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GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED

ANNUAL REPORT 2023  
(56-1 ONE REPORT)

# GROW GREEN ENERGY





# GROW GREEN ENERGY

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According to the plan to expand electricity production from renewable energy by 50% by 2030, although today GPSC has already achieved its goal. But we have not stopped continuing to develop green energy projects. To become a leader in sustainable energy in the same business group as well.









# GO GLOBAL ENERGY LEADER

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Adjust strategies to expand business to the world energy market We have invested in many countries in Asia, especially "India" which has high investment potential and has the 5<sup>th</sup> largest GDP in the world. It is designated as a Second Home Market, creating new investment approaches for future growth.









# GATHERING POTENTIAL OPPORTUNITY

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Opening the door to domestic investment focuses on enhancing the efficiency of electricity production in various forms on the basis of taking into account stakeholders, increased demand for electricity, appropriate electricity costs and the environment. It is in line with the new national power development plan (PDP 2022) to create sustainable energy security.









# GREEN ENERGY

## FOR CLEAN AIR

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Achieve zero greenhouse gas emissions by 2060 through reducing the use of fossil fuels, increasing the proportion of electricity generated from renewable energy, installing technology to manage carbon generated from operations (CCUS & Hydrogen Technology), and promoting carbon credit trading. This is a process that takes time to change. But we believe that we can be a company that provides good energy along with clean air.









# Table of Content

Message from the Chairman and President & CEO	12
Operational Highlight	16
Awards of Achievements	18
Business and Operation Results	21
Risk Management	98
Driving Business for Sustainability	107
Management Discussion and Analysis (MD&A)	143
General and Key Information	151
Corporate Governance Policy	157
Corporate Governance Structure and Key Information about the Board of Directors, Subcommittees, Management, Employees and Others	162
Key Good Corporate Governance Implementation	191
Internal Control and Connected Transactions	220



Attachment 1:	Details about Directors, Executives, Chief Financial Officer, Chief Accountant, Company Secretary and Chief of Compliance	249
Attachment 2:	Details of Directors in the Subsidiary Companies	280
Attachment 3:	Details of the Chief of Internal Audit	282
Attachment 4:	Details of Operating Asset	283
Attachment 5:	Full Version of the Corporate Governance Policy and Guideline	283
Attachment 6:	Report of the Audit Committee	283
	Financial Statement	284

“ This Annual Report (56-1 One Report) referred to the information disclosed on the Company’s website, which is an integral part of the 56-1 One Report. The Board of Directors certifies the correctness and completeness of such referred information. ”



## Message from the Chairman and the President & CEO



### Dear Shareholders,

The past year was another proof of Global Power Synergy Plc (GPSC)'s determination for conducting sustainable business. With our second straight year of DJSI membership in the Emerging Markets Index (Electric Utilities), we strive for sustainability development by focusing on power generation through leveraging clean energy innovations in tandem with environmental stewardship. It is our mission to drive GPSC toward Net Zero Emissions achievement by 2060.

Despite today's subsiding of Covid-19, its remnants are severe economic volatility coupled with relentlessly challenging energy situations resulting from the Russia-Ukraine war and the Israel-Hamas war, with rippling effects worldwide. These factors hiked the prices of energy and many commodities, including natural gas and coal, supplies and equipment, wages, and financial costs. What followed was that GPSC and our customers' businesses saw their demand for power and steam drop; in addition, the public policy in the latter half of the year reduced the electricity tariff in a move to appease the public. Nonetheless, thanks to the competencies and experience of the Board and management, we successfully mitigated the impacts by closely monitoring gas and coal price movements while exercising process optimization and merit order of power plant operation to minimize production costs. For optimal benefit, we also focused on operation synergy to manage production power and steam, among others. As a result, GPSC proceeded to realize its goals, with outstanding achievements including customer contract extensions, pursuit of new customers through enhanced process security and delivery of reliable products, and continuing renewables growth through Avaada Energy Private Limited (AEPL), which commanded a year-end committed capacity of 9,525 megawatts. Finally, termination of the arbitration on the dispute involving GHECO-One absolved it from the demand under the arbitration. All of these raised GPSC's gross profits up to THB 19,207 million or 55 percent, with a net profit of THB 3,694 million or 314 percent over last year.

On the business side, GPSC strived to implement its main strategic plan on clean-energy development, consistent with its sustainable growth direction:

1. Emphasis on securing more domestic and overseas sources of power generation from renewables. This year we proceeded through our subsidiary, which was named the producer and distributor of power from renewables under the announcement of the Energy Regulatory Commission (ERC) on projects to secure power from renewables in the form of feed-in tariffs (FIT) for 2022-2030 in the category of zero fuel costs of 2022. These were two solar power projects with a total of 16 megawatts (MW), due for commercial operation in 2030.
2. Collaboration with domestic universities, including Suranaree University of Technology (SUT) in solar energy research and development (R&D), and housing Thailand's learning sources for renewables technology and innovation, notably power generation from solar rooftops and installation of floating solar panels. To this end, a digital system is applied for optimal energy management in parallel with the installation of a battery energy storage system (BESS) as a smart renewables innovation network in a Thai university as well as a prototype educational institute of Smart Grid management that can extend development to a Smart City of Nakhon Ratchasima. Last but not least, GPSC will play a part in promoting solar power within SUT's facilities.



3. Pursuit of the opportunity to develop technologies and investigate the viability of the establishment of a battery-recycling facility in Thailand and support of a future integrated battery business with PTT Plc, NUOVO Plus Co., Ltd., and Total Environmental Solutions Co., Ltd. We will also look into the viability of applying the recycling technology to supplement clean-energy businesses related to PTT Group, enhance the capability of the Circular Economy in support of our Net Zero Emissions goal, and nurture sustainable growth for Thailand. Finally, we have extended our operations in AEPL in India to span BESS to grow its competitiveness in the battery business and drive business in line with the public policy toward the goal for energy transition by fully developing clean-energy infrastructure. Besides executing the above corporate strategic plans, GPSC values the drive toward sustainability. To this end, it earnestly values environmental, social, and governance (ESG) management, leading to business achievements this year, as evident in domestic and international awards presented by various institutions. For Environmental, GPSC won the Corporate ESG Bond of the Year at the presentation ceremony of the Outstanding Bond of the Year Awards 2022. For Social, GPSC ran social and community development projects in assorted formats under the scope of sustainability operation consistent with our business strategies and directions. For this, we won an outstanding award in the Thailand Energy Awards 2023 event for alternative energy (off-grid projects) and a hybrid solar-diesel power

project for Health Promotion Facilities in remote, barren locations to improve the efficiency of public health services more thoroughly. For Governance, we achieved an Excellent assessment score out of the CG Scorecard for the eighth consecutive year, which is our pride for fulfilling the business resolution under corporate governance as well as sustainable development.

Other accolades of GPSC's success this year were the Best Senior CEO Award in the category of Resources at the CEO Econmass Awards 2023 event and an international acclaim at the 13<sup>th</sup> Asian Excellence Awards 2023 event, which consisted of the Outstanding Asian CEO, Outstanding Asian CFO, Outstanding Investor Relations Personality, and Outstanding Investor Relations awards for the fourth consecutive year.

For 2024, we have defined business strategies to strengthen ourselves in core and related businesses alike by focusing on growing renewables-based plant capacity to 15,000 MW and posting more than 50 percent in such capacity by 2030. Judging from this past year's project development outcomes, we will, in all probability, achieve this goal sooner than planned. What GPSC dearly values and relentlessly drive for are power plant efficiency improvement and maintenance of power/steam generation reliability in support of customers' businesses. To achieve these, we have defined a goal of conventional power plant development in parallel with our investigation of GHG reduction technologies to maintain our capacity at 5,000 MW

by 2030. We are poised to accommodate transformation of the energy and power businesses for both our battery business and other S-Curve businesses by setting a goal for becoming a leader in clean-energy innovation in support of the future low-carbon generation and for operation in line with the Net Zero Emissions goal of Thailand and GPSC. Finally, we also take seriously the new model of power business focusing on decentralization and integrated energy management under Thailand's imminent free market, whereby innovations will play a part in expense reduction and stability increase for users needing clean energy.

The Board of Directors, management, and the workforce of GPSC are profoundly thankful for your trust, faith, and support in our business all these years. Please rest assured that all of us will try our best to improve GPSC and achieve our goals.



**Mr. Pailin Chuchottaworn**

Chairman



**Mr. Worawat Pitayasiri**

President & CEO



## Operational Highlight

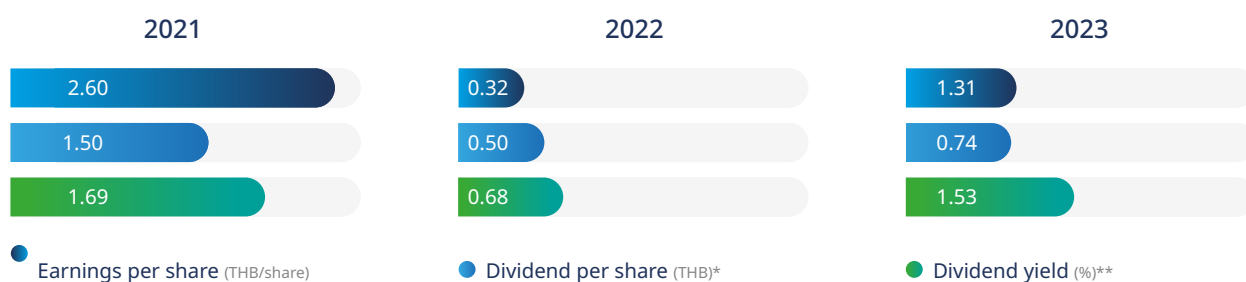
(THB Million)



### Remarks:

\* Total revenue consists of selling, general & administrative expenses and revenue derived from financial leases

## Return on Investment



### Remarks:

\* Dividend for 2023 performance consisted of an interim dividend for first-half 2023 at 0.30 baht/share, already paid to shareholders, and dividend for second-half 2023 at 0.44 baht/share, subject to approval at the 2024 AGM.

\*\* Calculation from share price at ending year

## Financial Ratio

FINANCIAL RATIOS	2021	2022	2023
EBITDA to Sales Revenue (%)	23.67	8.78	19.06
Interest Coverage Ratio (times)	2.36	0.41	1.49
Net Debt to Equity Ratio (times)	0.78	0.99	0.95
Return on Equity (%)	6.93	0.84	3.50
Return on Assets (%)*	2.78	0.32	1.30

Remarks: \* Return on assets is the ratio between the net profit/(loss) of the parent company inclusive of uncontrolled equity to total assets



## Products



### ELECTRICITY

2021  
**20,132** | 2022  
**21,665**

2023 (Gigawatt-hour, GWh)

**14,950**



### STEAM

2021  
**15,090** | 2022  
**14,510**

2023 (kiloton)

**13,161**



### CHILLED WATER

2021  
**25,228** | 2022  
**24,418**

2023 (kilo-refrigeration ton)

**26,649**



### WATER FOR INDUSTRIAL USE

2021  
**15** | 2022  
**14**

2023 (million cubic meter)

**10**



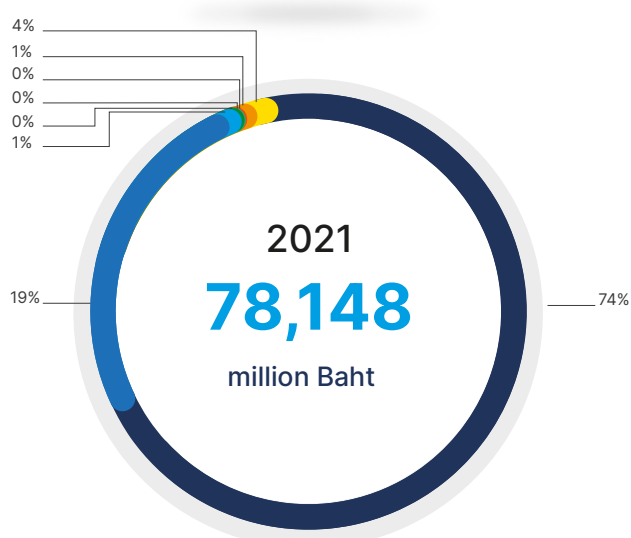
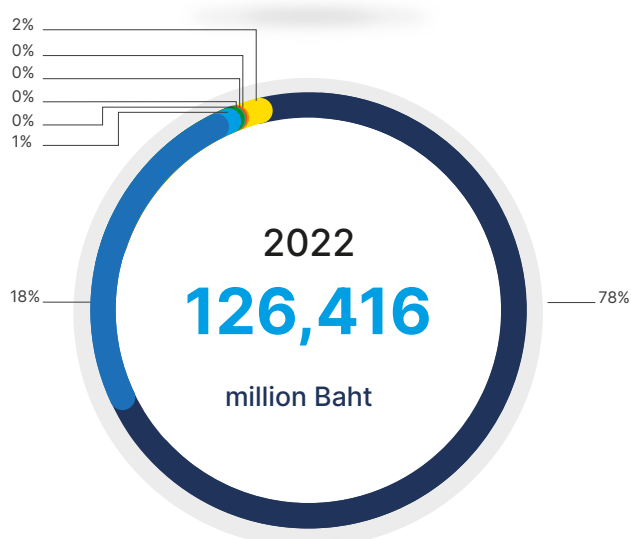
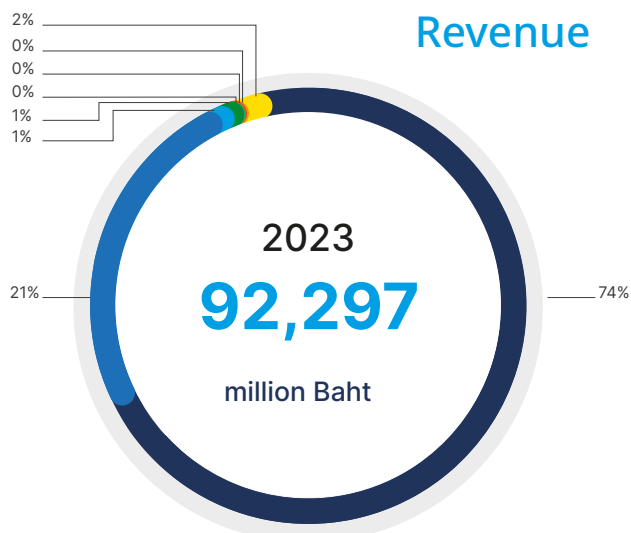
### REFUSE DERIVED FUEL

2021  
**0\*** | 2022  
**0\***

2023 (tonne)

**0\***

## Revenue



- Electricity
- Steam
- Industrial water / chilled water
- Services
- RDF waste fuel
- Nitrogen
- Financial leases in power plants
- Other revenue

Remarks: \* No sales volume for refuse derived fuel due to feed as fuel to RDF Power Plant



# AWARDS OF ACHIEVEMENTS



## Outstanding Executives

1. **Asia's Best CEO Investor Relations**  
by Corporate Governance Asia
2. **Asia's Best CFO Investor Relations**  
by Corporate Governance Asia
3. **Best Investor Relations Professional**  
by Corporate Governance Asia
4. **CEO Economass Awards, 2023**  
by The Economic Reporters Association

## Finance

5. **Best Investor Relations Company 2023**  
by Corporate Governance Asia
6. **Best Bond 2022**  
by THAI BMA

## Sustainability

7. **Dow Jones Sustainability Indices Award 2023**  
by S&P Global
8. **Thailand Sustainability Investment (THSI)**  
by The Stock Exchange of Thailand and Banking and Finance Journal



## Corporate Governance

9. **Corporate Governance Report of Thai Listed Companies (CGR) Survey Rating, 2023**  
by Thai Institute of Directors : IOD

## Anti-Corruption

10. **Certificate of Membership, 2021-2024**  
by THAI CAC

## CSR

11. **Thailand Energy Awards, 2023**  
by Department of Alternative Energy Development and Efficiency

## Others

12. **Sponsor of Event Sammachiv Awards, 2023**  
by Right Livelihood Foundation
13. **Social Appreciation Day, 2023**  
by The Provincial Press Association of Thailand

## Environment

14. **Carbon Footprint of Organization : CFO, 2023**  
- GPSC GROUP  
by Thailand Greenhouse Gas Management Organization (Public Organization)
15. **Low Emission Support Scheme : LESS, 2023**  
- Central Utility Plant 1  
- Central Utility Plant 2  
- Central Utility Plant 3  
- Central Utility Plant 4  
- Sriracha Power Plant  
- Gheco-One Co.ltd  
- Glow IPP Co.ltd  
- Glow Energy (Public) Co.ltd Phase 2  
- Glow SPP 3 Co.ltd  
- Glow SPP 11 Co.ltd  
by Thailand Greenhouse Gas Management Organization (Public Organization)
16. **ECO Factory, 2021-2024**  
- Central Utility Plant 1  
- Central Utility Plant 2  
- Central Utility Plant 3  
- Central Utility Plant 4  
by Industrial Estate Authority of Thailand







# 1 | Business and Operation Results

## 1. Structure and Operations of Global Power Synergy Plc (GPSC Group)

GPSC engages primarily in the production and distribution of electricity, steam, industrial water, and public utilities. As of December 31, 2023, its committed equity capacities were:

Product <sup>(1)</sup> As of December 31, 2023	Total Capacity	
	Total	Commercial Operation
Electricity (MW)	9,315	6,461
Steam (T/h)	2,858	2,681
Industrial Water (cu.m./h)	7,026	7,026
Chilled Water (RT)	15,400	15,400

**Remarks:**

<sup>(1)</sup> Units of power in megawatts (MW), steam in tons per hour (T/h), industrial water in cubic meters per hour (cu.m./h), and chilled water in refrigerated tons (RT).





# Business Overview

## 1 Xayaburi, Lao PDR

 Xayaburi Power Company Limited (XPCL)



## 2 Vientienne, Lao PDR

 Nam Lik 1 Power Company Limited (NL1PC)


## 3 Attapeu, Lao PDR

 Houay Ho Power Company Limited (HHPC)

## 4 Suphan Buri

 Siam Solar Energy 1 Company Limited (SSE1)  
 N.P.S. Stargroup Company Limited (NPS2)


## 5 Kanchanaburi

 Siam Solar Energy 1 Company Limited (SSE1)


## 6 Ayutthaya

 Bang Pa-In Cogeneration Company Limited (BIC-1, BIC-2)

## 7 Ratchaburi

 Ratchaburi Power Company Limited (RPCL)


## 8 Pathum Thani

 Nava Nakorn Electricity Generating Company Limited (NNEG)



## 9 Bangkok

 Combined Heat and Power Producing Company Limited (CHPP)





## 10 Sara Buri

 Glow Energy Solar PV Rooftop (Phase 1)



## 11 Chanthaburi

 Combined Heat and Power Producing Company Limited (CHPP)  
 EurusPlus Company Limited\*\*\*


## 12 Chon Buri

 Sriracha Power Plant  
 Glow IPP Power Plant  
 Chonburi Clean Energy Company Limited (CCE)  
 Electricity Generating Unit ERU (SCOD: 2025)\*

## 13 Phichit

 N.P.S. Stargroup Company Limited (NPS1)  
 World X Change Asia Company Limited (WXA1, WXA2, WXA3)

## 14 Lop Buri

 N.P.S. Stargroup Company Limited (NPS3)



NATURAL GAS-FIRED  
POWER PLANT



COAL-FIRED  
POWER PLANT



HYDRO  
POWER PLANT



SOLAR  
POWER PLANT




WIND  
POWER PLANT




















ENERGY  
STORAGE UNIT

## 15 Khon Kaen

 P.P. Solar Company Limited (PPS1, PPS2, PPS3)

## 16 Rayong

 Rayong Central Utility Plant (CUP-1, 2, 3 & 4)  
 IRPC Clean Power Company Limited (IRPC-CP)  
 Refuse-Derived Fuel Power Plant (RDF)  
 Refuse-Derived Fuel (RDF) Power Plant  
 GHECO-One Power Plant  
 Glow Energy Phase 1 Plant  
 Glow Energy Phase 2 Power Plant\*\*  
 Glow Energy Phase 4 Power Plant  
 Glow Energy Phase 5 Power Plant  
 Glow SPP2  
 Glow SPP3 Power Plant (Phase 3)\*\*  
 Glow Energy CFB3 Power Plant  
 Glow SPP 11 Phase 1 & Phase 3 Power Plant  
 Glow SPP 11 Phase 2 Power Plant  
 Glow Energy Solar Power Plant  
 Glow Energy Solar PV Rooftop (Phase 2)  
 Energy Storage Unit Factory



#### 17 Maha Sarakham



BoreePlus Company Limited\*\*\*

#### 18 Nakhon Ratchasima



Helios 1 Company Limited\*\*\*

Helios 2 Company Limited\*\*\*

Helios 3 Company Limited\*\*\*\*

Helios 4 Company Limited\*\*\*\*

#### 19 USA



24M Technologies, Inc. (24M)

#### 20 Taiwan



Sheng Yang Energy Company Limited (SYE)



CI Changfang Limited

CI Xidao Limited (CFXD)

#### 21 India



Avaada Energy Private limited (AEPL)



#### 22 China (Battery Business)



Anhui Axxiva New Energy Technology Co., Ltd.  
(AXXIVA)\*

(Start of Production (SOP): 2023)

\* Under construction

\*\* SPP Replacement Project

\*\*\* Under power sales proposal process according to the announcement of the Energy Regulatory Commission

\*\*\*\* Under to sign the PPA with EGAT.



Details of other investment and joint ventures in the power and other businesses of GPSC appear below.

1. GPSC-operated gas-fired and other power plants are already commercially generating and distributing electricity and/or other utilities such as steam and industrial water:

- Gas-fired power plants:
  - Sriracha combined-cycle power plant, located in Si Racha district, Chon Buri province
  - Co-generation power plants: Central Utility Plants (CUP-1-4), located in WHA Eastern Industrial Estate (Map Ta Phut), R.I.L. Industrial Estate, and Asia Industrial Estate, Rayong province.
- Other energy forms:
  - Rayong Waste-to-Energy (WTE) plant, located in Rayong province, consisting of two projects:
    1. Refuse-Derived Fuel (RDF), producing 300 tons of RDF per day, construction completed since 2018
    2. RDF power plant with a capacity of 9.8 MW, fired by RDF, with a Power Purchase Agreement (PPA) with the Provincial Electricity Authority (PEA). Commercial operation began on May 28, 2021

2. GPSC holds 99.83% shares in Glow Energy Public Company Limited (GLOW), which engages in power, steam and utilities generation and distribution from other energy forms as detailed below.

- Gas-fired and coal-fired power plants:
  - Glow IPP, located in WHA Chonburi Industrial Estate 1
  - GHECO-One, located in Map Ta Phut Industrial Estate
  - Glow Energy Phase 1 and 2, located in Map Ta Phut Industrial Estate
  - Glow Energy Phase 4, located in Map Ta Phut Industrial Estate

- Glow Energy Phase 5, located in Map Ta Phut Industrial Estate
- Glow Energy CFB 3, located in Map Ta Phut Industrial Estate
- Glow SPP 2/Glow SPP 3, located in Map Ta Phut Industrial Estate <sup>1</sup>
- Glow SPP 11 Phase 1, located in Siam Eastern Industrial Park
- Glow SPP 11 Phase 2, located in Siam Eastern Industrial Park
- Glow SPP 11 Phase 3, located in Siam Eastern Industrial Park
- Renewable energy (renewables) and other energy-based power plants:
  - Glow Energy Solar, located in Asia Industrial Estate
  - Glow Energy Solar, under a private PPA
  - Houay Ho power plant, located in Attapeu province, Lao PDR
  - Chonburi Clean Energy, industrial waste-fired, located in WHA Chonburi Industrial Estate 1

3. GPSC wholly owns Global Renewable Synergy Company Limited (GRSC), which engages in power generation and distribution from renewable energy, consisting of:

- Avaada Energy Private Limited (AEPL), in which GRSC holds 42.93%. AEPL operates solar and wind power plants. As of December 31, 2023, AEPL commanded a total committed capacity of 9,525 MW, consisting of commercial operation of 3,990 MW; project under construction (706 MW) and project being developed (4,829 MW). AEPL's growth goal is 11,000 MW by 2025.
- GPSC holds 25% shares through GRSC and Global Renewable Synergy Taiwan (GRSC TW) in CI Changfang Company Limited and CI Xidao Company Limited, which engage in the offshore wind power plant. The operation started in November 2022

<sup>1</sup> The expiring PPA of Glow SPP 3 between GPSC and EGAT will not be extended under SPP Replacement since GPSC has no policy on further investment on coal power plants. However, GPSC would reliably generate power and produce steam for industrial customers under its agreements.

- with a target to distribute power in full capacity of 595 MW in 2024.
- On December 11, 2023, GPSC's Board of Directors approved its acquisition of 10,007,500 common shares or 50% of the total shares, valued about THB 1,275 million, of Global Renewable Power Company Limited (GRP) from PTT Global Management Company Limited (PTTGM), a subsidiary of PTT Plc. After the acquisition, GPSC's equity ratio in GRP, both direct and indirect, will be 100%. The acquisition process is expected to be completed in the second quarter of 2024.
4. GPSC holds 50% <sup>2</sup> shares in Global Renewable Power Company Limited (GRP), which engages in renewable power generation and distribution, consisting of:
- N.P.S. Stargroup Company Limited (NPS), wholly owned by GRP, operating a ground-mounted solar farm with a total capacity of 18 MW.
  - World X Change Asia Company Limited (WXA), wholly owned by GRP, operating a ground-mounted solar farm with a total capacity of 17.9 MW.
  - P.P. Solar Company Limited (PPS), wholly owned by GRP, operating a ground-mounted solar farm with a total capacity of 3.6 MW.
  - Global Renewable Power Operating Company Limited (GRPO), wholly owned by GRP, engaging in operation and maintenance of solar farms.
  - Global Renewable Power One Company Limited (GRP1), wholly owned by GRP, as an investment arm in renewable energy in Taiwan. Today, GRP1 holds 90% shares in Sheng Yang Energy Company Limited, which engages in a solar power plant with a total capacity of 55.8 MW.
  - GRP China Company Limited (GRP China), wholly owned by GRP, is an investment arm in renewables in the People's Republic of China.
  - Global Renewable Power China (Shanghai) Company Limited, wholly owned by GRP, supports investment and development of renewables projects in the People's Republic of China.
5. Domestic and overseas joint-venture power plants engaging in power generation and distribution, based on energy forms, consisting of:
- Gas-fueled power plants:
    - Combined Heat and Power Producing Company Limited (CHPP), wholly owned by GPSC
    - IRPC Clean Power Company Limited (IRPC-CP), in which GPSC holds 51% shares
    - Nava Nakorn Electricity Generating Company Limited (NNEG), in which GPSC holds 30% shares
    - Bang Pa-In Cogeneration Company Limited (BIC), in which GPSC holds 25% shares
    - Ratchaburi Power Company Limited, in which GPSC holds 15% shares
  - Renewable power plants:
    - Combined Heat and Power Producing Company Limited (CHPP), wholly owned by GPSC, engaging in a ground-mounted solar farm in collaboration with Chanthaburi's Shrimp Farmers Cooperative Limited and a solar power plant under a Private Power Purchase Agreement (PPPA).
    - BoreePlus Company Limited, in which GPSC holds 51% shares, engaging in a wind power plant
    - EurusPlus Company Limited, in which GPSC holds 51% shares, engaging in a wind power plant
    - Wind Power Development Company Limited (WPD), in which GPSC holds 51% shares, engaging in the investigation of investment opportunities concerning wind power plants
    - Helios 1 Company Limited (Helios1), in which GPSC holds 50% shares, engaging in a ground-mounted solar farm
    - Helios 2 Company Limited (Helios2), in which GPSC holds 50% shares, engaging in a ground-mounted solar farm
    - Helios 3 Company Limited (Helios3), in which GPSC holds 50% shares, engaging in a ground-mounted solar farm

<sup>2</sup> GRSC is in the process of acquiring 50% of GRP's shares from PTT Global Management Co., Ltd. (PTTGM). The acquisition should be completed by the second quarter of 2024.



- Helios 4 Company Limited (Helios4), in which GPSC holds 50% shares, engaging in a ground-mounted solar farm
- Helios 5 Company Limited (Helios5), in which GPSC holds 50%<sup>3</sup> shares, engaging in a ground-mounted solar farm
- Thai Solar Renewable Company Limited (TSR), in which GPSC holds 40% shares
- Siam Solar Energy 1 Company Limited (SSE1), in which GPSC holds 40% shares through TSR, engaging in a ground-mounted solar farm
- Hydro power plants:
  - Natee Synergy Company Limited (NSC), wholly owned by GPSC
  - Xayaburi Power Company Limited (XPCL), in which GPSC holds 25% shares through NSC
  - Nam Lik 1 Power Company Limited (NL1PC), in which GPSC holds 25% shares

6. GPSC's projects under construction are detailed below.

- Energy Recovery Unit (ERU), designed to serve as a public utility support unit for processes under Thai Oil Plc's Clean Fuel Project (CFP), with a capacity of 250 MW. ERU's main fuel is the oily liquid by-product of CFP's distillation. GPSC invested through Energy Recovery Unit Company Limited, a wholly owned subsidiary of GPSC. ERU will be transferred when construction is completed and win a Provisional Acceptance Certificate (PAC), expected in the third quarter of 2025.
- Glow Energy Plc's SPP Replacement Project will replace expiring firm-SPP cogeneration power plants between 2019 and 2025, according to ERC. GPSC holds one project, which is under construction. The project comprises two PPAs with new capacities as detailed below:
- Glow SPP2, with a capacity of 98 MW and 230 tons/hour of steam, supplies a total 60 MW of electricity to EGAT under two PPAs. It is set to commence commercial operations in 2024. Amid shifting economic factors, business circumstances, and the industrial landscape, GPSC has decreased

the capacity of the project and reduced the number of machines from two to one per PPA. However, due to cutting-edge technology, Glow SPP 2 will be able to produce power and steam efficiently, contribute to the stability of the power and steam production network, and meet the power demand of EGAT and industrial customers in a suitable and ecofriendly manner.

7. Investment in the battery and related business, consisting of:

1) Operation and investment by GPSC

- 24M Technologies, Inc. of the USA, in which GPSC holds 13.59% in preferred shares. 24M engages in research and development (R&D) of batteries for energy storage for the industrial sector, especially power generation, transmission, and distribution systems for the enhanced security of power users. R&D of batteries has also been expanded for EVs.

2) Operation through NUOVO PLUS Co., Ltd., a joint venture with ARUN PLUS Co., Ltd. (a PTT Plc subsidiary). GPSC acquired 49% equity in NUOVO PLUS, which commands the following investment projects.

- Energy Storage Unit (ESU) factory, a battery factory using SemiSolid technology of 24M Technologies, Inc. (24M). This is the first of its kind in Thailand with an ESU capacity of 30 MWh per year, located on 12 rai in Map Ta Phut Industrial Estate, Rayong province. Construction was completed in the third quarter of 2021.
- GPSC Singapore Private Company Limited (GPSCSG), a subsidiary company wholly owned by NUOVO PLUS to accommodate future international investment plans with a focus on New Energy industrial investment. Today, GPSCSG is investing through its 9.99-percent equity in Anhui Axxiva New Energy Technology Company Limited (AXXIVA). AXXIVA manufactures battery cells with a capacity of 1 GWh per year.

<sup>3</sup> GPSC approved the dissolution of Helios 5 Company Limited (Helios5), a subsidiary where GPSC holds 50% shares. The dissolution process is ongoing.

- GPSC Singapore Private Company Limited (GPSCSG), a subsidiary company wholly owned by NUOVO PLUS to accommodate future international investment plans with a focus on New Energy industrial investment. Today, GPSCSG is investing through its 9.99-percent equity in Anhui Axxiva New Energy Technology Company Limited (AXXIVA). AXXIVA manufactures battery cells with a capacity of 1 GWh per year to serve the EV market in the People's Republic of China. The plant is under construction, due for completion in Q2/2024.
  - NUOVO PLUS holds 51% shares in NV Gotion Company Limited (NV Gotion), a joint-venture company with Gotion Singapore Pte. Ltd. (Gotion), engaging in importing, assembling, and selling battery modules and battery packs for energy storage systems and EVs. The plant lies in Siam Eastern Industrial Park 2, Pluak Daeng, Rayong province, with an initial capacity of 2 GWh per year. It began commercial production in December 2023.
8. Other businesses in Thailand and other countries, totaling four companies:
- GPSC Treasury Center (GPSC TC) Company Limited, a wholly owned subsidiary of GPSC, engaging in the management of a Treasury Center (TC) and an International Business Center (IBC) for the Group's financial efficiency and future investment in foreign currencies and liquidity.
  - Business Services Alliance Company Limited, a joint-venture company among PTT Group, engaging in the service and administration of human resources for PTT Group's outsourcing. GPSC holds 25% of the preferred shares.
  - Sarn Palung Social Enterprise Company Limited (SPSE), formed to support PTT's and PTT Group's social enterprises joining in the resolution of problems facing communities, society, and the environment while advocating hiring of local labor for sustainability. GPSC holds 10% shares here.
  - Eastern Fluid Transport Company Limited (EFT), in which GPSC holds 15% shares through Glow, engaging in pipeline administration and services for product transmission through pipeline in Map Ta Phut Industrial Estate for maximum efficiency and safety. EFT plans future expansion to meet demand of growing industries in Map Ta Phut Industrial Estate and its vicinity in Rayong province.



## 1.1 Policy and Business Overview

GPSC is the power flagship of PTT Group, committed to establishing energy and public utility security in support of domestic industrial growth, a crucial foundation of national growth and sustainable national development. It also pursues opportunities for investment in power projects in domestic and international markets to grow sustainably while developing energy storage technology, battery business and other New S-Curve businesses. Moreover, GPSC expands its businesses to new forms of energy through innovation to support customers' demand while pursuing the Carbon Net Zero goal to become a leading global power company in innovation and sustainability, equipped with the following vision and mission statements.

### 1.1.1 Vision, Mission, Objective, and Strategy

#### Vision

A global leading innovative and sustainable power company

#### Mission

- Be a leader of the power and smart power businesses of PTT Group
- Generate long-term value addition for shareholders together with steady profit growth
- Deliver to customers reliable power and utilities through operational excellence
- Conduct business with community, social, and environmental responsibility
- Seek innovation in power and utility efficiency management through smart power

#### Goal

To become one of the top three power generation companies in Southeast Asia with more than 50% of power generation from the green portfolio and with a goal for carbon neutrality in 2050 and carbon net zero in 2060.

#### Business Strategies

GPSC's 2023 strategies (2023-2030) serve the energy transition to clean-energy innovation, consisting of four main strategies: S1: Strengthen and Expand the Core; S2: Scale-Up Green Energy; S3: S-Curve & Batteries; and S4: Shift to Customer-Centric Solutions. It focuses on domestic and second-home countries, including India, Taiwan, Vietnam, and China, while developing six aspects of key enablers in pursuit of success defined by corporate strategies, namely Partnership, Financial Discipline, Technology & Digitalization, Sustainability, Agile & Resilient Organization, and Operational Excellence. These key enablers enhance its sustainable business growth while respecting the environment and stakeholders to become a leading power company in Southeast Asia. The strategies are detailed below:

#### S1: STRENGTHEN AND EXPAND THE CORE

Promote robustness, skills, and excellence of operation and business in parallel with GPSC's business growth with emphasis on maximum shareholders' satisfaction and appreciation of their needs while fostering customers' confidence with operational excellence to upgrade safety, reliability, profitability and environmental social and governance at international standards. To this end, GPSC relentlessly upgrades its people development and application of management standards as well as digital technology to drive and upgrade various aspects of operations. Our actions consist of subplans to help us achieve strategic goals.

Enablers are in place to promote the success of strategic implementation, namely an HR management structure, an operational excellence management system (OEMS), and digitalization. The S1 strategy also embraces customer-centric utility and development of the core business and adjacent businesses worldwide to meet shifting customers' needs

amid energy transition. Three key segments are described below:

1. Customer relationship management (CRM): CRM focuses on identifying customers' obstacles or pain points through ongoing engagement with them so that GPSC may propose solutions. Digital analytic tools may find application in assessment and analysis of these.
2. Solution-focused: This means GPSC's efforts to create value for products to establish differentiation from its competitors, including analysis and management of energy in its production efficiency and reliability together with product distribution.
3. Departmental design and assignment of responsibility: Suitability for CRM needs to be spelled out for thorough coverage and maximum satisfaction.

## **S2: SCALE-UP GREEN ENERGY**

This key strategy raises the proportion of clean energy development (solar, wind, and integrated renewables) with energy storage systems (ESSs). GPSC focuses its investment on Thailand and target countries where ongoing growth is likely under acceptable returns on investment and manageable risks—a core strategy enabling today's energy transition, valued around the world. GPSC strives to lower its carbon intensity in parallel with fostering its own growth, with a Net Zero emission target in future years.

## **S3: S-CURVE & BATTERIES**

During current and imminent energy transition, battery and ESSs are widely accepted as key drivers of such transition, whether across the manufacturing and power sectors' supply chains or other electricity-fueled industries, including electric vehicle (EV) and other transportation. GPSC values the feasibility study of the battery business

and its value chain investment to accommodate EV industries according to Thailand's automotive industry and the energy storage system promotion policy, to promote storage of power derived from renewable energy. GPSC also invests in related businesses for future battery business growth in domestic and other regions, including India. Besides the battery business, other potential New S-Curve businesses include the digital-energy business, hydrogen energy business, and carbon capture, utilization & storage (CCUS). We will be cooperating with PTT Group and leveraging skills and resource capability across our supply chains to create shared values.

## **S4: SHIFT TO CUSTOMER-CENTRIC SOLUTIONS**

This means mobilizing new energy business models through energy innovations to provide energy service to meet customers' various needs, including expense reduction, greater energy reliability, and capital venture service proposals. Customers here are in the commercial and industrial industries. Our solutions consist of the following:

1. Distributed generation: This means installation of renewables power systems in customers' locations, including rooftops and microgrids, possibly by incorporating ESSs for greater reliability and efficiency. In addition, GPSC would look after their equipment and inspect energy consumption.
2. District cooling systems: Here, GPSC's services range from development, installation, management, to maintenance.
3. Energy management service: This means comprehensive energy management combining power generation from renewables, chilled water, ESS, and the application of digital systems to aid customers. Support could be provided remotely or through real-time monitoring to assure customers that they can always use energy efficiently and problems can be promptly solved. This S4 strategy will be implemented in Thailand first.



### 1.1.2 Milestones

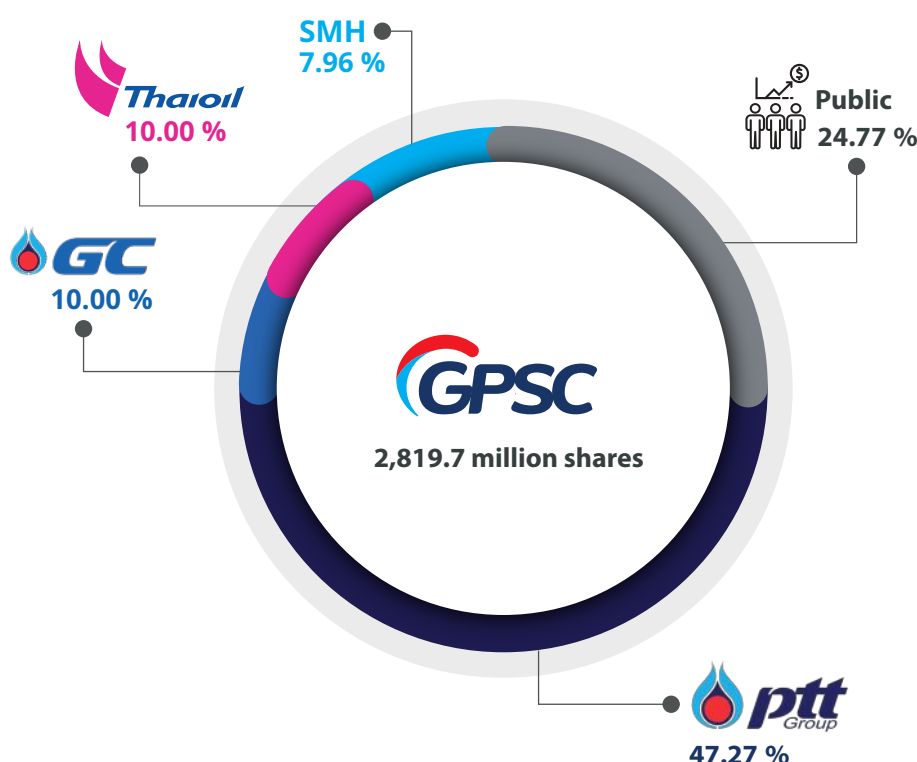
GPSC was registered on SET on May 18, 2015, with a registered capital of THB 14,983,008,000, comprising 1,498,300,800 shares at THB 10 per share. On October 9, 2019, GPSC completed allocation of newly issued common shares and completed the registration of the increase in paid-up capital to THB 28,197,293,670, representing 2,819,729,367 shares at THB 10 per share. The shareholding structure after the increase is PTT Plc, 22.81%; PTT Global Chemical Plc, 22.73%; Thai Oil Plc, 8.91%; Thairoil Power Company Limited, 20.78%; and other shareholders, 24.77%.

PTT's Board of Directors approved on August 20, 2020, the acquisition of 8.9% shares in GPSC from Thai Oil Plc and to restructure it for PTT's power business agility. The transaction was completed on December 3, 2020, giving

PTT 31.70% shares in GPSC. Thai Oil Plc will hold the remaining shares of 20.78%. On April 22, 2021, PTT's Board approved a scheme by PTT and Siam Management Holding Company Limited (SMH), a PTT subsidiary, to acquire 358,936,756 shares or 12.73% of GPSC's shares from GC. After the transaction was completed on June 8, 2021, PTT and SMH held a total of 44.45% and GC held 10.00% of the shares.

PTT's Board of Directors approved on February 17, 2022, the acquisition of shares in GPSC to restructure PTT's power business. PTT and Siam Management Holding Company Limited (SMH), a PTT subsidiary, acquired 304,098,630 shares of 10.78% of GPSC's shares from Thairoil Power Company Limited (TOP). After the transaction was completed, PTT and SMH held a total of 55.23% shares, and TOP held 10.00% of the shares, as shown below:

### GPSC's Shareholding Structure



## Milestones, 2019-2023

Date	Milestones
2019	
April 1, 2019	GPSC purchased the Energy Recovery Unit (ERU), part of Clean Fuel Project (CFP) of Thai Oil Plc through Energy Recovery Unit Company Limited. The rights transfer over ERU will be achieved when the construction is completed and a Provisional Acceptance Certificate (PAC) is won, expected in 2025.
August 28, 2019	GPSC held an Extraordinary General Meeting of Shareholders (EGM) No. 1/2019 to request an approval to increase its registered capital of THB 13,214,285,710, made up of a new registered capital of THB 28,197,293,710 for common shares of up to 1,321,428,571 shares with a par value of THB 10 per share, totaling THB 13,214,285,710 in rights offering for existing shareholders. Each shareholder can subscribe to the newly issued shares over his/her rights at a ratio of one existing common share to 0.8819 new shares for an offered price of THB 56 per share. Later, GPSC completed its recapitalization plan for existing shareholders by THB 74,000 million on October, 9 2019. It allotted 1,321,428,567 common shares at THB 56 per share, resulting in a current total of 2,819,729,367 common shares.
November 8, 2019	GPSC issued six sets of bonds totaling THB 35,000 million to institutional investors and major investors at an average interest rate of 2.80 per annum. The rating given by TRIS Rating Company Limited (TRIS) of the bonds was AA-. The funds received, according to GPSC's financial restructuring plan, will repay short-term loans for the acquisition of Glow.
2020	
January 18, 2020	GPSC, with the cooperation of PTT Global Chemical Plc (GC), launched a smart energy storage system (ESS) with a capacity of 1.5 MWh. This storage is the largest system in the industrial sector of Thailand. It boosted security and stability of the power network system distributed to GC's Science & Technology Center building in Rayong province.
January 31, 2020	GPSC Treasury Center Company Limited (GPSCCTC) was registered with the Ministry of Commerce with an initial paid-up capital of THB 20 million. GPSC wholly owns GPSCCTC.
March 11, 2020	GPSC started construction of a prototype battery factory using the SemiSolid technology, the first ever in Thailand, located on 12 rai in Map Ta Phut Industrial Estate, Rayong province. The project value exceeded THB 1.1 billion.
March 26, 2020	GPSC successfully acquired all shares through Global Renewable Power Company Limited (GRP) in four companies: N.P.S. Stargroup Company Limited (N.P.S.), World X Change Asia Company Limited (World X Change Asia), P.P. Solar Company Limited (P.P. Solar), and TerraForm Global Operating (Thailand) Company Limited. Nine solar farm projects were developed by these companies with a total capacity of 39.5 MW.
June 1, 2020	Glow Hemaraj Wind Company Limited, in which GPSC held shares through Eastern Seaboard Clean Energy Company Limited, completed its liquidation.
July 14, 2020	Rayong Clean Energy Company Limited, in which GPSC held shares through Eastern Seaboard Clean Energy Company Limited, completed its liquidation.
August 7, 2020	GPSC offered environmental conservation bonds (Green Bonds), which are unsubordinated and unsecured debentures with specified holders, to institutional investors and major shareholders for a total of THB 5 billion. The funds received will be used on renewable-energy projects, including solar and waste-to-energy projects.



Date	Milestones
September 25, 2020	GPSC signed an MOU with Electric Vehicles (Thailand) Plc (EVT) to develop and experiment with prototype electric buses using SemiSolid technology battery to examine the efficiency of batteries used in these buses.
September 28, 2020	GPSC, through Combined Heat and Power Producing Company Limited (CHPP), entered an MOU with Suranaree University of Technology to build a solar power plant with a total capacity of about 6 MW. The project aimed to create a low-carbon university to lower utility expenses of the university through a Private PPA. It is also intended to be a smart energy center of the Northeast for the public.
November 13, 2020	GPSC established Global Renewable Power One Co., Ltd. (GRP1) to accommodate its investment growth plan in a solar farm in Taiwan.
December 25, 2020	GPSC launched G-Cell batteries using SemiSolid technology, products of the Energy Storage Unit, Rayong province. Regular production started in the third quarter of 2021.
2021	
January 4, 2021	GPSC restructured its shareholding in Global Renewable Power Company Limited (GRP) by disposing of its 50% shares in GRP to PTT Global Management Company Limited (PTTGM), a PTT subsidiary. The transaction was completed on January 4, 2021, enabling GPSC to book GRP's performance as its share of profit from its investment in the associate.
February 9, 2021	GPSC established Singapore Pte. Ltd., Singapore, to invest in Anhui Axxiva New Energy Technology Company Limited (AXXIVA), People's Republic of China, with an investment value of about THB 500 million or 11.1% of AXXIVA's total equity interest. The fund mobilization was for its investment in a SemiSolid battery plant construction phase 1 in China with the knowhow of 24M Technologies Inc. (24M). Phase 1 plant commands 1 GWh per year to supply to its main customer group in the EV industry of that country, including Chery New Energy Automobile.
February 11, 2021	Through prestigious (S&P Global) assessment, GPSC was an outstanding business included in the Sustainability Yearbook 2021 with the second highest score of the Electric Utilities category in Thailand as a result of its maiden participation in the Dow Jones Sustainability Indices (DJSI).
February 24, 2021	In conjunction with PTT Oil and Retail Business Plc (OR), GPSC launched the G-Box Project, leveraging the 150-kWh Battery Energy Storage System (BESS) Project, which can scale up the G-Cell product of the SemiSolid technology in the future to improve energy management efficiency together with the EV station. Pilot-tested at PTT Station Nong Khaem, this energy innovation plays a key role in raising power consumption reliability, as it lowers energy costs and efficiently prevents brownouts or blackouts.
March 26, 2021	With Swap & Go Co., Ltd., GPSC signed an MOU on joint investigation and scaling-up of SemiSolid lithium-ion batteries (G-Cell) production from GPSC's ESS plant in Map Ta Phut Industrial Estate, Rayong, for application to electric motorcycles through battery swapping (no need to wait for recharging). Production was set to begin by the second quarter of 2021.
April 29, 2021	GPSC signed an MOU with nine companies in the EV industry group to develop prototype batteries and a battery-swapping system that is a scaled-up version of GPSC's SemiSolid technology for installation in battery EVs (BEVs) of electric motorcycles, electric tuk-tuks, and EVs. Therefore, efficiency will improve in safety, heat exchange, and charging aspects. The technology will ease battery swapping in EV chargers at service stations.

Date	Milestones
May 18, 2021	GPSC signed an MOU on cooperation with Electrify Pte. Ltd. (Electrify) in development and installation of a peer-to-peer energy trading platform on the Cloud system in Thailand. The platform was installed together with GPSC's energy innovation solution, operated by CHPP (a wholly owned subsidiary) for customers in the energy technology trendsetter group. It was put to pilot tests in various areas. These represent energy innovation prototypes of decentralized energy, solar power generation, and ESSs that would expand to other potential areas.
May 25, 2021	Through CHPP, GPSC became a partner in the G-Float clean energy innovation development, pioneered in the New Normal model in Thailand. This floating solar PV innovation was ready for commercial implementation for industrial plants, customers in industrial estates, and government as well as private agencies. It was already successfully used in projects like the Smart City Project for VISTEC and installation of solar rooftops and floating solar PVs at Suranaree University of Technology. To elaborate, this is a combination of smart energy involving BESS, peer-to-peer energy trading, and AI for greater generating efficiency. Also included was cooperation with PTT Group in the installation of a 100-kW system floating solar-on-sea in a marine section of PTT Tank Terminal Company Limited in Rayong.
May 28, 2021	With a PPA secured with the Provincial Electricity Authority (PEA), the 9.8-MW RDF Project began commercial distribution as part of GPSC's integrated Rayong Waste to Energy Project.
May 28, 2021	Global Renewable Power One Company Limited (GRP1), an indirect associate where GPSC holds equal 50% shares with PTT Global Management Company Limited (PTTGM), fulfilled all its terms of the share trade agreement worth 90% of all shares in Sheng Yang Energy Company Limited. The value of the deal was THB 2.56 billion.
June 15, 2021	GPSC registered subsidiary Global Renewable Synergy Company Limited (GRSC) in Thailand, holding all of its shares in support of investment in renewables power plants in other countries.
June 16, 2021	Board Meeting No. 8/2021 approved GPSC TC's entry into a loan agreement with PTT Plc or PTT TCC, or both, for a long-term loan from shareholders under a limit of THB 20 billion in support of its investment in overseas renewables power plants. The deal was for up to three years with a market rate of up to 3% a year.
July 13, 2021	Through GRSC, a wholly owned subsidiary, GPSC reached an agreement to invest in Avaada Energy Pte. Ltd. (Avaada), a renewable energy business operator in India, with a total investment of about THB 14.825 billion, or about 41.6% of its capital. As of the acquisition date, AEPL had a total committed capacity of 3,744 MW, with a growth target of 11,000 MW by 2025. This investment was part of the plan to grow GPSC'S renewables portfolio.
July 14, 2021	GRSC, a wholly owned subsidiary, signed a joint-investment agreement with Copenhagen Infrastructures Partners (CIP) on behalf of the Copenhagen Infrastructure II K/S (CI-II) and Copenhagen Infrastructure III K/S (CI-III) for cooperation under an offshore wind power projects entitled Changfang and Xidao in Taiwan with a combined installed capacity of 595 MW. The project is expected to go entirely commercial by the first quarter of 2024, with investment worth USD 5 million to the end of the construction. GPSC subsequently formed Global Renewable Synergy Taiwan Co., Ltd. (GRSC TW) to assume 25% shares in this project. The share acquisition was completed on September 26, 2022.

Date	Milestones
July 19, 2021	GPSC inaugurated its SemiSolid G-Cell energy storage system plant, the first in Southeast Asia, with an initial capacity of 30 MWh/year under the US's 24M Technologies Incorporation's battery production innovation. GPSC had obtained a license for production and distribution of the system. The plant lies in Map Ta Phut Industrial Estate, Rayong.
October 18, 2021	GPSC signed a memorandum of understanding with five others, namely CHPP, EXIM BANK, TGO, and Neoclean Energy Company Limited (NEO), to run a project supporting investment in solar rooftop systems together with carbon credit registration under the Solar Orchestra Project. The project supported Thai entrepreneurs' investment in solar rooftops and formalize them under the T-VER Project (Thailand's voluntary emission reduction) to obtain carbon credit for future trading.
October 21, 2021	GPSC proceeded with formal registration of a wholly owned subsidiary in Taiwan through GRSC, named Global Renewable Synergy Taiwan Company Limited (GRSC TW).
2022	
January 11, 2022	GPSC and Arun Plus Company Limited (ARUN PLUS) established Nuovo Plus Company Limited (NUOVO PLUS) for a feasibility study and investment supporting the battery value chain business with a registered capital THB 4.20 billion and a paid-up capital of THB 1.05 billion. GPSC holds 49% shares.
February 10, 2022	GPSC disposed of wholly-owned Ichinoseki Solar Power 1 GK (ISP1) to CES Iwate Taiyoko Hatsudensho GK, amounting to JPY 3,860 million or about THB 1,119 million.
February 28, 2022	GPSC transferred battery business-related assets currently operated by GPSC Group to NUOVO PLUS, consisting of assets, expenses, contracts, and obligations related to the Energy Storage Unit project, and 100% shares in a subsidiary company, GPSC-SG Holding Company, Singapore, which held 11.1% shares in Anhui Axxiva New Energy Technology Company Limited, People's Republic of China.
May 5, 2022	Nava Nakorn Electricity Generating Company Limited (NNEG), in which GPSC held 30% shares, plans to increase its power generation capacity by 30 MW and 5 tons/hour of steam with an investment fund of THB 1,724 million (70% from loans and 30% from shareholders). After completion, NNEG will command a total capacity of 215 MW and 45 tons/hour of steam.
August 24, 2022	GPSC established two subsidiary companies, namely UrusPlus Company Limited and BoreePlus Company Limited. Both companies will engage in feasibility studies and investment support for the renewable energy business in Thailand.
September 27, 2022	GPSC approved liquidation and close down two subsidiary companies, consisting of wholly-owned GPSC International Holdings Limited (GPSCIH) and Glow Energy Myanmar Company Limited, which GPSC directly and indirectly held 99.83% shares through GLOW.
November 22, 2022	GPSC approved establishment of NV Gotion Company Limited (NV Gotion), a joint-investment company in which NUOVO PLUS held 51% shares with Gotion Singapore Ptd. Ltd. (Gotion). This company imports, assembles, and sells battery modules, energy storage, and EVs. Premium lithium-ion battery will be on the market by 2023 with a production capacity of 1 GWh per year.
November 30, 2022	GPSC signed a joint-venture agreement with Copenhagen Infrastructure Partners (CIP) through CI NMF I Cooperatief U.A. (CI NMF I) to pursue wind power investment opportunities and set up a joint-investment company under the ERC invitation for those engaging in fuel cost-free operation in 2022, to bid for renewable energy Feed-in Tariff (FiT) 2022-2030. GPSC held 51% shares in the group.



Date	Milestones
December 13, 2022	GPSC established five subsidiary companies to propose for electricity sale according to an ERC announcement, namely Helios 1 Company Limited, Helios 2 Company Limited, Helios 3 Company Limited, Helios 4 Company Limited, Helios 5 Company Limited. GPSC held 50% shares in these.
2023	
January – December 2023	Avaada Energy Private Limited (AEPL), in which GPSC holds shares through Global Renewable Synergy Company Limited (GRSC), was awarded more than 5 GW of solar power generation in India, which included the first wind energy project with 50 MW in capacity for AEPL in India and projects under bidding. All these would contribute to AEPL's capacity growth goal to 11 GW.
January 30, 2023	Wind Power Development Company Limited (WPD), a joint-venture company between GPSC and Copenhagen Infrastructure Partners (CIP) through CI NMF I Cooperatief U.A. (CI NMF I), was set up to pursue wind power investment opportunities. GPSC held 51% shares.
June 14, 2023	GPSC signed an MOU with Meranti Steel Company Limited for a feasibility study of clean energy project development and an energy management system for eco-friendly steel production.
July 25, 2023	GPSC approved the dissolution of Helios 5 Co., Ltd. (Helios 5), a subsidiary in which GPSC had held 50% equity, since the subsidiary's project had failed the Energy Regulatory Commission (ERC)'s selection on September 30, 2022 (ref. ERC's announcement on power procurement from renewables in the form of feed-in tariff (FIT) for 2022-2030 for the zero-fuel cost group of 2022). The announcement was made to SET on July 30, 2023. The dissolution process was ongoing.
July 26, 2023	GPSC signed an MOU to study and develop an energy platform with PTT Digital Solution Company Limited (PTT Digital) to enable clean-energy business management for power generation and distribution from renewable energy.
October 18, 2023	GPSC signed an MOU with the Industrial Estate Authority of Thailand (IEAT), B.Grimm Power Plc, Earth Electric Supply Company Limited, and Triple P Technology Company Limited to explore the feasibility of co-investment in a smart utility system project in Smart Park Industrial Estate (Smart Park). The four are committed to establishing energy and public utilities security to accommodate the growing industry and sustainable national development.
November 13, 2023	GPSC signed an MOU for the battery-recycling business with PTT Plc, Nuovo Plus Company Limited (NUOVO PLUS), and Total Environmental Solutions Company Limited (TES), seeking opportunities for the development of technology and the feasibility study to build a battery-recycling plant in Thailand. The project enhanced an integrated battery business in the future while integrating recycling technology into clean energy-related businesses in PTT Group.
November 17, 2023	GPSC International Holdings Limited (GPSCIH), a wholly owned subsidiary of GPSC, completed its liquidation process.
December 7, 2023	GPSC attended NV Gotion Company Limited's (NV Gotion) plant inauguration and launch of battery products at Siam Eastern Industrial Park 2, Pluak Daeng, Rayong province. NV Gotion imports, assembles, and sells battery modules, energy storage, and EVs. Premium lithium-ion batteries will be put on the market by 2023 with an initial capacity of 1 GWh per year, rising to 8 GWh in the future.

Date	Milestones
December 12, 2023	Wind Power Development Co., Ltd. (WPD), which co-invested with Copenhagen Infrastructure Partners (CIP). CIP changed its shareholders from the CI NMF I Cooperatief U.A. (CI NMF I) fund to CI GMF II Cooperatief U.A. (CI GMF II) fund, consistent with the restructuring of CIP's funds for investment suitability.
December 21, 2023	GPSC's Board of Directors approved wholly owned GRSC's acquisition of 10,007,500 common shares in GRP from PTTGM, valued at about THB 1,275 million. After the acquisition, expected to be completed in the second quarter of 2024, GPSC's shareholding ratio in GRP, both direct and indirect, would become 100% of the registered capital. Such engagement eased business restructuring and sharpened competitiveness in the renewables power business in pursuit of PTT Group's goal of 15,000-MW renewables power generation capacity by 2030.

### 1.1.3 Use of fund report

#### Funds derived from bond issuance

GPSC has developed a Green Finance Framework as guidance for Green Bond issuance for its environmental conservation. It also commissioned an external firm to provide a second-party opinion.

GPSC issued Green Bonds on June 10, 2022. The senior, unsecured debentures amounting to THB 12 billion are proposed to institutional and/or major investors. GPSC will spend the proceeds on investment or refinancing, or both, in part of or the entire new or existing projects dealing with GPSC Group's renewables.

As of August 8, 2023, GPSC had spend the proceeds as detailed below:

Application of Fund	Amounts of Dec. 31, 2023 (Unit: THB Million)	Description
1. Investment in a solar power plant project (AEPL)	11,865	Solar and wind power plant projects in India and Taiwan
2. Investment in wind power plant projects (CFXD)	135	
<b>Total</b>	<b>12,000</b>	

In addition, on April 4, 2023, GPSC issued and offered "Global Power Synergy Public Company Limited's Debentures No. 1/2023, Maturity in 2035" amounting to THB 3,000 million. These debentures had been issued under the project in the previous year (2022). GPSC used the proceeds under this project as business-as-usual capital expenditures.

#### Governing Law

These bonds are governed and interpreted by Thai law.

#### 1.1.4 Obligations shown in the prospectus and/or conditions of the office (if any) and/or condition of securities receivable of SET (if any)

- None -

### 1.1.5 Company Information

<b>Company Name</b>	:	Global Power Synergy Public Company Limited
<b>Security Name</b>	:	GPSC
<b>Head Office Address</b>	:	555/2 Energy Complex Building B, 5th Floor, Vibhavadi Rangsit Road, Chatuchak Sub-District, Chatuchak District, Bangkok 10900
<b>Type of Business</b>	:	GPSC operates as a power, steam, and utilities producer and distributor. In addition, it invests in other companies that generate and distribute power, steam, utilities, and New S-Curve businesses: batteries and smart energy, including related businesses, both domestic and overseas.
<b>Business Registration Number</b>	:	0107557000411
<b>Telephone</b>	:	0-2140-4600
<b>Fax</b>	:	0-2140-4601
<b>Website</b>	:	<a href="http://www.gpscgroup.com">www.gpscgroup.com</a>



## 1.2 Nature of Business Operations

GPSC business operations are detailed below:

### 1.2.1 Revenue Structure

GPSC's total revenue comprised revenue from the sale of electricity, steam, industrial water, revenue from financial lease, and dividend income from Ratchaburi Power Co., Ltd.

Product /Service	Operated by	For the period ending December 31					
		2022		2023		2024	
		Revenue (Million THB)	%	Revenue (Million THB)	%	Revenue (Million THB)	%
Revenue from Sale of Products and Services							
Electricity	IPP Group	17,558	22%	41,724	33%	13,595	15%
	SPP Group	39,975	51%	56,918	45%	54,663	59%
	VSPP Group	418	1%	244	0.2%	402	0%
	Total	57,951	74%	98,885	78%	68,661	74%
Steam	SPP Group	15,032	19%	22,660	18%	19,121	21%
	Total	15,032	19%	22,660	18%	19,121	21%
Industrial water / chilled water	IPP Group	-	0%	(2)	0%	0	0%
	SPP Group	725	1%	765	1%	755	1%
	VSPP Group	182	0.2%	203	0.2%	220	0%
	Total	907	1%	966	1%	975	1%
Services	SPP Group	-	0%	9	0%	17	0%
	VSPP Group	89	0%	396	0.3%	911	1%
	Total	89	0.1%	405	0.3%	928	1%
RDF waste fuel	RDF	-	0%	-	0%	-	0%
	Total	-	0%	-	0%	-	0%
Nitrogen	GPSC	157	0.2%	167	0.1%	174	0%
	Total	157	0.2%	167	0.1%	174	0%
Total revenue from sale of products and services		74,136	95%	123,083	97%	89,860	97%
Revenue from Financial Leases							
Financial leases in power plants	IPP Group	737	1%	602	0%	443	0%
Total revenue from financial leases		737	1%	602	0%	443	0%
Other Revenue							
Dividend	GPSC	256	0.3%	192	0.2%	228	0.2%
Other revenue	GPSC	3,019	4%	2,539	2%	1,766	1.9%
Total Other Revenue		3,275	4%	2,731	2%	1,994	2.2%
Total Revenue		78,148	100%	126,416	100%	92,297	100.0%

## 1.2.2 Product information

### 1. Characteristics of Products, Services and Innovation Development

#### Characteristics of Core Products

- **Electricity** is a form of energy derived from primary energy, such as natural gas, to generate other types of energy, for instance, heat and mechanical energy for the manufacturing processes of industrial, commercial, and utilities. Electricity is distributed via transmission lines, which serve as conductors in bringing electricity to customers to different locations and different voltage levels, for example, 230, 115, and 22 kilovolts (kV). However, the quality and stability of power generation and transmission are crucial for product value, so GPSC designed generation units, production administration, and connectivity of transmission systems for the flexibility of production management and transmission to serve all circumstances.
- **Steam** is a form of heat energy produced by using the residual heat from electricity generation to produce steam. Direct fuel combustion is sometimes used for steam production. Steam distributed to customers is of various pressure levels and temperatures, depending on customers' requirements. GPSC designed production units, production administration, and connectivity of the distribution system for the flexibility of production management and distribution for customers' satisfaction.
- **Chilled water** is the water used as a medium for exchanging cooling energy in air-conditioning systems or production processes. GPSC offers to serve customers' needs for technical, temperature, and stability levels as well as business solutions.
- **Other utilities:** GPSC offers One-Stop Utility Services and is a solution provider to serve customers' various requirements. Other utilities consisted of:
  - Industrial water is the processed water of required standards, for instance, clarified water and demineralized water. Both are part of the electricity generation process and are distributed to customers for manufacturing processes.
  - Nitrogen is inert gas with the chemical formula 'N<sub>2</sub>', in a liquid state at -196 degrees Celsius. GPSC procures and distributes nitrogen to industrial customers via pipeline transmission.

#### Innovation Development

Consistent with its 4S strategies, GPSC relentlessly developed various innovations and in support of its investment in the battery value chain to accommodate the EV industry, driven by the national automotive industry policy. Our efforts included energy storage systems derived from renewables. We strive to evolve these systems into future business models or to breed New S-Curve businesses for energy transition, notably concerning automotive batteries. To this end, GPSC has proceeded with key projects regarding battery innovations.

- **Battery manufacturing:** Through NUOVO PLUS, we have invested in constructing prototype battery plants, which employs 24M's SemiSolid technology and with an initial capacity of 30 MWh/year, in the Map Ta Phut Industrial Estate, Rayong. The company also invested in the 9.99-percent equity in Anhui AXXIVA New Energy Technology Co., Ltd. (AXXIVA) of the People's Republic of China; AXXIVA also employed 24M's SemiSolid technology. The 1-GWh/year plant (phase 1) is currently under construction to serve China's EV industry.
- **Battery module and pack assembly:** GPSC has invested in the battery module and pack assembly business through its subsidiary NV Gotion, a joint venture between NUOVO PLUS (51-percent) and Gotion Singapore Pte., Ltd. NV Gotion plans a 1-GWh per year plant in Amphoe Pluak Daeng, Rayong, to engage in the business of importing battery sets from Gotion and assembling battery packs for EV customers of the personal, commercial, and ESS groups. The aim is to support domestic EV industrial growth while advocating a consumption increase in ESS-based clean energy.
- **New energy:** We have assigned a strategic direction for our wholly owned CHPP to be the leader in novel energy businesses through energy innovation exploitation. To elaborate, CHPP will become a smart energy solution provider, providing design, counsel, and energy management (production, power storage, and efficient response to power consumption) in order to accommodate diverse aspects of energy demand fitting customers' objectives.

To date, CHPP has undertaken multiple projects dealing with smart energy solutions, including its contract for the installation of solar rooftops, floating solars, and ESSs for power distribution on the premises of Suranaree University of Technology, Nakhon Ratchasima. Another instance is the installation of energy management software simulating peer-to-peer power trading; to elaborate, this is a scaled-up application of technology and application model derived from the prototype project in VISTEC (Vidyasirimethi Institute of Technology), PTT Group's sandbox.

This year, GPSC signed a memorandum of cooperation with Singha Estate Plc to develop clean-energy innovations, a power management system, and an innovative scaled-up power business. GPSC also investigated green hydrogen production from solar energy. A novel alternative fuel that is also clean, green hydrogen replaces natural gas in the iron and steel industry and as automotive fuel, which represents part of the transition to a greener and more sustainable energy system in addition to maximum efficiency of energy management.

### Investment Privileges

GPSC and subsidiaries earned investment promotion privileges under the Investment Promotion Act B.E. 2520 (1977) upon approval of the Board of Investment Office, with certain conditions. These privileges are described below:

- (A) A permission to take ownership in the land to operate the promoted business as the Board of Investment sees fit.
- (B) An exemption on the import duty for machinery, raw materials, or essential materials imported to produce goods for domestic distribution as the Board of Investment sees fit.
- (C) An exemption on the corporate income tax on the net profit from the commencement of revenue recognition. If an entity incurs a loss during such period, the amount can be deducted from the net profit incurred for no less than five years after the passing of such time limit.
- (C)\* An exemption on the corporate income tax for the net profit generated from operating promoted businesses for the proportion of 50% of the investment capital to improve production efficiency, not including land and three-year working capital, from the commencement of revenue generation after obtaining the promotion certificate. If an entity incurs a loss during such period, the amount can be deducted from the net profit incurred for no less than five years after the passing of such time limit.
- (D) An exemption on using the dividend received from the promoted business to calculate income tax during the period in which the corporate income tax exemption takes effect.
- (E) An exemption on the corporate income tax for the net profit of 50% of the normal rate for five years after the passing of the corporate income tax exemption period as stated in (C).
- (F) A permission to deduct two times of the transportation costs, electricity, and water expenses for a period of 10 years from the commencement of revenue recognition in such business.
- (G) A permission to deduct 25% of the investment capital in the installation or construction of facilities, apart from the depreciation expense as usual.
- (H) An exemption on import duty for goods imported for re-export, or production for export for a period of one year from the first import.



## GPSC companies that earned these investment privileges are:

Company	Permit Grant Date	Commencement of Revenue Recognition	Number of Years for Income Tax Exemption	Privilege Eligibility
<b>Global Power Synergy Plc</b>				
Central Utility Plant - 1 Phase 1-2	February 2005	June 2006	8	(B) to (G)
Central Utility Plant - 1 Phase 3	October 2006	June 2007	8	(B) to (G)
Central Utility Plant - 1 Phase 4	January 2008	May 2008	8	(B) to (G)
Central Utility Plant - 1 Phase 5	September 2008	July 2009	8	(B) to (G)
Central Utility Plant - 1 Phase 6	January 2009	December 2009	8	(B) to (G)
Central Utility Plant - 2	September 2007	May 2008	8	(B) to (D)
Central Utility Plant - 3	January 2009	July 2009	8	(B) to (G)
Central Utility Plant - 4	November 2018	September 2019	4	(B) to (D)
Waste Fuel Production Plant	October 2017	May 2018	8 and 5	(B) to (E)
Waste Power Plant	June 2019	May 2021	8 and 5	(B) to (E)
Sriracha Power Plant	December 2010	May 2021	8	(B) to (D)
Solar Rooftop Project - GC Glycol	July 2020	February 2021	8	(B) to (D)
EECi Solar Farm	July 2021	September 2021	8	(B) to (D)
GC5 Floating Solar Farm	September 2021	December 2022	8	(B) to (D)
EECi microgrid	February 2022	July 2022	8	(B) to (D)
Solar Rooftop Project – GC5	November 2023	Not yet redeemed	8	(B) to (D)
<b>Combined Heat &amp; Power Producing Co., Ltd.</b>				
Solar Farm Project	September 2016	December 2016	8	(B) to (D)
Solar Rooftop Project – Thai Oil	December 2019	January 2022	8	(B) to (D)
Solar Rooftop Project – VISTEC	December 2019	May 2020	8	(B) to (D)
Solar Rooftop Project and Floating Solar – VISTEC	May 2020	June 2022	8	(B) to (D)
Solar Rooftop Project - Futureflex	September 2022	December 2022	8	(B) to (D)
Solar Rooftop Project - Suretex	April 2022	Not yet redeemed	8	(B) to (D)
Solar Rooftop and Solar Floating pontoon - PTT	June 2022	Not yet redeemed	8	(B) to (D)
Solar Rooftop Project - PTT Oil and Retail	October 2022	November 2023	8	(B) to (D)
Solar Rooftop Project - PTT Exploration and Production	February 2023	October 2023	8	(B) to (D)
Solar Rooftop Project - Energy Complex	May 2023	Not yet redeemed	8	(B) to (D)
<b>IRPC Clean Power Co., Ltd.</b>				
Power Plant	April 2014	June 2015	8 and 5	(A) to (G)
Solar rooftop - IRPC Technological College	August 2021	September 2021	8	(B) to (D)
Power Plant - Extension	January 2022	December 2023	4	(B) to (D)

Company	Permit Grant Date	Commencement of Revenue Recognition	Number of Years for Income Tax Exemption	Privilege Eligibility
<b>Glow Energy Plc</b>				
Phase 1 Project	July 1994	May 1995	8 and 5	(A) to (G)
Phase 2 Project	June 1995	January 1996	8 and 5	(A) to (G)
Phase 2 Project (SPP Replacement)	November 2021	November 2022	4	(B) to (D)
Extended Project Phase 1	March 2004	July 2004	8 and 5	(A) to (G)
Extended Project Phase 2	August 2004	September 2005	8 and 5	(A) to (G)
CFB 3	June 2007	November 2010	8 and 5	(A) to (G)
Phase 1 Project	November 2007	-	-	(A) to (B)
Phase 5 Project	February 2009	March 2011	8 and 5	(A) to (G)
Glow Solar	August 2012	August 2012	8 and 5	(B) to (G)
Glow Solar Rooftop – Michelin	May 2018	November 2018	8	(B) to (D)
Glow Solar Rooftop – Continental	May 2018	February 2019	8	(B) to (D)
Glow Solar Rooftop – Holiday Inn	June 2019	December 2019	8	(B) to (D)
Glow Solar Rooftop – Indorama	July 2020	May 2022	8	(B) to (D)
Glow Solar Rooftop – NSP	June 2020	July 2021	8	(B) to (D)
Glow Solar Rooftop – Veolia(Suez)	July 2020	September 2021	8	(B) to (D)
Glow Solar Rooftop – Ecoblue	March 2023	August 2023	8	(B) to (D)
Glow Solar Rooftop – Polyplex	March 2023	January 2024	8	(B) to (D)
Glow Solar Rooftop – GCM-PTA	March 2023	January 2024	8	(B) to (D)
Glow Solar Rooftop – TPRC	March 2023	Not yet redeemed	8	(B) to (D)
Glow Solar Rooftop – NS-SUS	May 2023	Not yet redeemed	8	(B) to (D)
Glow Solar Rooftop – Inoac	October 2023	November 2023	8	(B) to (D)
Glow Solar Rooftop – Resonac	October 2023	Not yet redeemed	8	(B) to (D)
<b>Glow Co., Ltd.</b>	September 2003	August 1997	-	(A)
<b>Glow SPP 2 Co., Ltd.</b>	November 1996	August 1997	8 and 5	(A) to (G)
<b>Glow SPP 2 Co., Ltd.</b> Glow SPP 2 (SPP Replacement)	December 2022	Not yet redeemed	4	(B) to (D)
<b>Glow SPP 3 Co., Ltd.</b>	August 1997	August 1999	8 and 5	(A) to (G)
<b>Glow IPP Co., Ltd.</b> Solar Rooftop Project – GIPP Remarks: Promotion Certificate No. 1525/2542 was terminated and replaced by Promotion Certificate No.63-0111-1-04-1-0	November 1999 January 2020	January 2003 August 2021	8 3	(A) to (D) (B) to (C)* to (D)
<b>GHECO-One Co., Ltd.</b>	July 2008	November 2011	8 and 5	(B) to (G)
<b>Glow SPP 11 Co., Ltd.</b>				
Phase 1	March 1999	September 2000	8 and 5	(A) to (G)

Company	Permit Grant Date	Commencement of Revenue Recognition	Number of Years for Income Tax Exemption	Privilege Eligibility
Phase 2	July 2013	November 2012	8 and 5	(B) to (G)
Phase 3	July 2013	October 2006	8 and 5	(B) to (G)
Phase 3 (Extension)	September 2014	April 2015	8 and 5	(B) to (G)

**Remarks:**

“Number of Years for Income Tax Exemption from the commencement of revenue recognition” for eight years means “the company in question that earns privileges under Section 31, Clause 1, qualifies for corporate income tax exemption of up to 100 percent of its investment, excluding land and revolving capital for eight years from such commencement. If this number is five years, it means that the company in question comes under Section 35 (1), entitled to a 50% discount of the regular income tax on its net profit for five years from the last date under Section 31, Clause 1. The commencement of revenue recognition coincides with the first booking of revenue, evident in the accounting book’s first invoice date.

## 2. Market and Competition

### Distribution and Target Customers

#### Distribution

Since electricity and steam are core products which must be distributed immediately to customers, the distribution system is critical. The system must be equipped with readiness and high reliability for distribution. And because we value this matter, our electricity transmission system has been designed separately for each customer to control the usage and safety system for individual customers for electricity distribution from the generators with the same standard voltage level as regulated by EGAT, PEA, and MEA with transformers at substations. The electric current will then be transmitted through transmission lines via trading meters to the electric current systems of EGAT, PEA, MEA, and industrial customers. Furthermore, the locations of our power plants are critical to the product distribution system since they must be located in the industrial estate where customers’ plants are located and where steam, chilled water, and industrial water are in demand for processes. We therefore distribute the products via a pipeline system designed with extra insulation to minimize energy loss to the external environment. Our key customers fall into two main groups by product utilization.

### 1. Distribution to EGAT, PEA, and MEA

Under Thailand’s power system structure, EGAT is the accountable party for generating, procuring, and distributing electricity to PEA and MEA, which in turn distribute electricity to the industrial sector and the public. The three entities need to ensure sufficient procurement to accommodate the domestic demand. As electricity generation by EGAT alone is not sufficient, these entities need to purchase electricity from private power producers via these three types of PPAs:

- Independent Power Producer: IPP
- Small Power Producer: SPP
- Very Small Power Producer: VSPP

GPSC and investment companies sell electricity to EGAT, PEA, and MEA via the three types of PPAs. Selling power to EGAT has also granted GPSC additional electricity via the backup PPA, which strengthens the reliability of the power generation system for power plants.

### 2. Direct Distribution to Industrial Customers

Apart from distributing electricity to EGAT, GPSC distributes electricity to industrial customers and producers of fundamental utilities: electricity, steam, chilled water and industrial water. GPSC values the reliability and continuity of distribution and determines standard pricing that can be benchmarked against other producers in the market. Most of our industrial customers are in the petrochemical sector. Besides, GPSC distributes nitrogen to companies in PTT Group as a fully integrated service provider.



## Competition Landscape

GPSC commands long-standing proficiency and experience in power generation and steam production, enhanced by secure power transmission systems together with extensive grid systems and customer-centric management to deliver public utilities suiting customers' needs, customer stewardship, and guaranteed distribution security through agreement periods in parallel with GPSC's sustainable growth policy with emphasis on innovation development. In short, our strength and competitiveness remain even during greater market competition with a handful of players and GPSC's long-term agreements with customers.

GPSC is blessed with lower costs than its competitors because of its economies of scale of power generation and steam production, aided by international-standard efficiency and reliability in addition to its ability to operate with multiple fuels. This advantage of ours also applies to the idea of customers in industrial estates producing their own public utilities.

Solar Rooftop and Floating Solar have become more competitive this year because players from both outside and inside industrial estates are allowed to bid. GPSC's strengths are its security of the power transmission system with extensive grid systems and customer stewardship.

## Electricity Pricing

The National Energy Policy Council (NEPC) has specified an electricity pricing structure for Thailand to reflect costs at different times of the day, whereby the power purchase rate varies with the electricity rate structure, categorized by type of power producers:

### 1. Electricity Pricing of Independent Power Producer: IPP

The PPA of an IPP is generally governed by two parts of the pricing structure:

**The first part** is the availability payment (AP), a premium that EGAT pays power plants monthly to maintain the availability level regardless of the actual electricity units purchased by EGAT. The AP is made up of:

- **APR1:** The compensation that EGAT pays the Company for the construction cost, as well as the debt burden and the capacity cost.
- **APR2:** The compensation that EGAT pays the

Company for fixed costs in machine operation and maintenance (Fixed O&M).

**The second part** is the energy payment (EP) that IPPs use to determine the price by taking variable production costs into account.

### 2. Electricity Pricing of Small Power Producer: SPP

The electricity pricing for SPPs depends on the types of fuel and agreement:

2.1) Firm Agreement Pricing: A firm agreement is a PPA that specifies the amount of electricity capacity to supply to EGAT through the entire contract period, which is five years or more. The pricing structure of this agreement is made up of:

- **Capacity Payment: CP**, based on the investment cost for power plants that EGAT can avoid in the future (Long-Run Avoided Capacity Cost) by purchasing the capacity.
- **Energy Payment: EP**, based on the fuel cost used in electricity generation that EGAT can avoid in the future. (Long-Run Avoided Energy Cost)
- **Fuel Saving:** This revenue will be granted when fuel consumption falls below the standard amount regulated by EGAT. Moreover, EGAT will purchase electricity in the amount of capacity specified in the PPA and a fine will be applied if it fails to do so.

2.2) Non-firm Agreement Pricing: A non-firm agreement is a PPA that is valid for less than five years. This type of agreement will not be entitled to a capacity payment (CP) but only the energy payment (EP), based on the fuel cost used in electricity generation, operating cost and power plant maintenance cost that EGAT can avoid in the short-term period (Short-Run Avoided Energy Cost), which differs from season to season. So, the price in a non-firm agreement, specifically the EP, will be multiplied by a K factor as announced by EGAT. The pricing of a non-firm agreement is generally lower than that of a firm agreement. So in purchasing electricity from a renewable-energy power plant or for an FiT power purchase, an adder will be applied, under the announcement of PEA or MEA.

### 3. Electricity Pricing of Very Small Power Producer: VSPP

Very small power producers (VSPPs) are electricity producers who supply no more than 10 MW of electricity to PEA or MEA as agreed, whereby the purchase rate is equivalent to the cost of wholesale electricity at the voltage that VSPPs connect to the electricity system, combined with the electricity cost according to the average wholesale Ft rate. For the purchase of electricity from a renewable-energy power plant, or FiT power purchase, an adder will be applied, under ERC's announcement.

#### Power Purchase Agreements with Industrial Customers

Most industrial customers are industrial plants, with whom GPSC has entered a long-term PPA with reference to the selling price based on PEA's rates. The Ft rate is usually adjusted in line with fuel costs, while for some customers it has been agreed that the electricity cost is subject to fuel costs such as natural gas.

Long-term agreements are signed between GPSC and industrial customers who receive electricity from Rooftops or Floating Solars. Pricing is either fixed through the agreement period or referenced to PEA.

#### Pricing of Steam and Industrial Water

The selling prices of steam and industrial water to industrial customers are based on the energy raw materials used in production as well as other production costs, with a margin added on top (cost-plus), to serve as the pricing formula that relies on a cost variable to reflect the actual production cost, including investment, variable cost, and operation and maintenance cost. Regarding investment in the distribution system that has been arranged for each individual customer, the energy loss in the distribution system will be calculated separately to account for differences in the quantity distributed and customers' locations, with different outcomes in the investment capital required for the system. For general pricing conditions, GPSC's Board of Directors has identified the criteria and principles for standard products' selling prices to ensure fairness and transparency in distributing products to both inter-related customers and other customers.

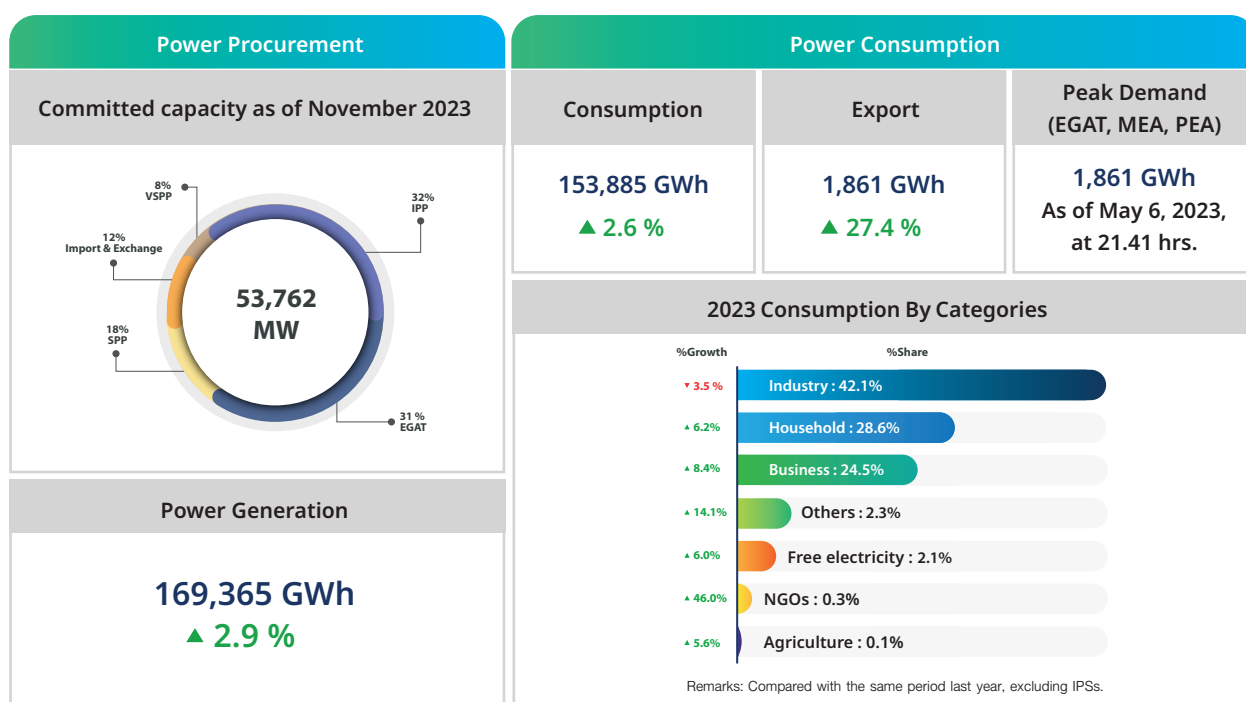
## Electricity Industries in Thailand

### 1. General

Thailand operates on the Enhanced Single-Buyer Model (ESB). To elaborate, EGAT is both the producer and the buyer of electricity supplied to the grid by independent power producers (IPPs, meaning those producing more than 90 MW), small power producers (SPPs, meaning those producing 10-90 MW), and imported electricity. EGAT owns the national transmission system, with the Metropolitan Electricity Authority (MEA) and the Provincial Electricity Authority (PEA) distributing and purchasing electricity from very small power producers (VSPPs, meaning those producing less than 10 MW). Regulators consist of the National Energy Policy Council (NEPC, the policymakers) and ERC.

### 2. Consumption overview 2023

As of November 2023, Thailand commanded a total generating capacity of 53,762 MW (excluding IPSs) with electrical power demand standing at 187,727 GWh, about 3.1% over the same month of 2022, 2021, and 2020, consistent with economic growth. The Thai economy grew 1.9% in the first nine months of 2023, shrinking from 3.1% last year. The 2023 system peak demand was seen on May 6 at 21.41 hours, registering 34,827 MW and increasing from the previous high in 2022 by 5.0% (excluding IPSs).



Source: Energy Policy and Planning Office, Ministry of Energy

### 3. Outlook for the National Energy Plan and Amendment

Today, the National Energy Policy and Planning Office (EPPO) is in the process of developing the National Energy Plan, which will combine five energy subplans (PDP, AEDP, EEP, Gas Plan, and Oil Plan), the enforcement of which should begin in 2023. The plan is to be made compatible with the energy transition from fossil fuels to clean energy as well as various innovations to sustain this transition and help Thailand achieve its targeted carbon neutrality by 2050 and finally the Net Zero Emissions by 2065. Thailand's energy policy direction needs to follow "4D1E": Digitalization, Decarbonization, Decentralization, Deregulation, and Electrification. The 4D1E energy plan covers five topics: Electricity, Oil, Natural Gas, Renewable Energy and Alternative Energy, and Energy Conservation.

#### Electricity

- Increasing domestic power generation from renewable energy for domestic consumption from 26% to 30% to reduce carbon dioxide emissions from fossil fuel power plants. Reference to Power Development Plan 2018 Revision 1.
- Developing technology on carbon capture, usage, and storage (CCUS).

#### Oil

- Advocating the improvement of refinery standards as well as the oil price structure to accommodate Euro 5 standards to minimize PM2.5 from tailpipes.
- Developing a system for oversight and data compilation for five years of government service to identify ways to develop the oversight process efficiently with e-service.

#### Natural Gas

- Promoting the use of natural gas, especially LNG, in economic sectors to minimize air pollution.
- Accelerating exploration and production of natural gas from indigenous sources and improving the infrastructure in keeping up with the regional demand.
- Advocating the liberalization of the natural gas business by amending regulations hindering full competition, with a target of Thailand as the Regional LNG Hub.



## Renewable Energy and Alternative Energy

- Enabling assessment of renewable-energy (renewables) potential;
- Promoting and developing decentralized power generation
- Developing platforms and digitalizing renewables energy data control
- Promoting investment in renewables such as improving Renewable Energy Certificates (RECs) to serve the future needs of power users who require RECs; and regulating domestic RECs prices for stability.

## Energy Conservation

- Encouraging building design for energy conservation under the Building Energy Code (BEC).
- An Energy Service Company (ESCO) should increase the efficiency of energy conservation. To this end, public agencies should be urged to set guidelines and rules for formal budget preparation, procurement methods, and contract under energy conservation standards.

## 3. Procurement of Products and Services

GPSC commands production and distribution procedures for products and services, categorized by each subsidiary as follows:

### Fossil Fuel Power Plants (Conventional Power Plants)

#### 1. Global Power Synergy Plc (The Company)

GPSC generates and distributes electricity to EGAT and industrial customers, with a total capacity of 1,103 MW. It also provides utility services, producing and distributing steam and industrial water to industrial customers in nearby areas, with a total steam production capacity of about 1,480 tons per hour, industrial water production capacity of 2,080 cubic meters per hours and chilled water capacity of about 12,000 refrigerated tons. Our power plants and central utility plants are listed below.

##### 1) Sriracha Power Plant

Sriracha Power Plant is under the power purchase project from a major IPP with a total capacity of 700 MW. It lies in Thung Sukhla sub-district, Si Racha district, Chon Buri. The total amount of electricity

generated is sold to EGAT under a 25-year PPA, starting from its commercial operation on August 15, 2000. The agreement will end in 2025, and electricity generation for distribution varies with the conditions and demand by EGAT.

## Production Processes

Sriracha Power Plant is a combined-cycle power plant using gas as the main fuel and diesel as the secondary fuel, comprising two sets of gas turbine generators (GTGs) of 235 MW and two sets of heat recovery steam generators (HRSGs) and one set of steam turbine (ST) to drive a set of steam turbine generators (STGs) of 240 MW.

## Raw-Material Sourcing

Sriracha Power Plant uses gas as the main fuel in electricity generation. It entered a 25-year gas purchase agreement with PTT Plc, ending in 2025 for an IPP gas price, and a diesel purchase agreement with Thai Oil Plc (TOP) to use as a secondary fuel, as well as a 25-year raw water purchase agreement with Eastern Water Resource Development and Management Plc (EW), ending in 2025. Besides, Sriracha Power Plant entered a PPA with EGAT for 10 MW on an annual basis and a 25-year backup PPA with Thailoil Power (TP) for 1 MW, ending in 2025, for use as reserve power during maintenance.

## Distribution

Sriracha Power Plant generates and distributes the entire amount of electricity to EGAT under the IPP-PPA. With reference to conditions of this PPA, it is EGAT's right to determine the amount of electricity purchased through a long-term power purchase plan on an annual and a monthly basis, and a short-term power purchase plan on a daily basis. The plant must notify the availability in electricity generation to EGAT on a long-term and short-term basis, whereby the availability payment (AP) is the compensation that EGAT pays Sriracha Power Plant for maintaining electricity generation availability regardless of the amount of electricity distributed to EGAT. The availability payment is made up of:

- **APR1:** The compensation that EGAT pays the Company for plant construction costs, debt burden and capacity cost.
- **APR2:** The compensation that EGAT pays the Company for fixed costs in machine operation and maintenance (Fixed O&M).

Sriracha Power Plant receives the AP revenue based on the availability notified by the plant itself and under power purchase conditions. Besides, it is eligible for the energy payment (EP) from the actual electricity generation based on EGAT's dispatch instruction, whereby EGAT has the contractual right to call for a termination of electricity generation or not to produce at full capacity, while EGAT is still required to pay AP to Sriracha Power Plant based on availability.

## 2. Rayong Central Utility Plant (CUP)

Rayong Central Utility Plant is a producer of electricity, steam and industrial water for industrial customers within PTT Group and industrial customers in general. It also distributes electricity to EGAT to maintain its balancing load between electricity and steam generation in case of industrial customers' high demand for steam, leading to the ramped-up electricity generation to yield enough steam to accommodate such demand. The excess electricity will then be distributed to EGAT under a non-firm SPP PPA. Therefore, distributing a portion of electricity to EGAT not only serves to enhance effectiveness, but also increases reliability for industrial customers and facilitates their business expansion in the future. Currently, there are four Central Utility Plants in Rayong:

### 2.1 Central Utility Plant 1: CUP-1

CUP-1 commands a generating capacity of about 226 MW, steam generating capacity of 890 tons per hour and industrial water production capacity of 720 cubic meters per hour. It is in WHA Eastern Industrial Estate (Map Ta Phut) in Rayong. It distributes electricity, steam and industrial water to industrial customers and EGAT, and it has begun commercial operation in 2006. CUP-1 has entered a Demineralized Water Purchase Agreement with WHA Eastern Industrial Estate (Map Ta Phut) No.1

in 2019 and No.2 in 2020 to enhance the potential and water resource reliability.

### Production Processes

CUP-1 is a cogeneration power plant, using natural gas as its fuel, consisting of six GTGs of 37.6 MW and six HRSGs of 70 tons per hour. Each set of equipment also has a supplementary burner that can produce steam at 70 tons per hour and an auxiliary boiler with a capacity of 50 tons per hour.

### Raw-Material Sourcing

CUP-1 uses natural gas as fuel, with a five-year gas purchase agreement with PTT ending in 2026, and the right to use water under a land purchase agreement with WHA Eastern Industrial Estate (Map Ta Phut). Furthermore, CUP-1 entered a one-year backup PPA of 57 MW with EGAT with an automatic renewal if the contract is not terminated otherwise.

### 2.2 Central Utility Plant 2: CUP-2

CUP-2 is located near Rayong Industrial Land (RIL), Rayong province, with a total capacity of about 113 MW, steam generating capacity of 170 tons per hour and industrial water production capacity of about 510 cubic meters per hour. It distributes electricity, steam and industrial water mainly to industrial customers and distributes excess electricity to EGAT under a non-firm SPP PPA. CUP-2 began commercial operation in 2008.

### Production Processes

CUP-2 is a cogeneration power plant using gas as its fuel, consisting of two GTGs of 37.6 MW and two HRSGs of 70 tons per hour each. Each set of equipment also has a supplementary burner that can produce additional steam of 70 tons per hour, which will be distributed to industrial customers. The remaining steam is passed through the steam turbines to drive a steam turbine generator (STG) of 38 MW to reduce the steam pressure to a medium level before distributing it to customers. Also, steam is produced from an auxiliary boiler of 50 tons per hour.

### **Raw-Material Sourcing**

CUP-2 uses natural gas as fuel, with a 15-year gas purchase agreement with PTT ending in 2023. A short-term gas purchase agreement has been signed for one year, expiring in 2024. A 15-year raw-water purchase agreement with RIL Industrial Estate was extended to 2032. Moreover, the Company entered a one-year backup PPA of 37.5 MW with EGAT with an automatic renewal if the contract is not terminated otherwise.

### **2.3 Central Utility Plant 3: CUP-3**

CUP-3 is in WHA Eastern Industrial Estate (Map Ta Phut), Rayong province, with a steam generating capacity of 280 tons per hour and industrial water production capacity of about 770 cubic meters per hour. The main equipment is made up of two auxiliary boilers of 70 tons per hour and one auxiliary boiler of 140 tons per hour, together with a demineralized- water production system. CUP-3 has commercially operated since 2009 with the installation of an STG of 15 MW in 2019 to maintain steam and electricity generating reliability to allow maximum production optimization.

### **Raw-Material Sourcing**

CUP-3 uses gas as steam generating fuel, with a 15-year gas purchase agreement with PTT ending in 2024 and a 15-year industrial water purchase agreement with WHA Eastern Industrial Estate (Map Ta Phut) ending in 2023, is under extension.

### **2.4 Central Utility Plant 4: CUP-4**

CUP-4 is in Asia Industrial Estate (AIE), Rayong province. This investment aligns with the Company's strategy for expanding its production capacity to accommodate industrial growth within Asia Industrial Estate and nearby industrial estates now and in the future. The investment also strengthens the potential of the production system and distribution network among all CUPs.

### **Production Processes**

CUP-4 is a cogeneration power plant, consisting of a GTG of 49 MW and a HRSG of 70 tons per hour, with a supplementary burner that can produce additional

steam of 70 tons per hour. CUP-4 has a network that connects electricity and steam distribution to customers and with CUP-1.

### **Raw-Material Sourcing**

CUP-4 entered a 15-year natural gas purchase agreement with PTT ending in 2034 and a 15-year clarified water purchase agreement with GC Estate ending in 2034.

### **Distribution for CUP-1, CUP-3 and CUP-4**

The Company has engaged in an electricity, steam and industrial water purchase agreement with industrial customers in WHA Eastern Industrial Estate (Map Ta Phut), Asia Industrial Estate (AIE) and nearby industrial estates. Besides, it entered a non-firm SPP PPA with EGAT of 40 MW with a contract period of five years, with an automatic renewal of five years for each renewal from the date when the Company started generating electricity for delivery to EGAT's system.

The electricity and steam distribution systems for CUP-1 and CUP-3, and CUP-1 and CUP-4, have been designed to connect with one another (Power and Steam Distribution Tie-up) to enhance production effectiveness and maintain balance and backup capacity for one another. CUP-4 has undergone commercial operation since the third quarter of 2019, enabling the Company's electricity and steam network to be more reliable, leading to a more effective plant optimization.

## **2. Glow Energy Plc (GLOW)**

GLOW operates as a major IPP and an SPP. Its core business is electricity generation for EGAT as well as production of steam, processed water and chilled water to supply to industrial customers in Map Ta Phut Industrial Estate, nearby industrial estates and Siam Eastern Industrial Park in Pluak Daeng, Rayong, and others. The total attributable electricity generating capacity is about 2,758 MW, steam generating capacity of 1,232 tons per hour, chilled water capacity of about 3,400 tons of refrigeration and processed water capacity of about 4,946 cubic meters per hour. Industrial customers usually have utility purchase agreements with a contract period of 10-20 years whereas



the PPA with EGAT is usually valid for 21- 30 years. GLOW's power plants both in Thailand and overseas consist of:

#### **1. Glow IPP Power Plant (GIPP)**

Glow IPP Power Plant is a combined-cycle plant using gas as a principal fuel and diesel as a secondary fuel. It has the same generating procedure as that of Sriracha Power Plant, and it has conducted commercial operation since January 2003. It operates as a major IPP, generating and distributing the entire production to EGAT, with an electricity generating capacity of 713 MW.

#### **2. Glow Energy Power Plant Phase 2**

Glow Energy Power Plant Phase 2 is a combined-cycle gas-fired cogeneration power plant. It commenced commercial operation in April 1996. Construction of the SPP replacement power plant of both Unit 1 and Unit 2 was completed, with commercial operation dates of November 29, 2022, and January 19, 2023. The SPP replacement power plant has a capacity of 200 MW and a steam generating capacity of 460 tons per hour. Electricity of 60 MW capacity is distributed to EGAT, while the remaining capacity is distributed to industrial customers in Map Ta Phut Industrial Estate.

#### **3. Glow Energy Power Plant Phase 4**

Glow Energy Power Plant Phase 4 is a gas-fired cogeneration power plant located in Map Ta Phut Industrial Estate. It commenced commercial operation in January 2005 with a generating capacity of 77 MW and a steam generating capacity of 137 tons per hour, a clarified water and demineralized water production capacity of 1,500 and 550 cubic meters per hour. All electricity generated is distributed to EGAT while steam, clarified water and demineralized water are distributed to industrial customers in Map Ta Phut Industrial Estate and nearby industrial estates.

#### **4. Glow Energy Power Plant Phase 5**

Glow Energy Power Plant Phase 5 is in the same vicinity as Glow SPP 3 Power Plant in Map Ta Phut Industrial Estate. This plant is equipped with a gas turbine, heat recovery steam generator and a steam

turbine, with a maximum electricity generating capacity of 328 MW. The electricity and the steam generated are distributed through GLOW's transmission lines. This plant is considered a larger combined-cycle and steam power plant than GLOW's other combined-cycle and steam power plants. Given the scale and effectiveness of Glow Energy Power Plant Phase 5, this plant can operate its base load unit while other smaller combined-cycle and steam power plants operate only to generate electricity to EGAT, subsequently enabling balance in the amount of electricity and steam distributed to industrial customers. This power plant commenced commercial operation in September 2011.

#### **5. GHECO-One Power Plant**

GHECO-One Power Plant is in Map Ta Phut Industrial Estate. It is a coal-fired power plant with a total capacity of 660 MW.

##### **Production Processes**

GHECO-One Power Plant has been designed and operated under an international standard, using bituminous coal, which is a high-quality coal with low sulfur contents as the project's principal fuel. The coal is imported from Indonesia and will be conveyed from a coal pile yard using a closed system conveyor to temporarily store them before finely pulverizing it and then injecting it to combine with air in the pulverized coal-fired boiler (PC boiler) that generates steam with a temperature of 566 degrees Celsius and a pressure of 242 bars. The coal is then transmitted into the steam turbine generator to generate electricity.

##### **Distribution**

GHECO-One Power Plant operates as an IPP, generating and distributing electricity to EGAT. It commenced commercial operation in July 2012.

#### **6. Glow Energy CFB3 Power Plant**

Glow Energy CFB3 Power Plant is a coal-fired power plant that commenced commercial operation in November 2010. It is equipped with a circulating fluidized bed boiler and a steam turbine generator. It is in the same area as Glow SPP3 Power Plant in Map

Ta Phut Industrial Estate. This plant has been designed for an electricity generating capacity of 85 MW, steam generating capacity of 79 tons per hour, or an electricity generating capacity of 115 MW without steam generation. Electricity and steam are distributed to industrial customers in Map Ta Phut Industrial Estate.

#### **7. Glow SPP2 / Glow SPP3 Power Plant (Phase 3)**

Glow SPP2 and Glow SPP3 Power Plants are hybrid natural gas and coal-fired combined-cycle cogeneration facilities located in Map Ta Phut Industrial Estate. They commenced commercial operation in March 1999. Glow SPP2 and Glow SPP3 Power Plants are considered the same facility. Now, SPP Replacement is under construction.

#### **Production Processes**

Glow SPP2 and Glow SPP3 Power Plants are separated into (1) Glow SPP2 Co., Ltd. with two gas turbines and a capacity of about 35 MW and two heat recovery units and (2) Glow SPP3 Co., Ltd., a coal-fired power plant with two units of combined-cycle gas and coal-fired generators (hybrid cycle unit) of 222 MW. Each unit is made up of a steam turbine, two gas turbines with a capacity of about 35 MW, two heat recovery units and a circulating fluidized bed boiler. Glow SPP2 and Glow SPP3 Power Plants have a combined generating capacity of 513 MW, steam generating capacity of 190 tons per hour and demineralized water production capacity of 150 cubic meters per hour.

Glow SPP2 and Glow SPP3 are combined-cycle gas and coal-fired power plants (hybrid cycle cogeneration). They use a gas turbine and a steam turbine in generating electricity and use a CFB boiler (Circulating Fluidized Bed Boiler) to generate steam, which is different from the Company's other power plants that mainly use natural gas. Instead, Glow SPP2 / Glow SPP3 Power Plants use both coal and natural gas as fuels. Even though the electricity-generating cycle at these plants is different from those at general power plants, the machinery and equipment used are of international standards for leading electricity generating firms. The Company has incorporated hybrid facility technology

to increase the use of coal fuel, which is less costly, and to reduce the use of natural gas as the principal fuel in production.

#### **Distribution**

The electricity generated from Glow SPP2 / Glow SPP3 Power Plants is distributed to EGAT and industrial customers in Map Ta Phut Industrial Estate, while steam and processed water are also distributed to industrial customers in the estate and nearby industrial estates.

#### **8. Glow SPP11 Power Plant Project 1**

Glow SPP11 Power Plant Project 1 is a gas-fired cogeneration power plant located in Siam Eastern Industrial Park. It commenced commercial operation in October 2000.

#### **Production Processes**

This power plant is equipped with two gas turbines, one steam turbine, one absorption chiller and one backup electric chiller, with an electricity generating capacity of 120 MW and a chilled-water capacity of 2,200 tons of refrigeration.

#### **Distribution**

The electricity generated from this power plant is distributed to EGAT, while the electricity and chilled water are distributed to industrial customers in Siam Eastern Industrial Park via the Company's transmission lines and chilled-water pipeline network.

#### **9. Glow SPP11 Power Plant Project 2**

Glow SPP11 Power Plant Project 2 is a gas-fired cogeneration power plant located in Siam Eastern Industrial Park. The power plant commenced commercial operation in December 2012.

#### **Production Processes**

This power plant is equipped with two gas turbines, one absorption chiller and one electric chiller to enhance the production capacity and increase the effectiveness of gas turbines. The plant's electricity generating capacity is 110 MW, with a chilled water production capacity of 1,200 tons of refrigeration.

## Distribution

The power plant distributes electricity to EGAT and the remaining capacity (both electricity and chilled water) to industrial customers in Siam Eastern Industrial Park via power transmission lines and chilled-water pipelines.

### 10. Glow SPP11 Power Plant Project 3

Glow SPP11 Power Plant Project 3 is equipped with four gas-fired engines. It is located near Glow SPP11, with a total production capacity of 23 MW. The four generators were installed, and the power plant commenced commercial operation in October 2006.

### 11. Glow SPP11 Power Plant Project 3 (Extension)

Glow SPP11 Power Plant Project 3 (Extension) is equipped with two gas-fired engines. It is located near Glow SPP11 with a total capacity of 19 MW. The two generators were installed, and the power plant commenced commercial operation in April 2015.

## Glow's Raw-Material Sourcing

Key raw materials for electricity and steam generation for Glow are natural gas and coal, except for Houay Ho Power Plant, a hydro power plant; a solar power plant in Asia Industrial Estate; and Chonburi Clean Energy Power Plant, an industrial waste power plant.

## Natural Gas

Glow has entered 10 gas purchase agreements with PTT, grouped into:

- A gas purchase agreement for an IPP
- A gas purchase agreement for an SPP
- A gas purchase agreement for a cogeneration power plant
- A gas purchase agreement for an industrial customer.

Power Plant	Period (Year)	Ending
1. Glow IPP (GIPP)	25	2028
2. Glow Energy Power Plant Phase 2 (Replacement)	25	2048
3. Glow Energy Power Plant Phase 4	25	2037
4. Glow Energy Power Plant Phase 5	5	2026
5. Glow SPP2 / Glow SPP3 Power Plant (Phase 3)	25	2024
6. Glow SPP2 (Replacement)	25	2049
7. Glow SPP 11 Phase 1	25	2025
8. Glow SPP 11 Phase 2	25	2037
9. Glow SPP 11 Phase 3	4	2025
10. Glow SPP 11 Phase 3 (Extension)	4	2025



## Coal

It is coal that fuels CFB1 and CFB2 power plants of Glow SPP3 Co., Ltd., CFB3 of Glow and GHECO-ONE Power Plant with a total purchase volume (measured by total mass) of 3.2, 3.8, and 1.3 million tons (data as of December 2023) in 2021, 2022 and 2023. In 2024, the Company purchases coal through medium-term and long-term purchase agreements and spot markets with domestic and international coal suppliers.

Coal is priced in US dollars, comprising the coal price (FOB) and freight rate. The coal cost for GHECO-ONE Power Plant is passed on to EGAT at an agreed heat rate. However, for cogeneration plants, Glow's product prices partially reflect the coal cost, so changes in the coal price affect Glow's profitability, since Glow cannot push its freight cost burden to EGAT under the PPA and to industrial customers purchasing electricity and steam.

## Diesel

Diesel is a secondary fuel for GTGs in generating electricity for an IPP. Glow does not have any issues in procuring diesel because its plants are located near Rayong Refinery and Star Refinery, both located in industrial estates, and near PTT's oil depot in Si Racha district, Chon Buri. Under a PPA with an IPP, Glow IPP Co., Ltd. is required to allocate sufficient diesel reserve for electricity generation for three days as specified in the agreement. For GHECO-ONE Power Plant, diesel is used only to get the machine up and running, so Glow does not need to prepare diesel reserve as required of an IPP.

## Raw Water and Other Utilities

### **GHECO-ONE Power Plant, Glow Energy Power Plant and Glow SPP2/Glow SPP3 Power Plants**

are in Map Ta Phut Industrial Estate, owned and operated by the Industrial Estate Authority of Thailand (IEAT). IEAT is a state enterprise under the control and

supervision of the Ministry of Industry, established under the Industrial Estate Authority of Thailand Act B.E.2522. IEAT as a government enterprise is responsible for acquiring infrastructure and utilities (raw water and waste treatment system, etc.) for entrepreneurs in Map Ta Phut Industrial Estate. Therefore, it is responsible for procuring water and utilities for Glow's power plants.

Seawater used as cooling water is transported via an underground pipeline from the port to the condenser for process use before getting transported back to the sea via a drainage canal. Meanwhile, clean and demineralized water used in production are produced by Glow's water treatment plant.

## **Glow IPP Power Plant**

is in an industrial estate, owned and operated by WHA, which is responsible for procuring key utilities such as raw water, a waste treatment system, telephone system, and other central utilities for Glow's power plants. Apart from the utility expenses, Glow pays WHA monthly fees for central utility management and maintenance within the industrial estate, which get adjusted occasionally.

## **Glow SPP11 Power Plant Project 1, Project 2, and Project 3**

are in Siam Eastern Industrial Park, which has its own wastewater treatment system and other utilities, with Eastern Water Resources Development and Management Plc as the procurer of raw water.

## **Other Raw Materials**

Glow uses a small amount of limestone (sourced domestically) in coal power plants and uses different chemicals in conditioning raw water to become clean and demineralized water. These chemicals include aluminum sulfate, sodium hydroxide, sodium hydrochloride, saline and trisodium phosphate.

### 3. Ratchaburi Power Co., Ltd. (RPCL)

RPCL is an IPP with a total capacity of 1,400 MW, with two production units of 700 MW capacity each. It lies in Damnoen Saduak district, Ratchaburi. It distributes the entire production to EGAT under a 25-year PPA from the date when the power plant commenced electricity generation for EGAT's system: March 1, 2008 for Unit 1 and June 1, 2008 for Unit 2. The agreement, whereby electricity generation complies with EGAT's conditions and operation orders, will remain valid until 2033.

#### Production Processes

RPCL is a combined-cycle power plant using natural gas as a principal fuel and diesel as a secondary fuel. It employs the same electricity generation procedures as Sriracha Power Plant's. RPCL has two sets of GTGs of 245 MW for each production unit, an HRSG, and one set of STGs of 275 MW for each production unit.

#### Raw-Material Sourcing

RPCL uses natural gas as fuel under a 25-year PPA with PTT, ending in 2033, for an IPP gas price, whereby RPCL can pass on the energy payment to EGAT. In case PTT is unable to supply natural gas as agreed, and EGAT orders RPCL to operate with the secondary fuel, EGAT will compensate the increase in fuel cost for RPCL. RPCL has entered a high-speed diesel purchase agreement with SUSCO and PTT (Secondary Fuel Agreement: SFA) to use it as a secondary fuel if natural gas is unavailable. Both agreements are valid for five years, ending in 2026.

#### Distribution

RPCL generates and distributes its entire production to EGAT under a PPA for an IPP. The agreement empowers EGAT to determine the power purchase volume via a long-term (annual and monthly) power purchase plan and the short-term (daily) plan, whereby RPCL must notify its availability to EGAT both on the long-term and short-term bases. The AP is the compensation that EGAT pays RPCL for maintaining the generating availability regardless of the

amount of electricity distributed to EGAT. In the meantime, RPCL will receive the AP revenue based on its availability notified and under the PPA. Besides, RPCL will receive the EP revenue from the actual amount of electricity generated as commanded by EGAT although EGAT is contractually entitled to order a termination of electricity generation or withholding of the maximum capacity. EGAT is still required to pay AP to RPCL based on its availability.

### 4. Combined Heat and Power Producing Co., Ltd. (CHPP)

CHPP is a VSPP with an installed capacity of about 5 MW and a chilled-water capacity of about 12,000 tons of refrigeration. It is located at the Chaengwatthana Government Complex, Bangkok (The Government Complex). It has a non-firm PPA with MEA and distributes cooling energy for the air-conditioning system for the Government Complex buildings.

#### Production Processes

CHPP is a combined heat and power with a district cooling power plant. It commenced commercial operation in 2009. Its chilled-water processes rely on electric chillers, with three units of 2,000 tons of refrigeration and three units of 1,000 tons of refrigeration each.

#### Raw-Material Sourcing

CHPP uses electricity to produce chilled water due to the expiry of its gas purchase agreement with PTT.

#### Distribution

CHPP distributes electricity to MEA, and it entered a 5-year non-firm PPA on April 23, 2009. The agreement is renewed automatically every five years until the agreement is terminated. The remaining electricity generates the cooling energy to distribute to the Government Complex for its air-conditioning system. The Company entered a 30-year cooling energy purchase agreement with Dhanarak Asset Development Co., Ltd., ending in 2038.

#### **5. Bang Pa-In Cogeneration Co., Ltd. Project 1 (BIC-1)**

BIC-1 is an SPP with a power generating capacity of about 117 MW and a steam generating capacity of about 20 tons per hour. It is in Bang Pa-In Industrial Estate, Bang Pa-In district, Phra Nakhon Sri Ayutthaya. It distributes electricity under a firm-SPP PPA mainly to EGAT, amounting to 90 MW, and distributes a portion of electricity and steam to industrial customers in Bang Pa-In Industrial Estate.

##### **Production Processes**

BIC-1 is a cogeneration plant using natural gas as fuel. It is equipped with two sets of GTGs to run the generator, whereby the exhaust from the gas turbine will be used to transfer heat to the water to generate steam with two sets of HRSGs. It will then pass through the steam turbines and run the STGs. The remaining steam will then be distributed to industrial customers.

##### **Raw-Material Sourcing**

BIC-1 uses natural gas as its production fuel. It has entered a 25-year gas purchase agreement with PTT, ending in 2038.

##### **Distribution**

BIC-1 distributes electricity to EGAT under a 25-year firm-SPP PPA for 90 MW, from the commencement of electricity generation into EGAT's system in 2013. The agreement will remain valid until 2038, and the remaining electricity will be distributed to industrial customers in Bang Pa-In Industrial Estate on long-term PPAs, with contractual periods of about 15 years. The Company also entered steam and processed water purchase agreements with industrial customers in Bang Pa-In Industrial Estate.

#### **6. Bang Pa-In Cogeneration Co., Ltd. Project 2 (BIC- 2)**

BIC-2 is an SPP with an electricity generating capacity of 117 MW and a steam generating capacity of about 20 tons per hour. It is in Bang Pa-In Industrial Estate, Bang Pa-In, Phra Nakhon Sri Ayutthaya. It distributes electricity under the firm-SPP, mainly to EGAT for 90 MW, and a portion of electricity and steam to industrial customers in Bang Pa-In Industrial Estate.

##### **Production Processes**

BIC-2 is a cogeneration power plant using natural gas as production fuel. It is equipped with two sets of GTGs to run the generators, whereby the exhaust from the gas turbine transfers heat to the water to generate steam with two sets of HRSGs. It will then pass through steam turbines and run the STGs. The remaining steam is then distributed to industrial customers.

##### **Raw-Material Sourcing**

BIC-2 uses natural gas as its production fuel. It has entered a 25-year gas purchase agreement with PTT, ending in 2042.

##### **Distribution**

BIC-2 distributes electricity to EGAT under a 25-year firm-SPP PPA for 90 MW from the commencement of electricity generation into EGAT's system in 2017. The agreement will remain valid until 2042, and the remaining electricity is distributed to industrial customers in Bang Pa-In Industrial Estate on long-term PPAs, with a contractual period of about 15 years. The Company also entered a steam and processed-water agreement with industrial customers in Bang Pa-In Industrial Estate.



## 7. Energy Recovery Unit Co., Ltd. (ERU)

The Energy Recovery Unit (ERU) Project was established under the cooperation between GPSC and Thai Oil Plc (TOP), an energy production scheme under the Clean Fuel Project (CFP) of TOP. It is a co-generation plant with an electricity generating capacity of 250 MW (50 MW to be used in the project) and a steam generating capacity of 175 tons per hour for CFP. ERU is on sub-leased land from TOP in Si Racha district, Chon Buri. The project is under construction, expected to be completed and begin commercial operation in 2025.

### Production Processes

ERU is a combined heat power plant using petroleum pitch as its fuel via a pitch solidification system which receives pitch from the residue hydrocracking unit of CFP and then injects it into the circulating fluidized bed boiler. The heat then generates high-pressure steam, which passes through steam turbines to generate electricity.

### Raw-Material Sourcing

ERU uses as its main fuel petroleum pitch, a by-product of CFP's distillation with environment-friendly high technology. ERU will enter a 25-year agreement to purchase the pitch and other fuels with TOP after the rights transfer of the project.

### Distribution

ERU will begin electricity distribution and deliver other products to TOP for revenue recognition after taking the transfer. The agreement is valid for 25 years, with a capacity of 180-200 MW.

## 8. IRPC Clean Power Co., Ltd. (IRPC-CP)

IRPC-CP is an SPP with an electricity generating capacity of 120 MW for each of its production unit, totaling 240 MW, and a steam generating capacity of about 180-300 tons per hour 180 tons per hour for on-peak periods and 300 tons per hour for off-peak periods. It is in IRPC Industrial Zone, Rayong. It distributes electricity under two firm-SPP PPAs to EGAT: each for 90 MW, totaling 180 MW. The agreements are valid for 25 years, and the remaining electricity and steam capacity is distributed to IRPC. Moreover, IRPC-CP is constructing the CHP III project with an installed capacity of 70 MW, to be distributed entirely to IRPC. Commercial operation is expected in March 2024.

### Production Processes

IRPC-CP is a cogeneration plant using natural gas as its production fuel. It is equipped with two sets of GTGs for each production unit, two sets of HRSGs for each production unit and one set of STGs for each production unit. Furthermore, steam is generated via an auxiliary boiler and the inlet air cooling system by using electric chillers designed and installed to increase the electricity generation capacity at different periods. CHP III is combined-cycle power plant using gas as its production fuel. It is equipped with one set each of GTG, HRSG, and STG.

### Raw-Material Sourcing

IRPC-CP uses natural gas as its production fuel. It has entered a 27-year gas purchase agreement with PTT from the commencement of commercial operation for Phase 1.

### Distribution

IRPC-CP entered two firm-SPP PPAs with EGAT for 90 MW each, totaling 180 MW. The agreements are valid for 25 years from the date when the Company started generating electricity for EGAT's system. Besides, IRPC-CP entered a PPA for the remaining capacity of 60 MW and a steam purchase agreement of 180-300 tons per hour, depending on the periods, with IRPC, which will end in 2042 or at the same time as that of the PPA with EGAT, whichever is later.

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

NNEG is an SPP with a total electricity generating capacity of about 185 MW with a steam generating capacity of 40 tons per hour, located in Nava Nakorn Industrial Promotion Zone, Pathum Thani. It distributes electricity under a firm-SPP PPA to EGAT for 90 MW, and the remaining capacity with a steam to industrial customers in Nava Nakorn Industrial Promotion Zone. Besides, NNEG is under construction of an expansion phase with a power generating capacity of 30 MW and a steam capacity of 5 tons per hour. Commercial operation of the expansion phase is expected in December 2024. All electricity and steam will be distributed to industrial customers in Nava Nakorn Industrial Promotion Zone.

### **Production Processes**

NNEG is a cogeneration power plant using natural gas as its production fuel. It is equipped with two sets of 45-MW GTGs and one set of 46-MW GTGs, three sets of HRSGs and one set of 35-MW STGs and 1 set of 14- MW STGs. Furthermore, an inlet air cooling system by using electric chillers has been designed and installed to increase the electricity generation capacity at different time periods.

### **Raw-Material Sourcing**

NNEG uses gas as its production fuel. It has entered a 25-year gas purchase agreement with PTT, ending in 2041.

### **Distribution**

NNEG entered a firm-SPP PPA with EGAT for 90 MW as well as PPAs and steam purchase agreements with industrial customers in Nava Nakorn Industrial Promotion Zone.

## **Renewable-Energy Power Plants in Thailand**

### **1. Global Power Synergy Plc (GPSC) Rayong Waste-to-Energy Project (WTE)**

GPSC operates the Waste-to-Energy Project, located in Rayong, which consists of two projects, namely Refuse-Derived Fuel (RDF) Project, producing 300 tons of RDF per day, with construction completed since 2018, and an RDF power plant with a capacity of 9.8 MW, which held a PPA with PEA and started commercial operation on May 28, 2021.

### **Raw-Material Sourcing and Production Processes**

GPSC cooperates with Rayong Provincial Administrative Organization (PAO Rayong), which manages community waste for over 67 local government organizations to feed community waste to the RDF plant. GPSC sorts 500 tons per day or 170,000 tons per year of waste from 1,000-1,200 tons per day of community waste, which is enough for power generation. Moving grate technology is used to incinerate the waste at 850-1,100 degree Celsius, and RDF waste is conveyed with a closed-system conveyor.

### **Distribution**

Electricity is distributed to PEA under the waste to-energy feed-in-tariff project. The agreement is valid for 18 years.

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

TSR holds all shares in Siam Solar Energy 1 Co., Ltd. (SSE1), a VSPP designed to develop solar farms, which use a photovoltaic system on a ground-mounted solar farm. Each of its 10 projects has a capacity of 8 MW, totaling 80 MW of contractual capacity, which is distributed to PEA.

Project	Location		Proposed Capacity (MW)	Commercial Operation
	District	Province		
SSE1-PV01	Bo Phloi	Kanchanaburi	8.0	September 4, 2013
SSE1-PV02	Don Chedi	Suphan Buri	8.0	July 17, 2013
SSE1-PV03	Nong Yasai	Suphan Buri	8.0	October 28, 2013
SSE1-PV04	Doem Bang Nang Buat	Suphan Buri	8.0	November 21, 2013
SSE1-PV05	Doem Bang Nang Buat	Suphan Buri	8.0	November 21, 2013
SSE1-PV06	Dan Makham Tia	Kanchanaburi	8.0	June 6, 2014
SSE1-PV07	Tha Muang	Kanchanaburi	8.0	March 20, 2014
SSE1-PV08	Phanom Thuan	Kanchanaburi	8.0	June 6, 2014
SSE1-PV09	U-Thong	Suphan Buri	8.0	April 4, 2014
SSE1-PV10	Sam Chuk	Suphan Buri	8.0	May 30, 2014

### Distribution

SSE1 distributes the entire electricity generated to PEA's system, based on 10 PPAs for a VSPP, dated April 11, 2012 for SSE1-PV01 to SSE1-PV05 projects, and July 25, 2012 for SSE1-PV06 to SSE1-PV10 projects. The power purchase capacity for each agreement is 8 MW, which is valid for five years. The agreement is automatically renewed for five years upon each renewal. The adder is applied to these PPAs, whereby the revenue can be categorized into 1) the revenue according to the capacity payment wholesaled to PEA, which is subject to the changes in the fuel cost and the maximum power purchase not exceeding the capacity specified in the PPA, and 2) the adder, whereby SSE1-PV01 to SSE1-PV10 projects are eligible for an adder of THB 6.5 per kWh. They will be supported for 10 years from the start of commercial operation.

### **3. Ground-Mounted Solar Farm Project for Chanthaburi Shrimp Farmer Cooperative Limited (Solar 1), sponsored by CHPP**

CHPP has taken part as sponsor of the ground-mounted solar farm project for selected agricultural cooperatives to generate and distribute electricity under the announcement of ERC on purchasing electricity from ground-mounted solar farms for government institutes and agricultural cooperatives B.E. 2558, dated September 17, 2015. The project is located on the premises, occupying about 75 rai of members' space in Chanthaburi Shrimp Farmer Cooperative Limited, Na Yai Am district, Chanthaburi. The capacity of 5 MW has been distributed to PEA since December 30, 2016, under a 25-year agreement.

#### **Raw-Material Sourcing**

The key raw material used in solar farms is sunlight, which depends largely on the location, topography and climatic condition.

#### **Distribution**

Solar 1 distributes electricity of about 5 MW to PEA over a 25-year PPA from the start of electricity distribution on December 30, 2016. The feed-in tariff (FiT) rate of 5.66 Baht per kWh is applied through the entire contract period.

### **4. Engineering, Procurement and Construction (EPC) Business for Solar Power Generation by CHPP**

CHPP operates the engineering, procurement and construction (EPC) a solar power plant within and outside PTT Group since 2017. The total installed capacity as of the end of December 2022 was 49.93 MW.

### **5. Glow Energy Solar Power Plant under Glow Energy Plc (Glow)**

Glow Energy Solar Power Plant (Solar Farm) leverages photovoltaic technology. It is in Asia Industrial Estate and has begun commercial operation since August 2012. Glow Energy Solar Power Plant commands an installed capacity of 1.55 MW, whereby the electricity generated is distributed to PEA.

### **6. Private PPA Solar Power Generation and Distribution Project under GPSC Group**

GPSC Group has further developed its renewable-energy (renewables) business operations by seeking investment in solar farm or solar rooftop projects with government bodies and private companies to invest and share the benefit from electricity generation using solar power under Private Power Purchase Agreements (PPAs). Currently, the Company's subsidiaries (GPSC, Glow, CHPP and IRPC-CP) have entered PPAs with companies within and outside PTT Group, with a combined installed capacity of 49 MW as of the end of December 2023.

### **7. Solar Farm Projects in Thailand via Global Renewable Power Co., Ltd. (GRP)**

GRP has invested 100% in four companies, namely 1) N.P.S. Stargroup Co., Ltd., 2) World X Change Asia Co., Ltd. and 3) P.P. Solar Co., Ltd., all of which are engaging in the solar farm business, while Global Renewable Power Operating Co., Ltd. is engaging in the operation and maintenance business for these companies, which own nine solar farm projects with a total capacity of 39.5 MW, located in four provinces: Lop Buri, Suphan Buri, Pichit and Khon Kaen. Currently, the electricity generated is distributed into PEA's system over 25-year PPAs (PPAs). The PPAs can be classified into an adder type, at the rate of THB 8 per unit (for the first 10 years of the agreement) for 3.6 MW, and the feed-in tariff (FiT) type at the rate of THB 5.66 per unit for 35.9 MW. All solar farms have begun commercial operation since 2014-2015.



Project	Location		Proposed Capacity (MW)	Commercial Operation
	District	Province		
NPS1	Sak Lek	Pichit	6	December 29, 2015
NPS2	Dan Chang	Suphan Buri	6	December 29, 2015
NPS3	Ban Mee	Lop Buri	6	December 30, 2015
WXA1	Taphan Hin	Pichit	6	December 29, 2015
WXA2	Sak Lek	Pichit	6	December 29, 2015
WXA3	Taphan Hin	Pichit	6	December 29, 2015
PPSolar 1	Kranuan	Khon Kaen	1.2	March 26, 2014
PPSolar 2	Kranuan	Khon Kaen	1.2	March 21, 2014
PPSolar 3	Kranuan	Khon Kaen	1.2	March 13, 2015

## 8. Chonburi Clean Energy Co., Ltd. (CCE)

CCE is an SPP with an installed electricity capacity of 8.63 MW. It lies in WHA Chonburi Industrial Estate 1.

### Production Processes

Chonburi Clean Energy Power Plant can accommodate non-hazardous industrial waste of up to 100,000 tons per year. The industrial waste is from different industrial estates in Chon Buri and nearby provinces. The power plant transfers the industrial waste to the combustion room to generate electricity, using environment-friendly technology.

### Distribution

This power plant distributes 6.9 MW of the electricity generated to PEA's system under a 20-year PPA. It has begun commercial operation since November 2019.

## Power Plants Abroad

### 1. Houay Ho Power Plant (HHPC)

Houay Ho Power plant is a hydro power plant that began commercial operation in September 1999. The plant is in Attapeu province, southern Lao PDR. The plant is operated under the IPP program, generating and distributing an installed capacity of 152 MW. Of the total, 126 MW is distributed to EGAT and 2 MW to Electricite du Lao (EDL).

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

NL1PC is registered in Lao PDR with the objective of developing the Nam Lik 1 Power Plant Project. It is a run-of-river hydro power plant with a capacity of 65 MW, located about 90 kilometers north of Vientiane. It is a concrete dam 160 meters wide and with 21.5-meter height of the dam head, blocking Nam Lik River, a tributary of Nam Nguem River in Lao PDR. It is equipped with two sets of bulb turbines with a capacity of 32.5 MW. NL1PC signed a concession agreement with the Government of Laos on February 6, 2013 in a Build, Operate and Transfer (BOT) scheme. The property will be transferred to the Government of Laos upon termination of the concession, which is valid for 30 years, from the day when the Government of Laos has entirely complied with the condition precedent of the concession. The PPA with EDL is also valid until the end of the concession, whereby the concession and the PPA will end in 2044.

### Raw-Material Sourcing

The key raw material used for generating electricity for a hydro power plant is running water that flows naturally in the river and water from a dike built for electricity generation instead of building a reservoir. Even though the water is derived from natural sources at no cost, the amount of water at different time periods is uncertain and unpredictable, depending on the climate and season. The Company has studied the sufficiency of water and taken such factors into consideration when designing the power plant.

### **Distribution**

NL1PC distributes the entire capacity to EDL under a long-term PPA, which is valid for 25 years. Nam Lik1 Power Plant has formally begun commercial operation since July 1, 2019.

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

GPSC holds a 25% stake in Xayaburi Power Co., Ltd. (XPCL) through Natee Synergy Co., Ltd. (NSC). XPCL was registered in Lao PDR to develop the Xayaburi Hydro Power Plant project, a run-of-river plant of 1,285 MW, located on the Mekhong River, about 100 kilometers from southern Luang Phrabang. The project leverages a Kaplan turbine technology that operates together with seven generators of 175 MW and one generator of 60 MW. It has commenced commercial operation since October 29, 2019. XPCL entered a concession agreement with the Government of Laos on October 29, 2010, whereby the distribution systems are under a Build-Own-Operate and Transfer (BOOT) scheme. The concession will end at the same time as the 29-year PPA. XPCL has received concession renewal for another two years, making the total concession period 31 years from the date of commercial operation.

### **Raw-Material Sourcing**

The key raw material for generating electricity for a hydro power plant is the running water that flows naturally in the river and water from a dike built for electricity generation instead of building a reservoir. Even though the water is derived from natural sources at no cost, the amount of water at different time periods is uncertain and unpredictable, depending on the climatic condition and season. XPCL has studied the sufficiency of the water and taken seasonality factors into consideration when designing the power plant.

### **Distribution**

XPCL distributes 1,220 MW to EGAT under a long-term PPA for 29 years from the commencement of commercial operation, and 60 MW to Electricite Du Laos (EDL), under a long-term PPA for 31 years from the commencement of commercial operation.

### **4. Global Renewable Power One Co., Ltd. (GRP1)**

GRP1 holds 90% shares in Sheng Yang Energy Co., Ltd., which operates a solar farm in Taiwan. It has a total installed capacity of 55.8 MW.

### **Distribution**

The entire electricity is distributed to Taiwan Power Company, a state enterprise held by the Government of Taiwan. It is a single buyer in Taiwan under a 20-year PPA with feed-in tariff rates through the period.

### **5. Global Renewable Synergy Co., Ltd. (GRSC)**

5.1 Avaada Energy Private Limited (AEPL): GPSC holds 42.93% shares through GRSC in AEPL, which operates a renewables power business in several states in India with a total generating capacity (committed capacity) of 9,525 MW. Of this total, 3,990 MW generated by solar farms has gradually begun commercial operation since 2018.

### **Distribution**

AEPL distributes the entire capacity to industrial customers and the Government of India under a long-term PPA, which is valid for 10-25 years.

5.2 Offshore Wind Power Project: GPSC holds 25% shares in CI Changfang Limited and Ci Xidao Limited (CFXD Project) through GRSC and Global Renewable Synergy Taiwan Company Limited (GRSC TW). It has a combined electricity generating capacity of 595 MW. The operation started in 2022 with a target to distribute power in full capacity in 2024.

### **Distribution**

The entire electricity is distributed to the Government of Taiwan under a long-term PPA, which is valid for 20 years.

Company	Project/ Location	Capacity								Power Plant Type	Fuel	Power Purchase Agreement	Commercial Operation
		Electricity (MW)		Steam (Ton/Hour)		Chilled Water (Refrigerated Ton)		Industrial Water (Cu.M./Hour)					
		Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity				
Combined-Cycle / Cogeneration / Combined Heat													
GPSC	Sriracha Power Plant, Si Racha district, Chon Buri	700	700	-	-	-	-	80	80	IPP	Natural gas 25-year agreement, ending 2025	EGAT 25-year agreement, ending 2025	2000
GPSC	CUP-1 WHA Eastern Industrial Estate, Map Ta Phut, Rayong	226	226	890	890	-	-	720	720	SPP (Non-firm)	Natural gas 5-year agreement, ending 2026	EGAT 40 MW 5-year agreement, with 5-year renewal, next renewal ending 2025	2006
												Industrial customers 10-15-year agreement, 2017-2026, with 5-year renewal	
GPSC	CUP-2 Near R.I.L. Industrial Estate, Rayong	113	113	170	170	-	-	510	510	SPP (Non-firm)	Natural gas 15-year agreement ending 2024	EGAT 60 MW 5-year agreement, with 5-year renewal, next renewal ending 2025	2008
												Industrial customers 15-year agreement, first round ending 2026, with 5-year renewal	

Company	Project/ Location	Capacity										Power Plant Type	Fuel	Power Purchase Agreement	Commercial Operation
		Electricity (MW)		Steam (Ton/Hour)		Chilled Water (Refrigerated Ton)		Industrial Water (Cu.M./Hour)							
		Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity						
GPSC	CUP-3 WHA Eastern Industrial Estate, Map Ta Phut, Rayong	15	15	280	280	-	-	-	-	770	770	SPP Cogeneration	Natural gas 15-year agreement	Industrial customers 15-year agreement, ending 2024-2027, with 5-year renewal	2009
GPSC	CUP-4 Asia Industrial Estate (AIE), Rayong	49	49	140	140	-	-	-	-	-	-	SPP Cogeneration	Natural gas 15-year agreement ending 2034	Industrial customers 10-15-year agreement, with 5-year renewal	Q3/2019
GLOW	GLOW IPP, WHA Chonburi Industrial Estate 1, Chon Buri	713	677	-	-	-	-	-	-	-	-	IPP	Natural gas 25-year agreement ending 2028	EGAT 25-year agreement ending 2028	2003
GLOW	GHECO-One Map Ta Phut Industrial Estate, Rayong	660	429	-	-	-	-	-	-	-	-	IPP	Coal medium- and long-term agreement	EGAT ending 2037	2012
GLOW	Glow Energy Phase 1, Map Ta Phut Industrial Estate, Rayong	-	-	-	-	-	-	-	-	1,240	1,240	SPP	-	Industrial customers	1994
GLOW	Glow Energy Phase 2 (SPP Replacement), Rayong	200	200	460	460	-	-	-	-	934	934	SPP (Firm)	Natural gas 25-year agreement ending 2049	EGAT 25-year agreement ending 2030	SPP Replacement 2022-2023
														Industrial customers 10-20-year agreement	



Company	Project/ Location	Capacity								Power Plant Type	Fuel	Power Purchase Agreement	Commercial Operation	
		Electricity (MW)		Steam (Ton/Hour)		Chilled Water (Refrigerated Ton)		Industrial Water (Cu.M./Hour)						
		Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity					
GLOW	Glow Energy Phase 4, Map Ta Phut Industrial Estate, Rayong	77	77	137	137	-	-	-	2,050	2,050	SPP (Firm)	Natural gas 25-year agreement ending 2037	EGAT 25-year agreement, ending 2030	2005
GLOW	Glow Energy Phase 5, Map Ta Phut Industrial Estate, Rayong	328	328	160	160	-	-	-	-	-	SPP Cogeneration	Natural gas 5-year agreement ending 2026	Industrial customers 10-20-year agreement	2011
GLOW	Glow Energy CFB3, Map Ta Phut Industrial Estate, Rayong	85	85	79	79	-	-	-	-	-	Cogeneration	Coal Medium and long term agreement	Industrial customers 10-20-year agreement	2010
GLOW Phase 3	Glow SPP2/ Glow SPP3 Map Ta Phut Industrial Estate, Rayong	513	513	190	190	-	-	-	150	150	SPP (Firm)	Natural gas and Coal 25-year agreement ending 2024	EGAT 25-year agreement, ending 2024	SPP Replacement 2024-2025
													Industrial customers 10-20-year agreement	
GLOW SPP11	Glow SPP11 Phase 1, Siam Eastern Industrial Park, Rayong	120	120	-	-	2,200	2,200	-	360	360	SPP (Firm)	Natural gas agreement ending 2025	EGAT 25-year agreement ending 2025	2000
													Industrial customers 2-10-year agreement	
GLOW SPP11	Glow SPP11 Phase 2, Siam Eastern Industrial Park, Rayong	110	110	-	-	1,200	1,200	-	212	212	SPP (Firm)	Natural gas 25-year agreement ending 2037	EGAT 25-year agreement ending 2037	2012
													Industrial customers 2-10-year agreement	

Company	Project/ Location	Capacity								Power Plant Type	Fuel	Power Purchase Agreement	Commercial Operation
		Electricity (MW)		Steam (Ton/Hour)		Chilled Water (Refrigerated Ton)		Industrial Water (Cu.M./Hour)					
		Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity				
GLOW SPP11	Glow SPP11 Phase 3, Siam Eastern Industrial Park, Rayong	23	23	-	-	-	-	-	-	SPP	Natural gas agreement ending 2025	Industrial customers 2-10-year agreement	2006
GLOW SPP11	Glow SPP11 Phase 3 (Extension), Siam Eastern Industrial Park, Rayong	19	19	-	-	-	-	-	-	SPP	Natural gas agreement ending 2025	Industrial customers 2-10-year agreement	2015
RPCL	Ratchaburi Power Plant, Ratchaburi	1,400	210	-	-	-	-	-	-	IPP	Natural gas 25-year agreement ending 2033	EGAT 1,400 MW 25-year agreement ending 2033	2008
CHPP	Chaeng Watthana Government Complex	5	5	-	-	12,000	12,000	-	-	VSPP	Electricity	MEA 6.4 MW 5-year agreement, automatic renewal 5 years each until 2025	2009
												DAD 30-year agreement for refrigeration, ending 2038	
BIC	Bang Pa-In Industrial Estate Phase 1, Ayutthaya	117	29	20	5	-	-	-	-	SPP (Firm)	Natural gas 25-year agreement ending 2038	EGAT 90 MW 25-year agreement ending 2038	2013
												Industrial customers 15-year agreement ending 2025-2029	

Company	Project/ Location	Capacity								Power Plant Type	Fuel	Power Purchase Agreement	Commercial Operation
		Electricity (MW)		Steam (Ton/Hour)		Chilled Water (Refrigerated Ton)		Industrial Water (Cu.M./Hour)					
		Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity				
BIC	Bang Pa-In Industrial Estate Phase 2, Ayutthaya	117	29	20	5	-	-	-	-	SPP (Firm)	Natural gas 25-year agreement ending 2042	EGAT 90 MW 25-year agreement ending 2042	2017
												Industrial customers 15-year agreement ending 2032	
NNEG	Nava Nakorn Industrial Promotion Zone, Pathum Thani	125	38	30	9	-	-	-	-	SPP (Firm)	Natural gas 25-year agreement ending 2041	EGAT 90 MW 25-year agreement ending 2041	2016 for Phase 1 and 2020 for Phase 2
												Industrial customers 10-15-year agreement ending 2041	
NNEG	Nava Nakorn Industrial Promotion Zone (Extension), Pathum Thani	90	27	15.3	4.6	-	-	-	-	Cogeneration	Natural gas	Industrial customers	2020-2024
IRPC-CP	IRPC Industrial Zone, Rayong	240	122	300	153	-	-	-	-	SPP (Firm)	Natural gas 27-year agreement ending 2042	EGAT 180 MW 25-year agreement ending 2042	Phase 1 - 2015 Phase 2 - 2017
												Industrial customers, ending 2042	

Company	Project/ Location	Capacity								Power Plant Type	Fuel	Power Purchase Agreement	Commercial Operation
		Electricity (MW)		Steam (Ton/Hour)		Chilled Water (Refrigerated Ton)		Industrial Water (Cu.M./Hour)					
		Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity				
IRPC-CP	IRPC Industrial Zone (CHP III Project), Rayong	70	36	-	-	-	-	-	-	Combined Cycle	Natural gas	Industrial customers	March 2024
ERU	Energy Recovery Unit, Chon Buri	250	250	175	175	-	-	-	-	SPP Cogeneration	Oily liquid by-product of CFP's distillation	Thai Oil Public Company Limited (TOP) 220 MW 25-year agreement ending 2048	2025
Total		6,365	4,431	3,066	2,858	15,400	15,400	7,026	7,026				
Solar Farm													
TSR/ SSE1	Kanchanaburi/ Suphan Buri	80	32	-	-	-	-	-	-	VSPP	Solar	PEA 80 MW  5-year agreement automatic renewal every five years	2013-2014
CHPP	Solar 1, on members' space of Chanthaburi Shrimp Farmer Cooperative Limited, Chanthaburi	5	5	-	-	-	-	-	-	VSPP	Solar	PEA 25-year agreement	2016



Company	Project/ Location	Capacity								Power Plant Type	Fuel	Power Purchase Agreement	Commercial Operation
		Electricity (MW)		Steam (Ton/Hour)		Chilled Water (Refrigerated Ton)		Industrial Water (Cu.M./Hour)					
		Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity				
GPSC GLOW CHPP IRPC-CP	Solar farm project	49	49	-	-	-	-	-	-	-	Solar	PPPA	2018-2021
GRP	Solar farms: Phichit, Suphan Buri, Lop Buri, and Khon Kaen	39.5	39.5	-	-	-	-	-	-	VSPP	Solar	PEA 25-year agreement	2014-2015
GRP1	Taiwan	55.8	50	-	-	-	-	-	-	-	Solar	Taiwan Power Company	2018-2021
GRSC (AEPL)	India	9,525	4,089	-	-	-	-	-	-	-	Solar	Indian State Government	2018-2026
GRSC (CFXD)	Taiwan	595	149	-	-	-	-	-	-	-	Wind	Taiwan Power Company	2022-2024
Helios 3-4	Nakhon Ratchasima	16	8	-	-	-	-	-	-	-	Solar	EGAT	2030
Hydro Power Plant													
GLOW	Houay Ho, Attapeu, Lao PDR	152	102	-	-	-	-	-	-	IPP	Water	EGAT - 126 MW EDL - 2 MW 30-year agreement ending 2029	1999

Company	Project/ Location	Capacity								Power Plant Type	Fuel	Power Purchase Agreement	Commercial Operation
		Electricity (MW)		Steam (Ton/Hour)		Chilled Water (Refrigerated Ton)		Industrial Water (Cu.M./Hour)					
		Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity	Installed Capacity	Equity Capacity				
XPCL	Lao PDR	1,285	321	-	-	-	-	-	-	-	Water	EGAT - 1,220 MW EDL - 60 MW 25-year agreement ending 2044	2019
NL1PC	Lao PDR	65	26	-	-	-	-	-	-	-	Water	EDL - 65 MW 25-year agreement ending 2043	2019
Waste Power Plant													
CCE	WHA Chonburi Industrial Estate 1, Chon Buri	8.6	2.9	-	-	-	-	-	-	-	Industrial waste	MEA 8 MW 20-year agreement ending 2039	2019
GPSC	RDF Power Plant, Rayong	9.8	9.8	-	-	-	-	-	-	-	Community waste	MEA 8 MW 20-year agreement ending 2041	2021
Total		11,886	4,824	-	-	-	-	-	-	-			
Grand Total		18,251	9,315	3,066	2,858	15,400	15,400	7,026	7,026				

## 4. Business Assets

### 1. Fixed Assets

GPSC's main businesses are the production and distribution of electricity, steam, and utilities and investments through shareholding in other companies engaging in similar and related businesses in domestic and international markets. The table below shows the fixed assets of GPSC Group with net book values after deduction of accumulated depreciation and other reserve for impairment, as stated in the consolidated financial statements as of December 31, 2022, and December 31, 2023, of THB 93,760 million and THB 92,799 million, respectively.

No.	Item	Book Value (THB Million)		Obligation
		December 31, 2022	December 31, 2023	
1	Land	1,844	1,844	Some portion of land of GPSC's subsidiaries was pledged as collateral for long-term loans between subsidiaries and financial institutions.
2	Building and building improvement	1,786	1,778	Buildings and building improvement of GPSC's subsidiaries were pledged as collateral for long-term loans between subsidiaries and financial institutions.
3	Power plants, water plants, machinery, tools and equipment	85,199	82,768	Some main machinery and equipment and portion of power and water plants of GPSC's subsidiaries were pledged as collateral for long-term loans between subsidiaries and financial institutions.
4	Furniture, fixtures and office equipment	129	131	Some furniture, fixtures and office equipment of GPSC's subsidiaries were pledged as collateral for long-term loans between subsidiaries and financial institutions.
5	Motor vehicles	18	18	Some motor vehicles of GPSC's subsidiaries were pledged as collateral for long-term loans between subsidiaries and financial institutions.
6	Construction in progress	4,783	6,260	Some machinery and equipment of GPSC's subsidiaries used in the construction were pledged as collateral for long-term loans between subsidiaries and financial institutions.

These fixed assets of GPSC Group are divided by type of assets and the companies as follows:

- **Land**

As of December 31, 2022, and December 31, 2023, the book values of land under the consolidated financial statements were:

Company	Book Value (THB Million)		Ownership	Obligation Value (THB Million)
	December 31, 2022	December 31, 2023		
GPSC	581	581	GPSC	-
IRPC-CP	614	614	IRPC-CP	614
GLOW	649	649	GLOW Group	-
<b>Total</b>	<b>1,844</b>	<b>1,844</b>		

- **Buildings and building improvement**

As of December 31, 2022, and December 31, 2023, the book values of buildings and building improvement under the consolidated financial statements were:

Company	Book Value (THB Million)		Ownership	Obligation Value (THB Million)
	December 31, 2022	December 31, 2023		
GPSC	699	748	Some buildings and building improvement are owned by GPSC, and some of them were constructed on sub-leased land to be used as power plants. Upon the expiration of the sub-lease agreement, these buildings and building improvement will be devolved to the sublessor.	-
CHPP	136	127	CHPP constructed buildings on sub-leased land to be used as power plants. Upon the expiration of each sub-lease agreement, these buildings and building improvement will be devolved to the sublessor.	24
IRPC-CP	781	758	IRPC-CP owned the building to be used as the power plant in Rayong.	758
GLOW	170	145	Glow Group owned the buildings to be used as power plants.	9
<b>Total</b>	<b>1,786</b>	<b>1,778</b>		

- **Power plants, water plants, machinery, tools and equipment**

As of December 31, 2022, and December 31, 2023, the book values of power plants, water plants, machinery, tools and equipment under the consolidated financial statements were:

Company	Book Value (THB Million)		Ownership	Obligation Value (THB Million)
	December 31, 2022	December 31, 2023		
GPSC	13,952	12,774	Owned by GPSC, to be used in the power plant and utilities plant.	-
CHPP	320	503	Owned by CHPP, to be used in the power plant.	303
IRPC-CP	7,051	6,649	Owned by IRPC-CP, to be used in the power plant.	6,649
GLOW	63,876	62,842	Glow Group owns the buildings, to be used as power plants.	27,290
<b>Total</b>	<b>85,199</b>	<b>82,768</b>		



- **Furniture, fixtures and office equipment**

As of December 31, 2022, and December 31, 2023, the book values of furniture, fixtures and office equipment under the consolidated financial statements were:

Company	Book Value (THB Million)		Ownership	Obligation Value (THB Million)
	December 31, 2022	December 31, 2023		
GPSC	71	80	GPSC	-
CHPP	1	2	CHPP	-
IRPC-CP	25	18	IRPC-CP	18
GLOW	31	31	GLOW	-
<b>Total</b>	<b>129</b>	<b>131</b>		

- **Motor vehicles**

As of December 31, 2022, and December 31, 2023, the book values of motor vehicles under the consolidated financial statements were:

Company	Book Value (THB Million)		Ownership	Obligation Value (THB Million)
	December 31, 2022	December 31, 2023		
GPSC	12	12	GPSC engaged in financial lease agreement.	-
GLOW	7	6	Glow Group	6
<b>Total</b>	<b>19</b>	<b>18</b>		

- **Construction in progress**

As of December 31, 2022, and December 31, 2023, the book values of the construction in progress under the consolidated financial statements were:

Company	Book Value (THB Million)		Ownership	Obligation Value (THB Million)
	December 31, 2022	December 31, 2023		
GPSC	282	236	GPSC	-
CHPP	272	120	CHPP	-
IRPC-CP	803	2,113	IRPC-CP	30
GLOW	3,426	3,774	Glow Group	989
EurusPlus	-	14	EurusPlus	-
WPD	-	3	WPD	-
<b>Total</b>	<b>4,783</b>	<b>6,260</b>		

## 2. Intangible Assets

As of December 31, 2022, and December 31, 2023, the book values of the intangible assets and rights to use under the consolidated financial statements were:

Company	Description	Book Value (THB Million)	
		December 31, 2022	December 31, 2023
Intangible assets			
GPSC	Cost of computer software copyright and system improvement for its power plants	507	846
	Deferred cost of the right-of-use of assets	60	40
CHPP	Cost of computer software copyright and system improvement	7	5
IRPC-CP	Cost of the right to use natural gas distribution system	446	423
	Deferred cost of the right-of-use of assets	834	792
	Cost of computer software copyright and system improvement	14	13
GLOW	Deferred cost of fair value from business purchase	37,294	35,401
	Cost of computer software copyright and system improvement	3	3
	Deferred cost of the right-of-use of assets	611	534
EurusPlus	Deferred cost of the right-of-use of assets	-	13
BoreePlus	Deferred cost of the right-of-use of assets	-	9
Total		39,776	38,079

### 3. Non-operating Assets

GPSC's subsidiaries had some machinery and equipment which were idle and under the amortization process. They therefore booked them as non-operating assets. As of December 31, 2022, and December 31, 2023, the book values of non-operating assets under the consolidated financial statements were:

Company	Book Value (THB Million)		Ownership
	December 31, 2022	December 31, 2023	
CHPP	97	-	Non-operating assets and under amortization process
<b>Total</b>	<b>97</b>	<b>-</b>	

### 4. Business agreements

#### • Long-term lease agreement

As of December 31, 2023, GPSC Group's significant agreements for the business operations of each company appear below:

Lessee	Lessor/Sub Lessor	Agreement	Purpose	Term of Agreement
GPSC	TOP/Treasury Department (TD)	Land sublease agreement	To be used as the location for GPSC's IPP power plant in Chon Buri. Currently awaiting TD's approval for entering the agreement	4 years (in process)
	TOP	Right to use common areas with a natural gas receiving and distributing station	To be used as the natural gas receiving and distributing station with Thaioil Group (Renewed agreement spanning September 11, 2022 to August 14, 2025)	2 years and 11 months

Lessee	Lessor/Sub Lessor	Agreement	Purpose	Term of Agreement
GPSC	GCEC	Service area agreement for the installation of underground electric transmission lines	For the installation of underground high-voltage transmission lines under GPSC CUP-4 project (to CUP-1)	15 years
	GCEC	Service area agreement for the installation of a drainage water system	For the installation of drainage water pipe under GPSC CUP-4 project (to AIE)	15 years
	GCEC	Service area agreement for the installation of underground electric transmission lines	For the installation of underground high-voltage transmission lines under GPSC CUP-4 project (to client)	15 years
	GCEC	Service area agreement for the installation of underground electric transmission lines	For the installation of underground high-voltage transmission lines under GPSC CUP-4 project (to PTTMCC)	15 years
	GCEC	Service area agreement for bridge construction to support a transmission pipeline	For the construction of the bridge to support GPSC's transmission pipeline under GPSC CUP-4 project	15 years
	GCEC	Service area agreement for the installation of ENVICCO underground electric transmission lines	For the installation of underground high-voltage transmission lines from CUP-4 project (to ENVICCO)	16 years and 7 months
	PTT	Land lease agreement	For the development, design, construction, possession and management of a ground-mounted solar electricity-generating system or other generating systems for commercial distribution and research and development (R&D).	25 years and 5 months
	Enco	Office space lease agreement	To be used as office and workplace	3 years
	PTTEP	Office space lease agreement	To be used as office and workplace	3 years
	WHA Eastern Industrial Estate (WHA)	Service area agreement for the installation of an underground electric transmission line system	For the installation of an underground transmission line system under GPSC CUP-1 project (to VCX)	15 years
	WHA	Service area agreement for the installation of an underground electric transmission line system	For the installation of an underground transmission line system under GPSC CUP-1 project (to PTTAC & MTPSC & Phenol II)	15 years
	WHA	Service area agreement for the installation of an underground electric transmission line system and an amendment agreement no. 1	For the installation of an underground transmission line system under GPSC CUP-1 project to MIGP & Phenol & TOCGC & TOL (CUP-1 to CUP-3)	15 years and 3 months

Lessee	Lessor/Sub Lessor	Agreement	Purpose	Term of Agreement
GPSC	WHA	Service area agreement for the installation of an underground electric transmission line system	For the installation of an underground transmission line system CUP-1 to CUP-4	15 years
	WHA	Service area agreement for the installation of an underground electric transmission line system	For the installation of an underground transmission line system (CUP-1 to GC Oxirane)	15 years
	Asia Industrial Estate (AIE)	Service area agreement for the installation of a drainage water pipeline	For the installation of a drainage water pipeline under GPSC CUP-4 project	15 years
	AIE	Service area agreement for the installation of an underground electric transmission lines system	For the installation of an underground transmission lines system CUP-4	6 years
	Industrial Estate Authority of Thailand (IEAT)	Service area agreement for other useful business operation or related operations	For the construction of a structure for the installation of raw material and product transmission pipelines (Agreement No. Nor Phor 005/2005)	30 years
	IEAT	Agreement for permission for pipeline installation in Padaeng Industrial Estate	For the installation of an underground electrical conduits at parcel no. P-3, occupying 15.8 Sq.Wah	15 years (January 17, 2018 – January 16, 2033)
	State Railway of Thailand (SRT)	Land lease agreement for the installation of above-ground or underground electrical conduits under railway crossing under the D3 project	For the installation of the D3 underground electrical conduits in 1,089.32 sq.m. Agreement dated October 28, 2021 (Agreement number: 901648076)	5 years (August 1, 2021 – July 31, 2026)
	SRT	Land lease agreement for the installation of above ground or underground pipelines	For the installation of a utility pipeline (CUP-3)	15 years
	R.I.L. Industrial Estate (RIL)	Agreement to use structure for pipeline installation	For the construction of underground electrical conduits (CUP-2)	15 years
	RIL	Land right agreement for the construction of underground electrical conduits	For the installation of underground electrical conduits in 163.16 sq.m. Agreement dated April 25, 2022	20 years (May 1, 2022 – April 30, 2042)
	Bangkok Industrial Gas Co., Ltd. (BIG)	Service area agreement for the installation of underground electric transmission lines	To house an area for quality improvement	2 years and 1 month (September 1, 2021 – September 30, 2024)



Lessee	Lessor/Sub Lessor	Agreement	Purpose	Term of Agreement
CHPP	State property by Dhanarak Asset Development Co., Ltd. as Sub-lessor	Sublease agreement of the State property	For the operation under a chilled energy purchase agreement, Government Complex project number: 35/3551	31 years and 4 months
	Private land of natural person	Land lease agreement	For the construction of building on the lease land for use as a solar farm. Upon expiration of the agreement, the land, building, and construction will be devolved to the lessor	25 years
IRPC-CP	IRPC	Land lease agreement	To be used as the location for high-voltage power transmission towers to support overhead power lines from lessee's area to the high-voltage power station (Agreement number: AL. 0221/2017)	3 years
GLOW	IEAT	Land sublease agreement in Map Ta Phut Industrial Estate (port)	For the construction of a factory building and operating of electricity and steam generation (Agreement number: 4/1996-Nor Phor.)	28 years
	IEAT	Land lease agreement for industrial use, Map Ta Phut Industrial Estate	For the construction of a plant and for the operation of electricity and steam generation/production (Agreement number: 4/1996-Nor Phor.). For the operation of electricity, steam, and industrial water generation/production, parcel no. I-17/1.2.1, I-17/1.2.2, Agreement dated July 17, 2020 (Agreement number: 8/2020-Nor Phor.)	20 years
	IEAT	Service area agreement for other business operations which are useful or related to business operations in Map Ta Phut Industrial Estate (underground power transmission lines)	For the operation of product and power transmission pipelines (Agreement number: 2/2007-Nor Phor.)	28 years with 20 years renewable term
	IEAT	Land lease agreement for industrial use, Map Ta Phut Industrial Estate (parking lot project 2)	To be used as a parking lot (Agreement number: 1/2019- Nor Phor.) (Under the agreement extension from January 1, 2022 to December 31, 2024)	3 years with renewable term
	IEAT	Land allocation agreement in Map Ta Phut Industrial Estate (coal stock piling)	For the operation of electricity, steam and water generation for industrial use, (reserve space for business expansion) (Agreement number: 2/2007 Nor Phor.)	30 years with 20-year renewable term

Lessee	Lessor/Sub Lessor	Agreement	Purpose	Term of Agreement
GLOW	IEAT	Service area agreement to operate other businesses that are beneficial or related to business operations in Map Ta Phut Industrial Estate (underground electric transmission line to RIL)	For the installation of underground electrical conduits, parcel No. PR-02 to PR-09, PR-11 to PR-12 (Agreement number: 3/2008-Nor Or Lor)	Agreement terminated as agreed by the parties
	IEAT	Land lease agreement for industrial use, Map Ta Phut Industrial Estate (GSPP2 Replacement) parcel no. S-54 for the operation of electricity, steam, and industrial water generation/production	GSPP2 Replacement power plant, parcel no. S-54, for the operation of electricity, steam, and industrial water generation/production (Agreement number: Nor Phor.043/2019)	20 or 30 years, as decided by IEAT's Board of Directors
	IEAT	Land lease agreement for industrial use, Map Ta Phut Industrial Estate (GSPP3 Replacement) parcel no. S-53 for the operation of electricity, steam, and industrial water generation/production	GSPP3 Replacement power plant, parcel no. S-53 for the operation of electricity, steam, and industrial water generation/production (Agreement number: Nor Phor.020/2022)	20 or 30 years, as decided by IEAT's Board of Directors
	IEAT	Service area agreement to operate other businesses that are beneficial or related to business operations in Map Ta Phut Industrial Estate (underground electric transmission line to RIL)	For the installation of underground electrical conduits, parcel No. PR-13 (Agreement number: 4/2008-Nor Or Lor)	Agreement terminated as agreed by the parties
	IEAT	Service area agreement to operate other businesses that are beneficial or related to business operations in Map Ta Phut Industrial Estate (underground power transmission lines to RIL)	For the installation of underground electrical conduit, parcel No. G-05, PR-14 (Agreement number: 5/2008-Nor Or Lor)	Agreement terminated as agreed by the parties

Lessee	Lessor/Sub Lessor	Agreement	Purpose	Term of Agreement
GLOW	IEAT	Service area agreement to operate other businesses that are beneficial or related to business operations in Map Ta Phut Industrial Estate (underground power transmission lines to RIL)	For the installation of underground electrical conduits, parcel No. P-20/1 (Agreement number: 6/2008-Nor Or Lor)	Agreement terminated as agreed by the parties
	IEAT	Service area agreement to operate other businesses that are beneficial or related to business operations in Map Ta Phut Industrial Estate (underground power transmission lines to RIL)	For the installation of underground electrical conduits, parcel No. P-12/1 (Agreement number: 7/2008-Nor Or Lor)	Agreement terminated as agreed by the parties
	AIE	Memorandum of Agreement on land allocation (underground power transmission line in Asia Industrial Estate)	For the installation of underground power transmission and distribution lines to supply to consumers (Agreement dated August 1, 2005)	15 years
	AIE	Service area agreement for the installation of an underground power transmission line system	For the installation of underground electrical conduits and manholes in part of the area in parcel No. 3761 (Agreement dated December 30, 2019)	January 1, 2020 – December 31, 2025
	IEAT	Service area agreement for other business operations which are useful or related to business operations in Map Ta Phut Industrial Estate (a bridge to support steam and product transmission pipeline I-6 Project 3)	For the construction of the bridge to support the product and steam transmission pipelines, to be distributed to industrial consumers (Agreement number: Nor Phor 033/2019)	3 years with renewable term
	IEAT	Service area agreement for other business operations which are useful or related to business operations in Map Ta Phut Industrial Estate (structure to support steam and product transmission pipeline I-2)	For the construction of a structure to support the product, water and steam transmission pipelines and a steam and water gauging station (Agreement number: 12/2014- Nor Phor.)	14 years

Lessee	Lessor/Sub Lessor	Agreement	Purpose	Term of Agreement
GLOW	IEAT	Service area agreement to operate other businesses that are beneficial or related to business operations in Map Ta Phut Industrial Estate (underground power transmission lines)	For the installation of a product transmission pipeline and power transmission lines (Agreement number: 3/2011- Nor Phor)	13 years
	IEAT	Service area agreement for other business operations which are useful or related to business operations in Map Ta Phut Industrial Estate (a bridge to support steam and product transmission pipelines)	For the construction of the bridge to support the product and steam transmission pipelines (Agreement number: 13/2014- Nor Phor.)	14 years
	IEAT	Service area agreement to operate other businesses that are beneficial or related to business operations in Map Ta Phut Industrial Estate (underground power transmission lines)	For the installation of a product transmission pipeline and power transmission lines, parcel number: G-76 (Agreement number: 3/2013- Nor Phor)	14 years
	IEAT	Service area agreement to operate other businesses that are beneficial or related to business operations in Map Ta Phut Industrial Estate (raw water pipeline project 2)	For the installation of a raw water intake pipeline, parcel number: G-84 Agreement dated July 18, 2019 (Agreement number: 1/2022-Nor Phor.)	3 years with renewable term
	IEAT	Service area agreement to operate other businesses that are beneficial or related to business operations in Map Ta Phut Industrial Estate (underground power transmission lines)	For the installation of a product transmission pipeline and power transmission lines (Agreement number: 6/2014- Nor Phor)	10 years



Lessee	Lessor/Sub Lessor	Agreement	Purpose	Term of Agreement
GLOW	IEAT	Service area agreement to operate other businesses that are beneficial or related to business operations in Map Ta Phut Industrial Estate (a steam transmission pipeline)	For the installation of a medium-pressure steam transmission pipeline (Agreement number: 4/2015- Nor Phor.)	30 years
	IEAT	Service area agreement for industrial use in Map Ta Phut Industrial Port	To maintain seawater-intake point for a cooling system, parcel No. S-3, Agreement dated May 23, 2022 (from January 1, 2022 to December 31, 2024) (Agreement number: 010/2022-Sor Thor Ror.) Agreement renewable (under process for January 1, 2024 to December 31, 2026)	3 years with renewable term
	B.Grimm Power (AIE-MTP) Co., Ltd. (BGRIM)	Land lease agreement for the location of a high-voltage power station, underground power transmission lines and a steam boiler control system. Certification dated February 21, 2019	To operate the power distribution system (MTP3 Substation near SPP 1 power plant)	30 years
	BGRIM	Rights-of-use agreement	For the rental of an area to set up GLOW's duct bank (in Glow SPP1 Co., Ltd.'s area) under the lease agreement dated February 1, 2017	30 years
	GCEC	Service area agreement for the installation of underground power transmission lines	For the installation of underground power transmission lines 800 meters long, agreement dated February 20, 2020 (Agreement number: GCEC-34-3420-001)	January 1, 2020 – December 31, 2034
	WHA	Supplementary Memorandum No. 1 of the service area agreement for the installation of underground power transmission lines in WHA Eastern Industrial Estate (Map Ta Phut). Formerly Hemaraj Eastern Industrial Estate (Map Ta Phut), (Agreement No. EIE 001/2017 dated January 1, 2017)	To amend the agreement on the installation of an underground power transmission system in WHA Eastern Industrial Estate (Map Ta Phut) by terminating Glow SPP 1 Co., Ltd. and revising the condition on the property transferred from GSPP1 to Glow Energy Plc (Agreement number: EIE 001/2017, dated January 1, 2017)	19 years January 1, 2017 – December 31, 2035

Lessee	Lessor/Sub Lessor	Agreement	Purpose	Term of Agreement
GLOW	PTTGC	Service area agreement for the installation of underground power transmission lines (D3 Project)	For the installation of underground power transmission lines to CUP-3 in an area of 2,938.38 sq.m. Agreement dated March 10, 2021 (Agreement number: S115-10-21-113)	20 years March 10, 2021 – March 9, 2041

## 5. Investment Capital in Power Plants under Construction

GPSC's investment capital in power projects under construction as of December 31, 2023 is summarized below:

Project	Shareholding (Percent)	Commencement of Commercial Operations/ Production	Estimated Investment Budget Required until Commercial Operation Date (Million Baht)
ERU <sup>(1)</sup>	100	2025	22,450
SPP Replacement (Glow SPP 2) <sup>(2)</sup>	100	2024	2,443
SPP Replacement (Glow Energy Phase 2) <sup>(3)</sup>	100	2023	0
Changfang and Xidao (CFXD) <sup>(4)</sup>	25	2024	2,743
<b>Total</b>			<b>27,636</b>

### Remarks:

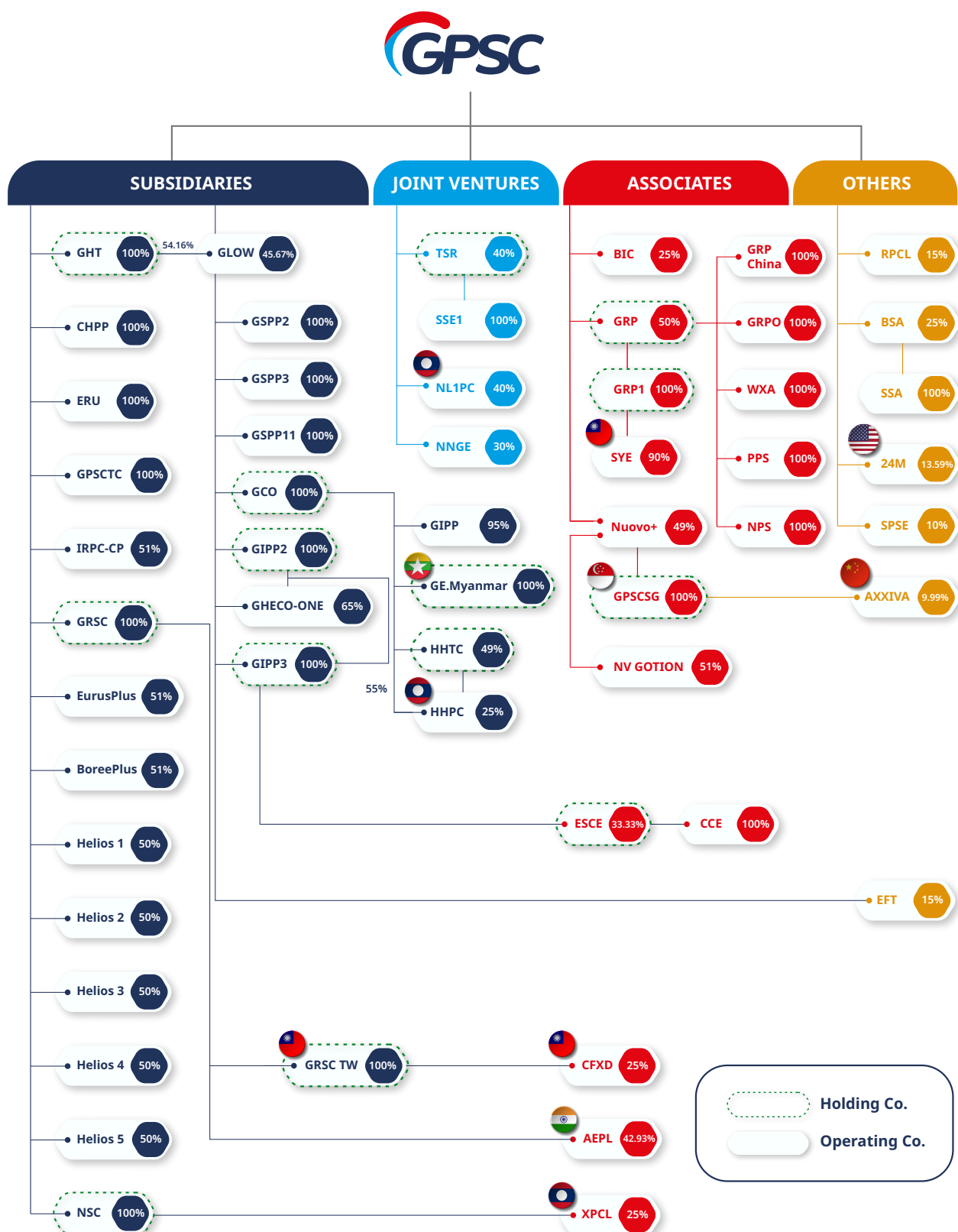
<sup>(1)</sup> The ERU project's total investment stood at about USD 757 million according to the asset purchase agreement with Thai Oil Plc (TOP). The remaining investment budget for 2024-2025 was reported at about USD 653 million, equivalent to THB 22,450 million at the exchange rate of THB 34.3876/USD, based on the average selling price of the Bank of Thailand as of December 28, 2023. The actual transaction in the Baht on the transaction date or payment date as stated in the contract varies with the exchange rate stated in the contract.

<sup>(2)</sup> The investment budget for the SPP Replacement (Glow SPP 2) stood at about USD 126 million, of which USD 55 million had already been invested, with pending investment capital in 2024 of about USD 71 million or THB 2,443 million at the exchange rate of THB 34.3876/USD, based on the average selling price of the Bank of Thailand as of December 28, 2023.

<sup>(3)</sup> The investment budget for the SPP Replacement (Glow Energy Phase 2) stood at about USD 194 million, of which USD 163 million or THB 5,611 million had already been invested, at the exchange rate of THB 34.3876/ USD, based on the average selling price of the Bank of Thailand as of December 28, 2023.

<sup>(4)</sup> GPSC invested equity in Changfang and Xidao Project (CFXD) through Global Renewable Synergy (GRSC) to acquire shares in CI Changfang Limited and CI Xidao Limited (CFXD) in Taiwan to invest in wind energy projects amounting to TWD 14,155 million, equivalent to about THB 17,270 million. This was based on the exchange rate of THB 1.22/TWD and USD 44 million or THB 1,513 million at the exchange rate of THB 34.3876/ USD, totaling about THB 18,783 million. Of this amount, USD 512 million had already been invested, with pending investment capital in 2024 amounting to USD 80 million or about THB 2,743 million at the exchange rate of THB 34.3876/ USD, based on the average selling price of the Bank of Thailand as of December 28, 2023.

## 1.3 Shareholding Structure of GPSC Group



Remarks: GPSC's shareholding structure and equities as of December 31, 2023

## General Information on GPSC-Invested Companies

As of December 31, 2023

Company	Type of Business	Registered Capital	Type of Share	Paid-up Capital	Share Value	GPSC's Shareholding
<b>Subsidiaries</b>						
<b>Combined Heat and Power Producing Company Limited (CHPP)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66 2143 9644	A very small power producer firm (VSPP) operating a combined heat and power with a district cooling power plant to generate and supply electricity to MEA and chilled water to Bangkok Government Complex. It produces, distributes, and installs buoys and provides construction services as well as electrical systems for solar power.	THB 500,000,000	Common share	THB 371,730,000	THB 10/share	100%
<b>Natee Synergy Company Limited (NSC)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900, Tel: +66 2140 4658	Investment through shareholding in hydropower plant projects of Xayaburi Power Co., Ltd.	THB 6,826,500,000	Common share	THB 6,826,500,000	THB 100/share	100%
<u><b>Indirect Associate</b></u> <b>Xayaburi Power Company Limited (XPCL)</b> 215 Lanexang Avenue, Ban Siang Yuen, Chanthaburi District, (ELECTRICITE DU Vientiane, Lao PDR LAOS: EDL) Tel: +856 (21) 251718	Investment through shareholding in hydropower plant projects of Xayaburi Power Co., Ltd.	THB 26,861,000,000	Common share	THB 26,861,000,000	THB 100/share	25% (through NSC)
<b>IRPC Clean Power Company Limited (IRPC-CP)</b> 299 Moo 5, Sukhumvit Rd., Choeng Noen Sub-district, Muang District, Rayong 21000 Tel: +66 3861 1333, +66 3861 3571-80	A small power producer (SPP) operating a cogeneration plant to generate and supply electricity to EGAT. The surplus electricity and steam are distributed to industrial customers in IRPC Industrial Zone.	THB 3,362,300,000	Common share	THB 3,362,300,000	THB 100/share	51%

Company	Type of Business	Registered Capital	Type of Share	Paid-up Capital	Share Value	GPSC's Shareholding
<b>GPSC Holding (Thailand) Company Limited (GHT)</b> (formerly ENGIE Holding (Thailand) Co., Ltd.) 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66 2140 4600	Investment through shareholding in the power generating and steam businesses of Glow Energy Public Company Limited	THB 7,804,100,000	Common share	THB 7,804,100,000	THB 10/share	100%
<b>Glow Energy Public Company Limited (GLOW)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66 2140 4600	Generating and supplying electricity, steam and industrial water to the industrial customers, and distributing electricity to EGAT	THB 14,628,650,350	Common share	THB 14,628,650,350	THB 10/share	45.67% direct shareholding and 54.16% through GHT
<b>GPSC Treasury Center Company Limited (GPSC TC)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900, Tel: +66 2140 4600	To provide financial management services to the Group companies	THB 20,000,000	Common share	THB 20,000,000	THB 10/share	100%
<b>Energy Recovery Unit Company Limited (ERU)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66 2140 4600	Generating and supplying electricity and steam as feedstock for TOP's CFP	THB 4,658,000,000	Common share	THB 3,315,899,000	THB 10/share	100%
<b>Global Renewable Synergy Company Limited (GRSC)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66 2140 4600 Indirect Subsidiary	Investment through shareholding in renewables power projects	THB 34,546,439,700	Common share	THB 32,848,048,967.15	THB 100/share	100%
<b>Indirect Associate</b> <b>Global Renewable Synergy Taiwan Company Limited (GRSC TW)</b> 2F., No. 21, Alley 26, Lane 300, Sec. 4, Ren'ai Rd., Da'an District, Taipei City, Taiwan (R.O.C.) Tel: +886-2-77077200	Investment in renewables power projects in Taiwan	TWD 10,000,000,000	Common share	TWD 9,497,824,900	TWD 100/share	100% (through GRSC)



Company	Type of Business	Registered Capital	Type of Share	Paid-up Capital	Share Value	GPSC's Shareholding
<b><u>Indirect Associate</u></b> <b>Avaada Energy Private Company Limited (AEPL)</b> Unit No. 406, 4 <sup>th</sup> Floor, Hubtown Solaris, NS Phadke Road, Near Gokhle Flyover, Andheri East, Mumbai, Mumbai City, Maharashtra, India 400069 Tel: +91-22-6140-8000	Solar power producer, generating and distributing electricity to industrial customers and India's government agencies, for instance, SECI in India	INR 100,000,000,000	Common share	INR 15,781,445,510	INR 10/share	42.93% (through GRSC)
<b><u>Indirect Associate</u></b> <b>CI Changfang Company Limited</b> 68, (26 <sup>th</sup> Floor), Sec.5, Zhongxiao East Rd., Xinyi District, Taipei 11065, Taiwan (R.O.C.)	Offshore wind power producer, generating and distributing electricity in Taiwan	TWD 13,700,000,000	Common share	TWD 12,517,936,000	TWD 10/share	25% (through GRSC TW)
<b><u>Indirect Associate</u></b> <b>CI Xidao Company Limited</b> 68, (26 <sup>th</sup> Floor), Sec.5, Zhongxiao East Rd., Xinyi District, Taipei 11065, Taiwan (R.O.C.)	Offshore wind power producer, generating and distributing electricity in Taiwan	TWD 1,200,000,000	Common share	TWD 1,166,128,000	TWD 10/share	25% (through GRSC TW)
<b>EurusPlus Company Limited (EurusPlus)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66-2140-4600	Wind power producer, generating and distributing electricity in Thailand	THB 416,000,000	Common share	THB 106,625,000	THB 100/share	51%
<b>BoreePlus Company Limited (EurusPlus)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66-2140-4600	Wind power producer, generating and distributing electricity in Thailand	THB 720,000,000	Common share	THB 182,625,000	THB 100/share	51%
<b>Wind Power Development Company Limited (WPD)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66-2140-4600	To accommodate investment growth in wind power plants in Thailand	THB 65,000,000	Common share	THB 65,000,000	THB 100/share	51%

Company	Type of Business	Registered Capital	Type of Share	Paid-up Capital	Share Value	GPSC's Shareholding
<b>Helios 1 Company Limited (Helios 1)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66-2140-4600	Solar power producer, generating and distributing electricity from ground-mounted solar farms in Thailand	THB 388,000,000	Common share	THB 97,000,000	THB 100/share	50%
<b>Helios 2 Company Limited (Helios 2)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66-2140-4600	Solar power producer, generating and distributing electricity from ground-mounted solar farms in Thailand	THB 491,200,000	Common share	THB 122,800,000	THB 100/share	50%
<b>Helios 3 Company Limited (Helios 3)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66-2140-4600	Investment in power generation from renewables and ground-mounted solar farms in Thailand	THB 64,000,000	Common share	THB 16,000,000	THB 100/share	50%
<b>Helios 4 Company Limited (Helios 4)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66-2140-4600	Investment in power generation from renewables and ground-mounted solar farms in Thailand	THB 128,000,000	Common share	THB 32,000,000	THB 100/share	50%
<b>Helios 5 Company Limited (Helios 5)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66-2140-4600	Investment in power generation from renewables and ground-mounted solar farms in Thailand	THB 124,800,000	Common share	THB 31,200,000	THB 100/share	50%
<b>Indirect Subsidiaries</b>						
<b>Glow Company Limited (GCO)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66 2140 4600	To provide administration, consultancy, and advisory services for the management of related business	THB 4,964,924,770	Common share	THB 4,401,668,111	THB 10/share	100%

Company	Type of Business	Registered Capital	Type of Share	Paid-up Capital	Share Value	GPSC's Shareholding
<b>Glow IPP Company Limited (GIPP)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66 2140 4600 <b>Plant</b> 42 Moo 8 CIE-8 WHA Chonburi 1 Industrial Estate, Bowin, Sriracha District, Chonburi 20230 Tel: +66 3834 5900-5	An IPP (combined-cycle power plant) generating and distributing electricity to EGAT	THB 2,850,000,000	Common share	THB 2,850,000,000	THB 10/share	95% (through GCO)
<b>Glow SPP2 Company Limited (GSPP2)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66 2140 4600 <b>Plant</b> 11 I-5 Road, Map Ta Phut Industrial Estate, Muang District, Rayong 21150 Tel: +66 3869 8400-10	Generating and distributing electricity and steam	THB 4,941,534,880	Common share	THB 4,941,534,880	THB 10/share	100%
<b>Glow SPP3 Company Limited (GSPP3)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66 2140 4600 <b>Plant</b> 11 I-5 Road, Map Ta Phut Industrial Estate, Muang District, Rayong 21150 Tel: +66 3869 8400-10	An SPP (cogeneration power plant) generating and distributing electricity, steam, and industrial water to customers in Map Ta Phut Industrial Estate and nearby industrial estates	THB 7,373,389,550	Common share	THB 7,373,389,550	THB 10/share	100%
<b>Glow IPP2 Holding Company Limited (GIPP2)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66 2140 4600	Investment through shareholding in power projects	THB 7,565,000,000	Common share	THB 7,565,000,000	THB 10/share	100%

Company	Type of Business	Registered Capital	Type of Share	Paid-up Capital	Share Value	GPSC's Shareholding
<b>Gheco-One Company Limited (GHECO One)</b> <b>Plant</b> 11 I-5 Road, Map Ta Phut Industrial Estate, Muang District, Rayong 21150 Tel: +66 3869 8400-10	A coal-based IPP power plant generating and distributing electricity to EGAT	THB 11,624,000,000	Common share	THB 11,624,000,000	THB 10/share	65% (through GIPP2)
<b>Glow IPP3 Company Limited (GIPP3)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66 2140 4600	Investment through shareholding in assorted power projects	THB 380,000,000	Common share	THB 245,000,000	THB 10/share	100% (through GIPP2)
<b>Glow SPP 11 Company Limited (GSPP11)</b> <b>Plant</b> 60/19 Moo 3, Siam Eastern Industrial Park, Mabyangporn, Pluak Daeng, Rayong 21140 Tel: +66 3889 1324-8	An SPP (cogeneration power plant) generating and distributing electricity to MEA and the remaining electricity and steam to industrial customers in industrial estates	THB 1,520,000,000	Common share	THB 1,520,000,000	THB 10/share	100%
<b>Houay Ho Thai Company Limited (HHTC)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66 2140 4600	Investment through shareholding in hydropower projects	THB 422,152,000	Common share	THB 422,152,000	THB 8/share	49% (through GCO)
<b>Houay Ho Power Company Limited (HHPC)</b> (Established in Laos) Vieng Vang Tower, (Unit 15), 5 <sup>th</sup> Floor, No. 502A, Boulichan Rd., Dongpala Thong Village, Sittasarak District, Vientiane Capital, Lao PDR <b>Plant</b> P.O. Box 661 Pakse, Lao PDR Tel: +856 3621 1720-1	Hydro power producer, distributing to EGAT and Lao PDR's state enterprise (EDL)	USD 40,000,000	Common share	USD 40,000,000	USD 80/share	67.25% (through GCO and HTC)
<b>Glow Energy Myanmar Company Limited (GE Myanmar)</b> (Established in Myanmar) No. 221, Sule Pagoda Road, Unit #10/01, 10 <sup>th</sup> Floor, Sule Square, Kyauktada Township, Yangon, Myanmar	Provision of technical and consultancy services for the power sector	USD 940,000	Common share	USD 940,000	USD 1/share	100% (through GCO)

Company	Type of Business	Registered Capital	Type of Share	Paid-up Capital	Share Value	GPSC's Shareholding
<b>Joint Ventures</b>						
<b>Thai Solar Renewable Company Limited (TSR)</b> 725 S Metro Building, 19 <sup>th</sup> Floor, Sukhumvit Rd., Klongton Nua, Wattana, Bangkok 10110 Tel: +66 2258 4530	Investment through shareholding in power projects	THB 583,333,400	Common share	THB 583,333,400	THB 10/share	40%
<b>Nam Lik 1 Power Company Limited (NL1PC)</b> 402B of 4 <sup>th</sup> Floor, ViengVang Tower, Unit 15, Boulichan Road, Dongpalan Thong Village, Sisattanak District, P.O Box 3684, Vientiane Capital, Lao PDR	Hydro power (run-of-river) producer, generating and supplying electricity to Lao PDR's state enterprise (Electricite du Laos: EDL)	USD 37,200,000	Common share	USD 37,200,000	USD 10/share	40%
<b>Nava Nakorn Electricity Generating Company Limited (NNEG)</b> 111 Moo 20 Phahonyothin Rd., Khlong 1 Sub-District, Khlong Luang District, Pathum Thani 12120 Tel: +66 2978 5283, +66 2978 5291	A small power producer (SPP) operating a cogeneration power plant to generate and supply electricity to EGAT, and surplus and steam to industrial users in Nava Nakorn Industrial Promotion Zone	THB 2,050,000,000	Common share	THB 2,050,000,000	THB 10/share	30%
<b>Indirect Joint Ventures</b>						
<b>Siam Solar Energy 1 Company Limited (SSE1)</b> 725 S Metro Building, 19 <sup>th</sup> Floor, Sukhumvit Rd., Klongton Nua, Wattana, Bangkok 10110 Tel: +66 2258 4530	A very small power producer (VSPP) generating electricity from solar energy	THB 1,800,000,000	Common share	THB 1,800,000,000	THB 100/share	40% (through TSR)
<b>Associates</b>						
<b>Bangpa-In Cogeneration Company Limited (BIC)</b> 587 Viriyathavorn Building, Sutthisan Vinitchai Rd., Din Daeng, Bangkok 10400 Tel: +66 2691 9720	A small power producer (SPP) operating a cogeneration power plant to generate and supply electricity to EGAT. The surplus power and steam are distributed to industrial users in Bangpa-In Industrial Estate	THB 2,705,000,000	Common share	THB 2,705,000,000	THB 10/share	25%



Company	Type of Business	Registered Capital	Type of Share	Paid-up Capital	Share Value	GPSC's Shareholding
<b>Global Renewable Power Company Limited (GRP)</b> 555/1 Energy Complex, Building A, 3 <sup>rd</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66 2140 1968	To support investment in renewables businesses by the Company	THB 2,001,500,000	Common share	THB 2,001,500,000	THB 100/share	50%
<b>Nuovo Plus Company Limited (NUOVO PLUS)</b> 555/1 Energy Complex, Building A, 4 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900	Production and sale of batteries	THB 4,200,000,000	Common share	THB 3,675,000,000	THB 100/share	49%
<b>Indirect Associates</b>						
<b>Global Renewable Power China (Shanghai) Company Limited (GRP China)</b> No. 1599, Pingzhuang West Road, Fengxian District, Shanghai	To accommodate investment growth in renewables power plants in China	CNY 5,340,000	Common share	CNY 5,340,000	-	50% (through GRP)
<b>Global Renewable Power Operating Company Limited (GRPO)</b> 555/1 Energy Complex, Building B, 3 <sup>rd</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66 2140 1968	Provision of management and maintenance services for solar farms	THB 3,000,000	Common share	THB 3,000,000	THB 100/share	50% (through GRP)
<b>N.P.S Star Group Company Limited (NPS)</b> 555/1 Energy Complex, Building B, 3 <sup>rd</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66 2140 1968	A VSPP generating electricity from solar energy	THB 293,700,000	1,174,800 common shares and 1,762,200 preferred shares	THB 293,700,000	THB 100/share	50% (through GRP)
<b>World X change Asia Company Limited (WXA)</b> 555/1 Energy Complex, Building B, 3 <sup>rd</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66 2140 1968	A VSPP generating electricity from solar energy	THB 293,700,000	1,174,800 common shares and 1,762,200 preferred shares	THB 293,700,000	THB 100/share	50% (through GRP)

Company	Type of Business	Registered Capital	Type of Share	Paid-up Capital	Share Value	GPSC's Shareholding
<b>P.P. Solar Company Limited (PPS)</b> 555/1 Energy Complex, Building B, 3 <sup>rd</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel: +66 2140 1968	A VSPP generating electricity from solar energy	THB 82,000,000	Common share	THB 82,000,000	THB 100/share	50% (through GRP)
<b>Global Renewable Power One Company Limited (GRP1)</b> 555/2 Energy Complex, Building B, 5 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Tel : +66 2140 4600	To accommodate future renewable energy investment in Taiwan	THB 570,000,000	Common share	THB 570,000,000	THB 100/share	50% (through GRP)
<b>Sheng Yang Energy Company Limited (SYE)</b> 1F, No. 160, Sec. 1, Fuxing S. Rd., Da'An District, Taipei City Tel: +886 2 2592 5252	A solar power producer, supplying to Tai Power in Taiwan	TWD 100,000,000	Common share	TWD 100,000,000	TWD 10/share	45% (through GRP1)
<b>GPSC Singapore Pte. Limited (GPSC SG)</b> 38 Beach Road #29-11 South Beach Tower Singapore (189767)	To support overseas investment growth	USD 16,020,100	Common share	USD 15,720,100	USD 1/share	49% (through NUOVO PLUS)
<b>NV Gotion</b> Head Office: 555/1 Energy Complex, Building B, 4 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900 Branch No. 00001: 119/18 Moo 4, Pluak Daeng District, Rayong 21140	Battery module and pack business	THB 750,000,000	Common share	THB 750,000,000	THB 10/share	24.99% (through NUOVO PLUS)
<b>Eastern Seaboard Clean Energy Company Limited (ESCE)</b> 98 Sathorn Square Office Tower, 9 <sup>th</sup> Floor, Unit 912, North Sathorn Road, Silom Subdistrict, Bang Rak District, Bangkok 10500 Tel: +66 2085-3995-6	Investment (shareholding) in power plant projects	THB 1,039,000,020	Common share	THB 1,017,810,005	THB 10/share	33.33% (through GIPP3)

Company	Type of Business	Registered Capital	Type of Share	Paid-up Capital	Share Value	GPSC's Shareholding
<b>Chonburi Clean Energy Company Limited (CCE)</b> 40/5 Moo 8 WHA Chonburi Industrial Estate 1, Bowin Sub-District, Sriracha District, Chonburi 20230 Tel: +66 6571-7779-6	A very small power producer (VSPP) generating electricity from industrial waste	THB 989,000,000	Common share	THB 989,000,000	THB 10/share	33.33% (through ESCE)
<b>Long-term Investment</b>						
<b>Ratchaburi Power Company Limited (RPCL)</b> 1828 Sukhumvit Road, Bangchak Subdistrict, Phra Khanong District, Bangkok 10260 Tel: +66 2311 5111-9	Independent Power Producer (IPP) operating a combined-cycle power plant to generate and supply electricity to EGAT	THB 7,325,000,000	Common share	THB 7,325,000,000	THB 100/share	15%
<b>Business Services Alliance Company Limited (BSA)</b> 555 PTT Office, Phra Khanong Oil Depot, Art - Narong Road, Khlong Toei, Bangkok 10260 Tel: +66 2239 7328	Provision of human resource management for PTT Group	THB 2,000,000	Preferred share	THB 2,000,000	THB 10/share	25%
<b>24M Technologies, Inc. (24M)</b> Cambridge Office, Massachusetts, U.S.A. Tel: +(001) 617-553-1012	Research and development of lithium-ion batteries for energy storage in the industrial sector and for enhancement of power distribution and power network security	USD 425,001,164	Preferred share	USD 342,384,008	USD 0.001 /share	13.59%
<b>Sarn Palung Social Enterprise Company Limited (SPSE)</b> 555/1 Energy Complex, Building A, 10 <sup>th</sup> Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900	Production and sale of goods and/or services for the benefit of society, communities, and the environment	THB 10,000,000	Common share	THB 10,000,000	THB 10/share	10%

Company	Type of Business	Registered Capital	Type of Share	Paid-up Capital	Share Value	GPSC's Shareholding
<b>Long-term Indirect Investment</b>						
<b>Sport Services Alliance Company Limited (SSA)</b> 199/7 Moo 1, Tambon Choeng Noen, Muang District, Rayong 21000 Tel: +66 3894 8138	Management of a football club for PTT Group	THB 5,000,000	Common share	THB 5,000,000	THB 10/share	25% (through BSA)
<b>Anhui Axxiva New Energy Technology Company Limited (AXXIVA)</b> 28 East Chizhushan Rd., Economic and Technological Development Zone, Wuhu, Anhui Province	Production of batteries for EVs in China	RMB 409,128,602	-	RMB 361,052,518	-	4.90% (through GPSCSG)
<b>Eastern Fluid Transport Company Limited (EFT)</b> 2, Muang Mai Map Ta Phut 6 Rd., Huai Pong Subdistrict, Muang District, Rayong 21150 Tel: +66 3868-7513-4	Provision of maintenance for pipeline structure installation and management of the system for pipeline installation in Map Ta Phut Industrial Estate	THB 10,000,000	Common share	THB 10,000,000	THB 10/share	15% (through GLOW)

### 1.3.3 Relationship with major shareholders' business groups

GPSC's major shareholders consist of (1) PTT Plc, with 55.23% shares (including 7.96% held by Siam Management Holding Co., Ltd., wholly owned by PTT Public Company Limited), (2) Thai Oil Public Company Limited, with 10.00% shares, and (3) PTT Global Chemical Public Company Limited, 10.00% shares of the paid-up registered capital-all affiliates of PTT Group. GPSC's ongoing business relationship and transactions with these are considered normal business practices, such as the sale of electricity and steam to PTT Group and its purchase of natural gas from PTT. In addition, GPSC joined PTT in founding companies for battery value chain investment to accommodate the EV industry, following the government's auto-industry advocacy and energy storage system policy, consistent with GPSC's business strategies in tandem with PTT Group's business growth.

### 1.3.4 Shareholders

Our top ten shareholders as of the book-closing date (XO) on January 3, 2024, were:

No.	Name	Shares	Percentage of Total
1.	PTT Public Company Limited	1,332,955,135	47.27
2.	PTT Global Chemical Public Company Limited	281,972,937	10.00
3.	Thai Oil Public Company Limited	281,972,937	10.00
4.	Siam Management Holding Co., Ltd.	224,431,735	7.96
5.	Thai NVDR Co., Ltd.	62,622,534	2.22
6.	Social Security Office	44,121,295	1.56
7.	South East Asia UK (Type C) Nominees Limited	19,874,012	0.70
8.	State Street Europe Limited	14,780,468	0.52
9.	Mr. Sompob Tingthanathikul	11,400,000	0.40
10.	Krungsri Dividend Stock LTF	10,039,600	0.36

**Remarks:** The data above were recorded on the roster-closing date (XO) on January 3, 2024, which were the latest available data when this report was compiled.

### Limitation of Share Transfers

There is no limitation except for share transfers to foreign investors that would give them more than 49% of the total shares in GPSC.



## 1.4 Paid-Up Registered Capital

### 1.4.1 Registered Capital

As of December 31, 2023, GPSC commanded THB 28,197,293,710 in registered capital, with THB 28,197,293,670 paid up, consisting of 2,819,729,367 common shares valued at THB 10 per share.

**1.4.2 Other types of shares with different rights or conditions from those of common shares, including preferred shares. If applicable, please provide details about their numbers, values, and such different rights or conditions.**

- None -

**1.4.3 If the company's shares or convertible securities serve as underlying securities for the issuance of unit trusts of Thai trust funds, and if certificates of rights to the benefits of NVDR are available, please state the number of shares and convertible securities that serve as underlying securities and explain their impacts on shareholders' voting rights due to Thai trust funds' or NVDR issuers' not exercising their voting rights at shareholders' meetings.**

- None -



## 1.5 Issuance of Other Securities

GPSC's bonds are unsubordinated and unsecured. As of December 31, 2023, its bonds not yet mature for redemption were:

Bond Number	Amount (THB Million)	Annual Interest Rate	Age / Maturity	Credit Rating
GPSC249A	1,500	2.82% Interest paid every 6 months	7 years Sep. 29, 2024	A+ (tha) by Fitch (TH)
GPSC24NA	5,000	2.24% Interest paid every 6 months	5 years Nov. 8, 2024	AA+ By TRIS
GPSC26NA	6,000	2.52% Interest paid every 6 months	7 years Nov. 8, 2026	AA+ By TRIS
GPSC29NA	8,000	2.86% Interest paid every 6 months	10 years Nov. 8, 2029	AA+ By TRIS
GPSC31NA	7,500	3.15% Interest paid every 6 months, 12-year maturity	12 years Nov. 8, 2031	AA+ By TRIS
GPSC34NA	6,500	3.25% Interest paid every 6 months	15 years Nov. 8, 2034	AA+ By TRIS
GPSC258A*	1,500	2.11% Interest paid every 6 months	5 years Aug. 7, 2025	AA+ By TRIS
GPSC308A*	1,000	2.94% Interest paid every 6 months	10 years Aug. 7, 2030	AA+ By TRIS
GPSC358A*	2,500	3.24% Interest paid every 6 months	15 years Aug. 7, 2035	AA+ By TRIS
GPSC256A*	1,000	2.55% Interest paid every 6 months	3 years Jun. 10, 2025	AA+ By TRIS
GPSC276A*	3,000	3.04% Interest paid every 6 months	5 years Jun. 10, 2027	AA+ By TRIS
GPSC306A*	1,000	3.56% Interest paid every 6 months	8 years Jun. 10, 2030	AA+ By TRIS
GPSC326A*	3,000	3.75% Interest paid every 6 months	10 years Jun. 10, 2032	AA+ By TRIS
GPSC376A*	4,000	4.40% Interest paid every 6 months	15 years Jun. 10, 2037	AA+ By TRIS
GPSC354A	3,000	3.78% Interest paid every 6 months	12 years Apr. 4, 2035	AA+ By TRIS

Remarks: \* Green debentures

## 1.6 Dividend Policy

### 1.6.1 GPSC

GPSC pays out as dividends no less than 30% of its net profit under financial statements after deducting all taxes, provisional reserves required by laws, and obligations under the terms of loan contracts. Dividend payment is subject to future investment plans, spending necessities, and other future suitability. Once the Board has decided on annual dividend payment, it must seek approval from the shareholders' meeting. An exception is for interim dividend payment, which the Board can approve and report to the next shareholders' meeting.

#### GPSC's dividend payment (THB/share) since SET listing

Year	Dividend Paid (THB/Share)			Dividend per Net Profit (%)
	First Half	Second Half	Full Year	
2015	0.35	0.60	0.95	75
2016	0.45	0.70	1.15	64
2017	0.45	0.80	1.25	59
2018	0.45	0.80	1.25	56
2019	0.50	0.80	1.30	74
2020	0.50	1.00	1.50	56
2021	0.50	1.00	1.50	58
2022	0.20	0.30	0.50	158
2023	0.30	0.44	0.74*	56

**Remarks:** \* Board Meeting No. 2/2567 of February 9, 2024, endorsed a dividend payment proposal for approval by the 2024 AGM for the performance of GPSC and subsidiaries in 2023 at THB 0.74 per share or about 56% of the net profit under the 2023 consolidated financial statements. This broke down into interim payment for the first half of the year (January 1 to June 30, 2023) at THB 0.30 per share, which was paid on September 20, 2023. As a result, dividend payment for the second half of the year (July 1 to December 31, 2023) equaled THB 0.44 per share. The rights to receive these dividends were subject to approval by the 2024 AGM.

### 1.6.2 Subsidiaries

With the endorsement of the board of each subsidiary, this matter may be raised for the shareholders' meeting to approve for each given year. Dividend payment must take into account essential investment plans and other suitability, including the subsidiary's cash flow after legal provisions.

## 2 | Risk Management

### 2.1 Risk Management Policy and Plan

GPSC's operations are committed to business goals based on the aspirations and responsibility to all stakeholders under increasingly volatile circumstances and uncertainty produced by international factors, including wars, geopolitical and geo-economic conflicts, and supply chain disruptions, and by domestic business factors with extreme impacts on the energy and power sectors, namely energy and power charge policies and the sluggish economy. Risk and opportunity management therefore represents our vital tool for development and application to performance oversight, monitoring, and assessment. For these actions ensure that, whatever the business context, we've anticipated and assessed potential outcomes and pursued mitigation and better business opportunities while striving for optimal benefit for the corporation and stakeholders under GPSC's strategies and goals.

Our applied tools and approaches for risk management conform to the principles laid down by the Committee of Sponsoring Organizations of the Treadway Commission (COSO ERM 2017), which is internationally accepted. They include risk and crisis management practices for business sustainability under the Dow Jones Sustainability Indices (DJSI), of which GPSC has constantly belonged. These are supported and driven by all executives and employees on policy, management structure, and operations. Our structure consists of two levels.

- At the corporate level: The Risk Management Committee (RMC), appointed by the Board of Directors, defines a corporate policy and a risk management framework. The RMC also supervises and issues guidelines for management to execute in line with the prevailing environment.
- At the management level: The Risk Management and Internal Control Committee (RMCC) drives policy implementation and monitors as well as assessing all risk management activities, including prompt responses to emerging risks.
- In addition, we value the management of specific risk exposures through designated subcommittees including
- The Operation Management Committee (OMC) in charge of scrutinizing and executing risk management activities concerning operations
- The Strategic Investment Committee (SIMC) in charge of scrutinizing, monitoring, and reviewing all investment project risk exposure
- The Hedging Committee in charge of scrutinizing, overseeing, and conducting risk management concerning prices of feedstock and products together with the financial side for GPSC Group.

We also value the Audit Committee's supervision of risk management adequacy and the Board's annual review of efficiency to ensure that GPSC has applied risk management tools in support of concrete business efficiency.

### 2.2 Risk Management Culture

We strictly observe the philosophy and corporate culture of management focusing on value creation for all stakeholders. We value the nurturing of a sound corporate culture with a strong foundation for systematic risk management to successfully manage the company, both short-term and long-term, through the likes of a clearly defined corporate risk management policy, risk appetites, and risk assessment criteria to serve as the scope and metrics, together with our verification for alignment with

business settings and context for currency. Then on the operational level, we've defined risk management roles and responsibility for each employee. And to further raise efficiency, we value the initiation of a corporate culture and knowledge development on risk management. We've organized e-learning and workshops for Group executives and employees. We've also introduced innovations in support of risk management that are accessible and practical for the entire organization, including development

of a risk platform whose objective is to integrate business data and standard knowledge into a database accessible to all employees. Risk management assessment has been

made a performance indicator for executives and employees. These indicators also motivate business pursuit of our goals through an efficient risk management process.

## 2.3 Risk Factors Facing GPSC Group's Businesses

Below is an overview of key risks facing GPSC:

### 2.3.1 Risks Facing GPSC Group's Businesses

#### Strategic Risks

##### 1. Investment and Business Growth

GPSC strives to become a power industry leader with goals under the 4S strategy to maintain and extend current competitiveness and grow further domestically as well as internationally in the domains of conventional energy, renewable energy, S-Curve and batteries, including the battery business, new energy businesses, and related businesses, and a shift to customer-centric solutions to accommodate emerging consumption behavior and energy efficiency. Our approach to managing key projects is to

- Operate with PTT Group
- Pursue cooperation with business partners well-versed in the business
- Merge with high-potential businesses
- Conduct research and development (R&D) to accommodate emerging energy businesses.

This year we faced domestic as well as international challenges. Domestically, these challenges are the sluggish economy and the policy to freeze energy and power charges; internationally, geopolitical and geo-economic conflicts as well as economic recession. All these contribute to volatile fuel prices, exchange rates, and interest rates. Nevertheless, this year we successfully grew our renewable-energy (renewables) business, notably in India, as part of the Second Home investment strategy and grew our capacity of conventional energy. We now command 9,759 MW in capacity, of which 52.43% is the capacity derived from renewables. We've also conducted revenue risk management concerning fluctuating prices of fuels and electricity.

##### 2. Organizational Capability

GPSC's behavior and work model arising from Covid-19 over the past few years have accelerated work model and

procedural transformation in all organizations, including work-from-anywhere and efficiency as well as performance management. Under the strategy of long-term business development to diverse and emerging businesses, we now command human resources made up of different age groups and generations. Organizational capability development is therefore critical to corporate strength, for it leads to integration of knowledge, ability, and collaboration in support of business growth. With this in mind, we've provided oversight of the integration of caliber and upskilling of employees, recruitment of additional talents, management of organizational structure readiness, and the advocacy of a work culture to promote personnel with specific expertise in selected businesses or areas in new target countries. This aligns with GPSC's growth direction and supports pursuit of new long-term business opportunities.

Thanks to the success of organizational capability management under the ACT SPIRIT values of producing smart, conscientious, and responsible people to lead to new generations of future executives, this year GPSC seconded personnel to India to support and jointly develop a renewable-energy platform with AVAADA Energy. This is a key project expanding our renewables portfolio, reflecting the goal of more than half of our portfolio capacity. This secondment also enhanced our pursuit of new business opportunities in that country, a market with long-term potential. Our businesses now boast readiness of proficient staff, illustrated by relentless production efficiency, availability, and reliability of power generation and distribution. This year we recorded 50% superior statistics on machine stoppages and unplanned shutdowns to those of 2022, while creating more than Baht 2.4 billion in synergy value.



### 3. Altered Rules and Regulations

Current, pending, or likely laws and regulations enforced domestically, regionally, or internationally tend to produce business obstacles to GPSC Group or customers, or both. On the other hand, these laws and regulations could accompany business opportunities concerning existing businesses or emerging businesses. We therefore value risk management and business opportunities accompanying changing laws and regulations, notably those directly connected to our strategies and business practices, for instance, the policy on increasing the power capacity derived from renewable energy under PDP 2018 Rev. 1, the Utility Green Tariff rule, the Third Party Access Code (TPA Code), the policy on reducing greenhouse gas (GHG) emissions, and the promotion of EVs. We've monitored data movement to analyze and plan mitigation of impacts as well as reviewing measures to ease potential impacts, including our pursuit of investment opportunities under the policy of increased power capacity through renewable energy to lower risks to GPSC Group and customers posed by laws and regulations of the public sector and social regulations concerning GHG emissions. To this end, a dedicated business division is tasked with developing and updating a database of rules and regulations to track changes affecting our operations. This group collects relevant updated data and social trends, providing analyses and situation assessment to define strategies or adaptation plans for potential impacts. At the same time, we relentlessly assess and verify our own performance to ensure alignment with laws, regulations, and requirements of various agencies. Employees are also responsible for promoting and nurturing the culture and corporate values of compliance, good governance, and a code of conduct as we strive to become a good corporate citizen with responsibility to the community, society, the environment, and all stakeholders.

### 4. Climate Change

Nowadays, at the global, national, business, and household levels, our world is awake, aware, and committed to greenhouse gas (GHG) reduction to collectively improve social and environmental conditions under a common pledge to resolve climate change through GHG reduction. The efforts command more stringent forms of oversight

and enforcement than current ones. New laws and regulations to stem GHG emissions are expected. Clearly, from now on the world is bound to see new lifestyles and business activities. GPSC will address this with the business resolve to lessen CO<sub>2</sub> intensity by 35% by 2030, to achieve carbon neutrality by 2050, and to achieve Net Zero GHG emissions by 2060. This year saw us drive our operations and seek cooperation from business partners as well as customers in support of these goals through activities like growing our renewables business, improvement in machinery and energy efficiency, and optimization of production and distribution. These actions have not only lowered GHG emissions in the production stage for us and our customers, but also lowered expenditure and yielded higher business returns. We've also sought long-term business opportunities under the context of business sustainability, including scaled-up investigation of technology where GHG emissions are reduced, carbon capture and storage (CCS) to accommodate future business opportunities, and an investigation of emerging fuels like hydrogen with allies and PTT Group. The purpose is to integrate the capability and knowledge of each entity across the business value chain. Besides lowering potential impacts on society, businesses, and the public sector from GHG reduction, the exercise has illustrated our determination to play a part in fostering sound and global sustainable society and environment over the long term.

## Operational Risks

### 1. Power Plant Security Management

GPSC Group's core business is power and steam generation to deliver products of high quality and stability to customers our long-standing business mission and protect our customers from damage to their operations while supporting national economic growth and energy security. As a result, risk management concerning power generation and distribution security is our top priority. Our key current risk and impact management action is to foster our personnel's specialized skills and forge confidence in their ability to control production and provide maintenance. This is done through training at our Power Academy and on-the-job training. At the same time, we've restructured our organization for asset management in parallel with power and steam network integration and plant optimization among GPSC Group. Not only has this

been our joint capacity management, but it has also represented our synergistic efforts for additional financial returns on our assets. We also value work efficiency improvement under the Operational Excellence Management System (OEMS), which frames PTT Group's operations. We have introduced assorted international standards that are helpful and suit our own business context, including ISO 9001:2015 quality management, ISO 14001:2015 environmental management, ISO 45001:2018 safety and occupational health management, IMS R-100 Rev. 4 integrated management, ISO 22301:2019 business continuity, and ISO 27001:2013 IT security. That way, GPSC ensures operations under international standards and is poised to cope with crisis management to continuously deliver products and services.

## **2. Quality, Security, Safety, Health, and Environment**

GPSC recognizes the value of loss control concerning security, safety, health, and the environment to prevent the loss of lives, injuries, and illnesses among employees, contractors, business partners, and customers as well as property losses, business disruption, and discontinuity together with impacts on communities, society, the environment, and stakeholders. We therefore advocate Operational Excellence (OE) to improve, enhance, and develop safety operation, stability, production management caliber, and business sustainability by zooming in on minimizing accidents, incidents, and zero unplanned machine stoppages by 2025. To this end, we cultivate values leading up to the oversight of the scope of the Quality, Security, Safety, Health, and Environmental Policy. Beyond this commitment we've instilled a "WE SAFE" organizational culture together with attitudes of "Work Safely, Care for All, Think before Acting, and Stop if It's Not Safe". We've promoted an organizational culture among employees and contractors in the following ways:

- Establish a Quality, Security, Safety, Health, and Environmental Policy
- Establish a Safety, Health, and Environment Committee for all operating areas
- Implement contractor safety management
- Implement health risk assessment, industrial hygiene, and Fit-to-Work programs

- Prepare safety manuals for all employees and contractors
- Relentlessly advocate a "WE SAFE" corporate culture
- Set short-term and long-term strategic operational targets for safety and health
- Develop suggestion programs and mandate routine reporting on substandard acts and conditions, incident reports, and investigation programs
- Implement ISO 45001:2018 on health and safety management and a business continuity management plan under the ISO 22301:2012 standard
- Enforce work environmental management in all operating areas.

In addition, we strongly advocate efficiency and strategic activities to ensure that the corporation achieves its goals and plans concerning security, safety, health, and the environment apart from maintaining stability and continuous production as planned.

## **3. Management of Projects under Construction**

To prevent negative impacts on the reliable delivery of power and steam to customers and achieve financial performance aligned with our budget plan for projects under construction, we carefully monitor and supervise all project stages of our plans to ensure optimal resource consumption with maximum efficiency to meet deadlines and stay within the budget.

Typical construction risks deal with construction work, instruments, installation delays, overbudgeted expenditure, engineering complications, and environmental constraints that could harm communities and stakeholders, in addition to contract management. This year also contained additional factors, including geopolitical and conflicts between countries, fluctuating exchange rates, supply chain disruptions—all of which compromise project quality management. Our emphasis therefore begins with the design and approval of projects. We select credible contractors with specific skills, use turnkey contracts, select machinery sources, and engage in prudent project monitoring. We also pursue regular communication and engagement with adjacent community stakeholders for good understanding and perception of the project. Additional third-party technical and project management

consultants are recruited to supervise and inspect as well as closely monitoring project work in progress. Each week, direct reporting to management executives is required to closely manage uncertainty and stay vigilant about unplanned incidents, while preventing/mitigating potential impacts. Finally, in place is our process to regularly report work progress internally among various business functions.

These projects are currently under construction and controlled by GPSC in Rayong and Chon Buri:

1. Construction and installation of an energy recovery unit (ERU), a subproject of Thai Oil Plc's Clean Fuel Project (CFP), located inside the refinery compound in Chon Buri. The project initiative is to recover oil residue from the oil distillation unit in the refinery and turn it into power and steam to run various distillation units.
2. Construction of Glow Energy Phase 2 and Glow SPP 2, which feature new power plants replacing old ones under the Firm VSPP cogeneration (SPP Replacement) Program.

#### **4. Imbalanced Fuel Supply Portfolio**

Natural gas and coal are our fuel sources for power and steam generation, so managing fuel supply to meet production needs in line with contracts (fuel supply and distribution) is critical to maintain generation and distribution stability in addition to balancing suitably priced fuels in line with anticipated business performance outcomes.

GPSC manages these risks concerning quality, volumes, and prices by securing long-term gas supply contracts with PTT Plc. Owing to the proximity of our facilities to PTT's fuel storage terminals and main gas pipeline, the risk to fuel supplies has become manageable.

To manage supply continuity, we mitigate coal supply risks with various short-term and long-term contracts and supply sources, depending on market conditions. Contingent supplies of spot-market coal can be arranged in an emergency.

Under today's volatile fuel prices, GPSC conducts price hedging in parallel with supply contract management and plant optimization under terms concerning power supply

to EGAT and industrial customers to ease impacts and optimize benefit to GPSC and all sectors under the supervision of the Hedging Committee, the members of which represent executives from applicable functions, who integrate data and procedures for uniform implementation.

#### **5. Corrupt Business Practices**

We dearly value the cultivation of workforce integrity and transparency. Employees must recognize their duties in conforming to good governance and the Code of Business Conduct, which are in line with GPSC's long-standing corporate governance code. We tolerate no corruption and take very seriously the prevention of improper actions or illegal actions, or both, whether by accepting or giving benefits in monetary or other forms inside the company (directly and indirectly) by any employees or business partners. We achieve this by declaring an anti-corruption policy for all to acknowledge and observe. Guidelines developed for giving and accepting gifts, entertainment, or other benefits frame proper work practices and help employees address corruption risks. Whistle blowing channels are in place for corrupt practices, and so are written measures to aid assessment, detection, and response to corruption. To underline our total commitment to transparent business conduct, we've required assessment of corruption risks via annual reporting to the Risk Management Committee in line with the intent of the Thai Private Sector Collective Action against Corruption (CAC), to which GPSC belongs. Thanks to efficient performance under international guidelines, this year GPSC and the workforce have maintained a sound record of no shortcoming and no involvement in any corrupt practices.

### **Financial Risks**

#### **1. Over-reliance on Industrial Customers**

GPSC's strategies and plans for growth in renewable energy and emerging businesses worldwide cater to our business mission under GHG emission reduction while accommodating business sustainability under the context of the consumption culture under prevailing energy consumption models and styles. This is a boon to GPSC's capability for risk management concerning business structure and revenue, for a company which relies on power and steam distribution to customers in certain areas.

This year, thanks to GPSC's tremendous success in growing business to renewable energy and foreign lands, our power generation structure features a 52.43% proportion in renewables and 50.86% of all capacities, with rising profitability from renewables. Thanks to these, we've successfully managed the risk of imbalanced revenue and revenue structure.

As for the management of core revenue derived from power generation and public utilities, most of which are located in Rayong industrial estates, we've solved our income imbalance through our diverse group of customers, including petrochemical plants, chemical plants, the automotive industry, and steel complexes. With customers, GPSC also advertises energy management services, whether rooftop solar power generation and distribution or joint pursuit of clean-energy opportunities from other areas via business to business (B2B) renewables project development in the form of private PPAs, S-Curve and battery business, and shift to customer-centric solutions in conjunction with capable partners. These would foster our income security and long-term growth.

## **2. Price Volatility Reference**

For power plants under the IPP and SPP schemes, GPSC can transfer fuel supply costs from gas and coal to the Electricity Generating Authority of Thailand (EGAT) under power purchasing agreements (PPAs). The same cost transfer isn't possible for power and steam generation and distribution to industrial users, thus creating fuel supply price volatility. The prices of gas and coal (our main fuels) are so volatile, with monthly referenced prices. A portion of gas costs is transferred to customers under price formulas stipulated under agreements. However, the retail power rate is strictly controlled by the Energy Regulatory Commission (ERC) and priced partially under an automatic adjustment mechanism (Ft). This retail power rate doesn't always reflect current fuel supply costs, but rather periodically potentially affecting our overall performance. This year has seen a drastic impact on GPSC Group of the public sector's policy to fix Ft and the volatile fuel price situation. Beginning this year, GPSC Group therefore mounted risk management by monitoring and planning activities with customers in parallel with stress tests to closely monitor and analyze financial impacts. In addition,

we took steps to become ready for cashflow management and leveraged ways to administer expenses, improve production efficiency, and accelerate incremental profits from integrating capacities of assets in the power and steam distribution network, and advocated GPSC Group's pursuit of incremental value to minimize impacts on our bottom line.

## **3. Capital Management for Business Expansion**

Under our 4S business strategies to focus on business growth through investment growth spanning conventional energy, renewable energy, and S-Curve and battery business, and shift to customer-centric solutions worldwide, GPSC has defined criteria and processes for investment scrutiny that are suitable and align with short-term and long-term strategies and goals while supervising investment and monitoring audit returns as well as performance on approved projects. In addition, GPSC prepares funds in support of future investment plans by considering liquidity, cash flow, and various financial ratios to administer capital mobilization tools and models that suit cash needs and align with economic and financial market conditions to optimize benefit to us, preserve a suitable financial structure, and maintain our credibility ratings. To this end, we've formed GPSC Treasury Center Co., Ltd., as a treasury center for the group to facilitate fund-raising activities and for optimal benefit of financial management by GPSC Group.

## **4. Interest Rate Volatility**

Loans from financial institutions are the most common investment option because of low volatility. Loans generally come in fixed and float rates. GPSC effectively manages proportions of fixed and float interest rates for the nature of its businesses.

## **5. Exchange Rate Volatility**

We plan our overseas project financing and investments in foreign currencies carefully. Fluctuating exchange rates are closely monitored so that we can mitigate exchange rate volatility risks, including reviewing and selecting hedging instruments, under a policy scope approved by the Risk Management Committee and administered by the Hedging Committee. This enables prompt actions in the best interests of GPSC.

## 2.3.2 Shareholder Investment Risks

### 1. Credit Risks

As a rule, bond holders willingly take some risk to their principal and dividends when bond issuers' performance falls short of expectations and the collateral is less than the overall debt. Investors are thus advised to consider the issuer's financial status and ability to redeem or refund debt stipulated in the bond under the prospectus in conjunction with the issuer's credit risk assessment and the credit rating reported by credit rating agencies before making investment decisions. Credit rating generally helps indicate the risk level of the bond and the issuer. The return on investment reflects the credit risk level: the higher the risk, the higher the return. Investors can learn about bond issuers and their credit ratings from SEC's website, credit rating agencies, or the Thai Bond Market Association.

### 2. Price Risks

The net asset value of bonds can be volatile, depending on money market movements and interest rate changes, the interest rate policy of the Bank of Thailand, general economic conditions, inflation rates, remaining tenors, excess demand, or bond supply shortages in the market. Bond holders may thus be affected by net asset value volatility when disposing of them before due dates.

### 3. Liquidity Risks

Generally, bond holders may be unable to dispose of bonds before maturity when there is no liquidity in the secondary or over-the-counter markets. But if the issuer doesn't book bonds for trade in the bond electronic exchange (BEX) facility, private bond holders can exchange them at commercial banks, securities companies, or other entities holding securities and bond-trading licenses. Another obstacle faced by bond holders is SEC regulatory controls including: SEC announcement Kor Jor 5/2552 dated March 13, 2009, and subsequent applicable announcements on the definitions of terms used in the issuance and public offering of all bonds. SEC announcement Kor Jor 4/2560 dated February 8, 2017, and subsequent applicable announcements on the definitions of institutional investors, special major investors, and other major investors, with the exception of inheritance transfers.

## 4. Default Risks

GPSC has no records of default on either principal or interest for bonds, mortgages, or loans from commercial banks, finance and securities firms, credit fonciers, and specialized financial institutions (SFIs). It bears no records of default during 2017-2023.

## 2.3.3 Foreign Equity Investment Risks

GPSC has no investment in foreign securities.

## 2.3.4 Emerging Risks

### 1. Economic Recession, Geopolitical, and War Risks

These result from international conflicts and rippling international challenges from geopolitics and polarization, in addition to economic doldrums, volatile exchange rates, interest rates, and inflation affecting countries around the world as well as conflicts and wars in neighboring countries that are Thailand's key sources of energy. All sectors are facing challenges of emerging risk management at both macro and business levels. These challenges are complicated and interconnected, with severe rippling international impacts. GPSC views these as the context for emerging risks, with the tendency of lingering on over the next 3-5 years, thus causing it to closely monitor and supervise activities to address uncertainty.

- Impacts are severe on the energy stability and security in neighboring countries, together with the volatility of fuel supplies (natural gas and coal) on our energy industry, notably the power sector. In the short term, we've administered these impacts through fuel supply contracts containing applicable conditions and formulated guidelines for the risk diversification of managing and procuring coal. We've also managed the stability of gas supply through PTT, Thailand's key producer and distributor of gas from sources in neighboring countries through pipelines and gas in other regions through tanker transport. Thanks to our production technology that applies to coal, natural gas, and oil, we can flexibly manage our production from these fuels, which is a boon to our overall business and to national power security alike.



- Fiscal policy management under controlled inflation, tightened international economies, and volatility of the international capital markets have affected our financing cost management through exchange rates and interest rates. Our revenue and expenditure (for feedstock supply and project investment) are managed; risk management of exchange rates is conducted by the Hedging Committee, the members of which represent senior executives from applicable functions that are knowledgeable and experienced to provide oversight and support to our operations. Through delegated parties, we also monitor interest rate situations and financing costs to identify suitable and optimal financial tools.
- Geopolitical risks arise from regional and national conflicts, potentially leading to polarization (social and political). This factor is considered and managed under GPSC's growth strategy in target countries. To this end, we've managed risks and impacts from investment project area, category, and project characteristic selection (with short-term and long-term assessment of outcomes). We've identified local business partners, investigated and monitored in-depth business surroundings through our men-on-the-ground for the consideration of the exit strategy under our operating guidelines for suitability and optimization of GPSC's businesses.

## 2. Power and Energy Interference Risks

Under the government's policy of fixing energy commodity prices, notably that of electricity, to shore up the cost of living of the public, the power producer group and GPSC have suffered from the incompatibility of energy prices and power charges. To elaborate, production costs are highly volatile, whereas our revenue is fixed by the public policy. To manage this impact, GPSC has resorted to pursuit of expense reduction related to overall production costs in tandem with proper maintenance and improvement of production efficiency and stability to minimize unplanned shutdowns, promote plant optimization, and promote coordination among customers/partners to secure power generation and distribution, particularly for industrial customers needing high degrees of power supply stability for their production stability under limitations of expenditure and performance outcomes. This year, therefore, GPSC

managed to eliminate 80% of unplanned shutdowns from those of the previous year. We also coordinated with third-party agencies in the power generation sector and government agencies the push for proper policy and operation guidelines for the optimum benefit of all sectors at the national level (manufacturing, industrial, private, and public sectors).

## 3. Climate Regulation and Climate Action Risks

As seen worldwide, including all sectors in Thailand, countries have expressed their intention and pledged to resolve GHG emission problems. Several measures (voluntary and mandatory) are in place and look set to become more intensified. These measures bring direct risks to GPSC's operations. To elaborate, GPSC is responsible for reducing GHG emissions against respective goals under the production management of fossil fuels, all the while maintaining the performance outcomes to address the needs of shareholders and stakeholders. GPSC must manage the finance and the cost of funds derived from policies supporting investment in clean-fuel businesses. In addition, there are indirect impacts on customers, including tax discrimination measures and incremental expenses for products that release more GHG than defined; this could result in lower purchase orders. This could affect us in our pursuit of activities and our guidelines for lowering GHG emissions in response to customers' business activities and goals. As a result, we've managed short-term risks and impacts by accelerating power generating efficiency, fuel consumption, investment expansion in renewables, development of new businesses for securing clean energy and certification of clean-energy emissions for customers; for long-term risk management, we've conducted technological R&D on the consumption of new forms of energy with low GHG emissions and investigated the application of CCUS technology, and so on, in the hope of enabling our power generation business to thrive in parallel with the resolution of GHG emissions for society while maintaining both parties' sustainable growth.

#### 4. Power and Steam Production and Synchronization Risks

In place is a technical requirement that all power generators must secure the prior approval of EGAT. This means that any private party's power system linked to EGAT's distribution system must abide by such requirement, including all our new power generators and SPP Replacement ones. Currently, EGAT is improving its distribution system in Rayong and the Eastern Region to resolve the higher-than-normal fault levels, which affects our medium-term to long-term planning and management. As a result, we need to set operating measures to manage this risk, including:

- Technical analysis and coordination with EGAT in resolving connection problems
- Maintenance administration to raise production and distribution efficiency and lower power generator shutdowns
- Administration of commissioning and maintenance in parallel with energy purchase planning with customers
- Administration of plant optimization for overall production management
- Joint planning with EGAT in procuring additional power during power generator maintenance.

#### 5. Disruptive Technology Risks

Disruptive technology has been accelerating energy technology transformation, culminating in changing consumer behavior of industrial and public users. This includes energy transition, heavily influenced by the stride

toward sustainability together with impacts on future laws and regulations on GHG emission reduction. The uncertainty amid change in today's businesses and innovation business development is inevitable. To tackle such risks and preserve business stability as well as security over the long term, we've developed the following guidelines:

- Pursue opportunities of investing in the development of a renewable business value chain and a New S-Curve business model beyond the existing power-generating business model to support future growth. This new model includes storage battery manufacturing; energy storage system development and related businesses; and research and development (R&D) investment in emerging energy technologies to maintain our competitive advantages and fulfill our vision to become a leading innovative energy company.
- Develop a model for energy management system (EMS) to better address micro-grid and smart-grid energy efficiency while integratable with our existing businesses.
- Develop a new energy trade platform to cope with new behaviors of users, simultaneously reducing impacts on current and future power generation and distribution operations.
- Investigate and develop CCUS technology and emerging energy businesses, including the hydrogen business, to ready ourselves for future constraints over GHG emissions and shape alternative business opportunities for GPSC.



## 3 | Pursuit of Sustainability

### 3.1 Policy and Goals of Sustainability Management

#### Policy and Goals of Sustainability Management

Global Power Synergy Plc (GPSC), the Innovative Power Business and Smart Energy Flagship of PTT Group, is committed to operating with a sustainability development approach. We strive to foster engagement, confidence, and value among stakeholders, abide by operational excellence, demonstrate business transparency, and constantly develop innovation and technology. Our aim is to grow business in a secure and sustainable way in three ESG aspects: environmental, social, and governance (economic). We aim to align with PTT Group's approach to sustainability management as well as international sustainability practices together with the United Nations Sustainable Development Goals (SDGs). We've therefore defined a policy and goals for sustainability management while striving to become a Net Zero organization. This policy applies to all units across GPSC's supply chain. All executives and employees must support, drive, and comply with the defined policy and sustainability management scope.

For details of the policy and goals of sustainability management, please log on to

<https://www.gpscgroup.com/storage/download/sustainability/policy/20230510-gpsc-sustainability-management-policy-th.pdf>

#### Goal-setting and Business Operations That Support UN SDGs

GPSC Group is committed to developing and growing in a sustainable way to become part of the drive toward UN SDGs. Our activities duly address SDGs while agreeing with the vision, mission, nature of business, strategic plans, and materiality issues concerning sustainability and stakeholders' expectations. Our operations support seven out of 17 SDGs: SDG 7 (access by all to clean energy), SDG 8 (productive employment and economic growth), SDG 9 (industry, innovation, infrastructure), SDG 11 (cities and sustainable human settlements), SDG 12 (sustainable

consumption and production patterns), SDG 13 (action to combat climate change), and SDG 16 (peaceful societies, justice for all, and inclusive societies). These SDGs shape our sustainable development management approach for the benefit of all stakeholders.

For more details of our action plans and long-term goals, please log on to

<https://www.gpscgroup.com/th/sustainability/gpsc-sustainability/gpsc-sustainability-strategy-and-sdgs>

GPSC Group is relentlessly committed to business development for sustainability under the four-aspect management scope embracing all three ESG aspects and aligning with SDGs to achieve the goal of creating long-term value, innovation, and sustainable energy together with goals for GHG reduction that are in tune with international goals. To this end, we operate with the 4S strategy: S1: Strengthen and Expand the Core, S2: Scale-up Green Energy, S3: S-Curve & Batteries, and S4: Shift to Customer-centric Solutions. We've also set goals for capacity expansion ratios by focusing on more than 50% of renewable-energy (renewables) power generation by 2030 and improving the generation efficiency of the power plants running on conventional fuels. To elaborate, the Carbon Capture and Storage (CCS) and Hydrogen Technology will be applied to raise combustion efficiency and lower carbon formation, which will play a key role in our drive toward Net Zero Emissions by 2060, designed to resolve climate change and participate in combatting global warming under the UN Framework Convention on Climate Change (UNFCCC).

This year's assessment of materiality issues identified a changing context due to external factors with positive and negative impacts as well as long-term value addition for stakeholders and businesses. These forces arise from inside and outside GPSC: the big economic picture (international and national), the driving force behind GHG

reduction efforts to deal with climate change, geopolitical conflicts and energy crises, the outlook for market demand and pattern shifts in energy consumption, regard for biodiversity, and the human rights code, which is increasingly accepted around the world. GPSC's key materiality issues consist of

- **Environmental Management and Clean Energy toward Net Zero**

Recognizing environmental management in pursuit of high standards, GPSC strives to become a green factory, leading to a high quality of the workplace environment and neighboring communities as well as employees' and surrounding neighbors' quality of life. That way, our business will be a good neighbor of the environment and society. GPSC is the country's major power service provider that contributes to the push for clean energy and climate change goals, attracts foreign investors in the energy sector, and supports low-carbon businesses and innovation with a promising growth outlook and promotes consumers' access to clean-energy sources.

- **Capturing the Future Sustainability Market**

We've on course to cope with future changes in energy consumption model, support the market transformation trends, customers' needs, and public policies. To elaborate, we connect emerging technology with our products and services in addition to identifying new business opportunities while growing our business models toward consumers, spanning upstream to downstream energy consumption. We've established cooperation in developing products that create value and marketing opportunities for ourselves and business partners to accommodate and adjust ourselves to change in a secure and sustainable way.

- **Being an Innovative Leader**

We value support for research and technology work, since these are key to knowledge-based organizational development, which in turn leads to competitiveness and business growth in line with our corporate mission and vision. We prevent ourselves from disruption by new market players by identifying business strengths and raising work efficiency to help employees work more efficiently and find time to hone skills and competencies of their interest.

- **Employee-focused Organization**

To us, employees are the most valuable resources, an indispensable driver of the corporation toward growth and goals. They do make the difference and foster GPSC's competitive edge, which explains our commitment to human resource (HR) management in line with our corporate strategies.





## 3.2 Mitigation of Impacts on Stakeholders in the Business Value Chain

### 3.2.1 Value Chain

#### Primary Activities

##### 1. Inbound Logistics

Various types of fuel are raw materials for GPSC Group's power generation. The fossil fuel power plants consist of natural gas-fired and coal-fired power plants. As for renewables power plants, they consist of solar plants, refuse-derived fuel (RDF) plant, and hydro power plants located across many provinces in Thailand and overseas. To achieve efficient fuel procurement, we've entered an agreement with PTT Plc on long-term gas supply and delivery in quantity, quality, and price. Medium-term and long-term contracts are also in place for coal supply with numerous domestic and foreign business partners. Further, we've engaged in power purchase agreements (PPAs) to supply power reserves for government agencies and raw-water supply agreements with industrial estates where our power plants lie for consumption in power generation process. As for RDF, the fuel comes from community waste from the Rayong Solid Waste Integrated Disposal Center. The waste is received from various local administrative organizations for separating, upgrading, and production of RDF with suitable properties as well as consistent physical and chemical composition. RDF fuel is then fed to the RDF power plant project.

##### 2. Operations

The principle of plants that use natural gas as a cogeneration fuel (cogeneration power plants) is to convert thermal energy from gas into mechanical energy to drive power generators with the support of other key equipment such as compressors, gas turbines, and generators. As for a combined-cycle power plant, the process is similar to that of the cogeneration power plant, except that the generators are driven by steam produced by steam turbines. Coal-fired power plants run on two types of steam boiler: circulating fluidized bed boiler (CFB) and supercritical pressure boiler. Steam produced from the boilers drives generators. For the photovoltaic system or solar cell, solar power is turned into electricity. Wind farms convert the natural kinetic energy of winds, leveraging differences between air

temperatures to propel wind turbines that are connected to power generators. We've installed wind farms offshore and planned to expand onshore installation next year. As for run-of-river power plants, the volume of natural water flow and the different water levels over and below the dam are channeled toward the turbines connected to the axle shafts of power generators. As for power generation using RDF, such fuel is an energy source for heating to produce steam. The steam produced then drives the steam turbine generation (STG) to generate electricity.

##### 3. Outbound Logistics

GPSC currently produces electricity, steam, industrial water, and chilled water, which require well-prepared and stable distribution systems. A distribution method equipped with a safe protection system has therefore been exclusively designed for each customer. Furthermore, our power plant must lie in an industrial site where products are needed so as to ensure efficient delivery. We sell electricity to industrial customers and the government sector, namely Electricity Generating Authority of Thailand (EGAT), Provincial Electricity Authority (PEA), and Metropolitan Electricity Authority (MEA). As much as 230 kilo-volts, 115 kilo-volts, and 22 kilo-volts of electricity are delivered through transmission lines. As for the steam supply, GPSC provides steam of different pressures and temperatures as demanded by customers. Steam, industrial water, and chilled water are delivered through product pipelines.

##### 4. Marketing and Sales

GPSC produces electricity for sale to government agencies, namely EGAT, PEA, and MEA, through PPAs, which can be classified into independent power producer (IPP), small power producer (SPP) and very small power producer (VSPP). Moreover, we produce electricity, steam, industrial water, and chilled water for sale to industrial customers. For electricity, long-term PPAs are based on the price of electricity sold to PEA as reference prices, whereas the Ft rate varies with the fuel cost. As for steam, industrial water, and chilled water, their prices are dictated by the



energy cost and other production costs. We've also invested in renewables to produce electricity, which is sold under private PPAs.

## 5. Customer Services

GPSC values cordial relations with customers for satisfaction and long-term bonds. Customer relations management (CRM) has been strengthened through various processes, including complaint and communication channels via the website, e-mail, phone calls, and letters. Customer relations activities are also regularly organized. The online Energy Lens Application was launched to keep records of customers and products. Customer services include annual customer satisfaction surveys, from which analyzed data assist in issue management, providing knowledge about the electricity business and supporting sustainability management for customers.

## 6. Support Activities

Besides the four core businesses that GPSC operates in power generation and utilities production, we've expanded investment into innovation, not just to increase revenue but to gain a competitive edge from new business models. The power storage and battery business has been expanded from the existing power generation and sales business,

following research and development (R&D) of lithium-ion battery production using the semi-solid or "G-Cell" manufacturing technology. The G-Cell innovation has been evolving into the energy storage system through batteries, or G-Box, to strengthen power transmission and connection systems in addition to applicability as a standby power storage system for the industrial sector for various applications, notably applications in the small and large electric vehicle industry (mobility application - light duty and heavy duty) such as electric buses, electric boats, electric tuk-tuks, small four-wheeled electric vehicles (EVs), electric motorbikes, and the energy storage system manufacturing industry (stationary application). We are also a leading energy management solution provider by providing installation services for small, distributed generation systems, developing and designing installation of district cooling systems, consulting and conducting energy consumption analysis, and integrating energy storage systems to enhance stability within power management systems. For more details of the business value chain under "Creating Shared Business Value" in the 2023 Sustainability Report, please log on to <https://www.gpscgroup.com/en/downloads/sd-report>





### 3.2.2 Stakeholder Analysis in the Business Value Chain


Recognizing stakeholders' engagement, GPSC believes that cordial relationship built on trust, along with suggestions and recommendations from stakeholders, drives us toward goal attainment and sustainable growth. Equally important is the management of stakeholders which enables GPSC to respond efficiently to their needs, as well as minimizing risk to the business image and cause business disruption, and to create maximum benefit for stakeholders. We keep regular contact with stakeholders to ensure proper understanding of all issues of interest. Stakeholders' opinions are integrated into our decision-making process and business plans. In 2023 a review of stakeholders' participation and engagement was conducted. We've annually identified and prioritized key stakeholder groups relevant to GPSC's operations across the business chain, as well as finding ways and means to respond effectively and appropriately to expectations and issues of stakeholders' concern. The findings will be useful for planning and devising ways to improve stakeholders' participation and engagement. Our stakeholders fall into eight main groups:


1. Shareholders
2. Investors
3. Government agencies and related organizations
4. Employees
5. Suppliers and contractors
6. Partners
7. Customers
8. Communities and society.

Methods of communication and engagement vary according to each group of stakeholders as detailed below:


Stakeholder Group	Engagement Channel	Issue of Interest	Response
 <p><b>1</b></p> <p><b>Shareholders (major and minor shareholders)</b></p>	<ul style="list-style-type: none"> <li>• Annual general meeting</li> <li>• Various communication channels, e.g., website, e-mail, phone calls, letters, social media, and others.</li> <li>• Annual GPSC site visit</li> <li>• Visits to businesses related to GPSC, both within and outside Thailand</li> <li>• Perspective survey of shareholder representatives to gauge their expectations as part of the preparation or improvement of the company's action plan, etc.</li> <li>• Shareholder relations activities</li> <li>• Equal opportunities for all shareholders to join Annual General Meeting with equal voting rights and questioning</li> <li>• Roadshows and various investor relations activities</li> <li>• Annual report (56-1 One Report)</li> </ul>	<ul style="list-style-type: none"> <li>• Good performance with share price and dividends at appropriate level</li> <li>• Constant business growth</li> <li>• Transparency and corporate governance</li> <li>• Risk management</li> <li>• Joint venture and innovation development to raise operation efficiency</li> <li>• Investment in renewable energy</li> <li>• Equal opportunities and rights for all shareholders to join Annual General Meeting</li> <li>• Equal access to information</li> <li>• Study of power business operation model based on real-time pricing and energy trading</li> </ul>	<ul style="list-style-type: none"> <li>• Risk management</li> <li>• Business ethics</li> <li>• Development and investment in renewable energy and battery projects</li> <li>• Innovation management</li> <li>• Operational stability and availability</li> </ul>



Stakeholder Group	Engagement Channel	Issue of Interest	Response
	<ul style="list-style-type: none"> <li>• Opportunities for all shareholders to propose meeting agenda and candidates for directorship in Annual General Meeting</li> </ul>		
 <p><b>2</b></p> <p><b>Investors</b> (Banks, financial institutions/ debentures (bond) holders/ credit rating agencies/ analysts)</p>	<ul style="list-style-type: none"> <li>• Providing financial support and services such as corporate loan / project finance / trade finance / FX / derivative / debentures / common shares / investment banking / occasional financial advice</li> <li>• Organizing a credit review event at least once a year</li> <li>• Annual General Meeting</li> <li>• Quarterly analyst meetings</li> <li>• Organizing occasional Deal Roadshow / Non-Deal Roadshow activities</li> <li>• Occasional reception of feedback by mail and during various IR events</li> <li>• Disclosure of investment information (via Opportunity Day, Roadshows, and various IR activities)</li> <li>• Occasional meetings with executives to update projects and situations</li> <li>• Roadshows, both domestically and internationally, and related activities as planned</li> <li>• Annual GPSC site visit</li> <li>• Other communication channels such as website, e-mail, phone calls, letters, social media, and others.</li> <li>• Perspective survey of expectations of investor representatives as part of the preparation or improvement of the company's action plan</li> </ul>	<ul style="list-style-type: none"> <li>• Good performance with share price and dividends at appropriate level</li> <li>• Constant business growth</li> <li>• Transparency and corporate governance</li> <li>• Business operation with environmental, social, and governance (ESG) management</li> <li>• Joint investment and innovation development that will raise operation efficiency</li> <li>• Disclosure of the company's operating results, covering financial as well as environmental, social, and governance (ESG) aspects</li> <li>• Disclosure of complete information, adequate for business result forecast</li> <li>• Accuracy of IR Materials used for reporting quarterly business results</li> <li>• Financial stability of income and cash flow including financial ratios, debt levels, and solvency</li> <li>• Debt covenant level at 2.5x financial ratios, liquidity, and solvency</li> <li>• Size and growth of entity</li> </ul>	<ul style="list-style-type: none"> <li>• Risk management</li> <li>• Business ethics</li> <li>• Ongoing development and investment in various projects</li> <li>• Innovation management</li> <li>• Operational stability and availability</li> </ul>


Stakeholder Group	Engagement Channel	Issue of Interest	Response
	<ul style="list-style-type: none"> <li>• Answering ESG assessment form</li> <li>• Disclosure of the company's operations through Annual Report (Form 56-1 One Report) / Sustainability Report /Financial Statements</li> </ul>		
 <p><b>3</b></p> <p><b>Government agencies and related organizations (Government agencies / state enterprises / local administrative organizations/ agencies with licensing authority)</b></p>	<ul style="list-style-type: none"> <li>• Operating results submitted to related government agencies at required intervals</li> <li>• Constant participation in government projects and activities</li> <li>• Engaging with committees dealing with issues with which the government requests cooperation</li> <li>• PTT Group's government affairs seminars</li> <li>• Perspective survey on expectations of representatives of government agencies and related organizations as part of the preparation or improvement of the company's action plans</li> <li>• Being a learning site in operations for the government agencies and related organizations</li> <li>• Following up on policies, rules, regulations, and requirements of regulatory / licensing agencies</li> <li>• Making complete operating reports as required by law</li> <li>• Support for the government's policies and activities</li> <li>• Communication channels between the company and government agencies such as website, phone calls, e-mail, letters, social media,</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance with rules, regulations, laws, and good governance policies, including disclosure, submission, and reporting of accurate information</li> <li>• Alignment of investment ratio with the country's energy development policies and plans, including renewable energy</li> <li>• Social and environmental responsibility</li> <li>• Sustainable co-existence with communities</li> <li>• Good safety and environmental management</li> <li>• Collaboration with government agencies on various projects/activities</li> <li>• Formulation of strategies, plans, goals, and actions to address the mitigation of climate change problems that clearly align with those of national and international levels</li> <li>• Being a learning site in both operation and management aspects</li> </ul>	<ul style="list-style-type: none"> <li>• Risk management</li> <li>• Business ethics</li> <li>• Business opportunities</li> <li>• Environmental management, including gas emission control, water and wastewater management, and biodiversity management</li> <li>• Clean energy for the future and climate change response</li> <li>• Sustainable co-existence with communities and social responsibility</li> <li>• Strict compliance with rules and laws, including fee payment requirements</li> </ul>

Stakeholder Group	Engagement Channel	Issue of Interest	Response
	<p>and others.</p> <ul style="list-style-type: none"> <li>• Membership in FTI to raise concerns to government agencies</li> <li>• Membership in trade organizations and the likes involved in power generation business as a channel to raise concerns to government agencies</li> </ul>		
 <p><b>4</b></p> <p><b>Employees (Executives / employees)</b></p>	<ul style="list-style-type: none"> <li>• Annual Employee Engagement Survey</li> <li>• Records of complaints via different channels</li> <li>• Staff engagement through CEO Town Hall Meetings</li> <li>• Internal communication through various channels</li> <li>• Perspective survey on expectations of employee representatives as part of the preparation or improvement of the company's action plan</li> <li>• Welfare committee in the workplace communication channels between the company and employees such as website, phone calls, letters, e-mail, social media, and others.</li> </ul>	<ul style="list-style-type: none"> <li>• Employees' competency development in line with the company's business strategies and directions</li> <li>• Employee well-being, occupational health, and safety at work</li> <li>• Good remuneration and welfare as well as career opportunities and advancement</li> <li>• Fair performance assessment</li> <li>• Income stability</li> <li>• Equal treatment</li> <li>• Leadership development</li> <li>• Talent retention</li> <li>• Fair and non-discriminatory</li> </ul>	<ul style="list-style-type: none"> <li>• HR development through training, diversity enhancement, equality, and staff well-being, both physically and mentally</li> <li>• Human rights</li> <li>• Occupational health and safety at work</li> </ul>



Stakeholder Group	Engagement Channel	Issue of Interest	Response
 <p><b>5</b></p> <p><b>Suppliers and contractors (contractors / delivery agents)</b></p>	<ul style="list-style-type: none"> <li>• Annual Supplier Day</li> <li>• Perspective survey on expectations of representatives of suppliers and contractors as part of the preparation or improvement of the company's action plan</li> <li>• Annual supplier assessment with feedback provided to suppliers</li> <li>• Survey of suppliers' and contractors' satisfaction</li> <li>• Complaint and communication channels between the company and suppliers and contractors, via website, phone calls, letters, e-mail, social media, and others.</li> <li>• Supplier relations activities to encourage participation, such as CSR activities.</li> </ul>	<p>competition</p> <ul style="list-style-type: none"> <li>• Relationships and cooperation to grow together</li> <li>• Efficient, transparent, and accountable policies and procurement system with due regard especially for suppliers' sustainability management</li> <li>• Compliance with the conditions set forth without taking advantage of suppliers and contractors</li> <li>• Emphasis on occupational health and safety of employees</li> <li>• Joint business development using innovative, environment-friendly technologies and clean energy in the future for sustainable growth</li> <li>• Supplier development (including contractors/delivery agents) to mutually achieve best practices and sustainable growth</li> <li>• Income stability</li> <li>• Values jointly created along</li> </ul>	<ul style="list-style-type: none"> <li>• Risk management</li> <li>• Corporate governance</li> <li>• Supply chain management</li> <li>• Transparent and auditable procurement system</li> </ul>

Stakeholder Group	Engagement Channel	Issue of Interest	Response
 <p><b>6</b></p> <p><b>Business Partners</b></p>	<ul style="list-style-type: none"> <li>• Memorandum of understanding of joint business operations</li> <li>• Invitations to company activities involving each partner</li> <li>• Activities co-organized with partners</li> <li>• Perspective survey on expectations of partner representatives as part of the preparation or improvement of the company's action plan</li> <li>• Communication channels through various media such as meetings, business negotiations, website, e-mail, phone calls, social media, and others.</li> </ul>	<p>the value chain</p> <ul style="list-style-type: none"> <li>• Building trust, good relationships, and cooperation to achieve higher potential and efficiency that benefit long-term business deals</li> <li>• Higher competitive edge with higher and sustainable business value</li> <li>• Business deals based on fairness joint innovation and creation of businesses that create values for new business opportunities, as well as joint human resource development for the power generation business</li> <li>• Compliance with the terms</li> </ul>	<ul style="list-style-type: none"> <li>• Business opportunities</li> <li>• Innovation management</li> <li>• Co-creation of business value</li> </ul>
 <p><b>7</b></p> <p><b>Customers (long-term and short-term customers)</b></p>	<ul style="list-style-type: none"> <li>• Annual Customer Satisfaction &amp; Engagement Survey</li> <li>• Monthly, quarterly, and annual customer relations activities, such as annual golf competition, sports, seminars.</li> <li>• Monthly or quarterly meetings to follow up and report demand plans, readiness plans, and maintenance plans, as well as monitoring problem solving progress</li> <li>• Energy Lens Application to facilitate real-time monitoring of energy and steam consumption with record tracking, as well as other functions, including monthly expense reports and communication manual</li> <li>• Perspective survey on expectations of the customer representatives as part of the</li> </ul>	<p>of the PPA, such as power supply according to the terms in the PPA, delivery of documents according to the schedule, delivery of quality products and services in accordance with the PPA, power plant control according to the terms of the contract and requirements.</p> <ul style="list-style-type: none"> <li>• Delivery of quality products and services meeting agreed conditions at fair prices in compliance with the regulations of ERC</li> <li>• Reliable power production and distribution system</li> <li>• Contractual availability of power distribution</li> <li>• Prompt responses to customer needs, supported by capable problem-solving team</li> <li>• Customer communication</li> </ul>	<ul style="list-style-type: none"> <li>• Customer relations management (CRM)</li> <li>• Maintaining stability and production availability</li> </ul>

Stakeholder Group	Engagement Channel	Issue of Interest	Response
	<p>preparation or improvement of the company's action plan</p> <ul style="list-style-type: none"> <li>Complaint and communication channels with the customers via website, e-mail, phone calls, letters, social media, and others.</li> </ul>	<p>channels that are convenient and fast with easy access</p> <ul style="list-style-type: none"> <li>Technology development for environmental impact reduction</li> <li>Joint search for new business opportunities</li> <li>Technical support team that is knowledgeable and capable of solving problems in a timely manner.</li> <li>Customers' personal data protection equipped with cyber defense system</li> <li>Equal treatment for all customers under applicable laws</li> <li>Attentive social, environmental,</li> </ul>	
 <p><b>8</b></p> <p><b>Communities and society (communities surrounding new project sites/ communities surrounding power plants/ local administrative organizations / NGOs / local associations / media (both central and local))</b></p>	<ul style="list-style-type: none"> <li>Organizing a tripartite committee meeting (government agencies, private companies, local communities)</li> <li>Attending monthly meetings with relevant provinces and local authorities to publicize the company's news and information, including listening to opinions from various agencies about the company</li> <li>Supporting activities of provincial/local administrative organizations</li> <li>Organizing meetings to clarify the operation of the power plants, seminars, and visits to the power plants, as well as publicizing the projects through online communication system</li> <li>Community satisfaction survey by an external</li> </ul>	<p>and safety impact reduction management arising from the company's operations</p> <ul style="list-style-type: none"> <li>Business operation with concern for safety and the environment</li> <li>Create local people's understanding of the company's business operations and participation from the community with a clear plan</li> <li>Job creation, income generation, and expense reduction for community people</li> <li>Support for activities with community participation on a regular basis</li> <li>Application of the company's knowledge, skills, and expertise to develop the communities around the power plant</li> <li>Optimum use of resources</li> <li>Concern for people's water</li> </ul>	<ul style="list-style-type: none"> <li>Risk management</li> <li>Business ethics</li> <li>Water and wastewater management</li> <li>Sustainable co-existence with communities and social responsibility</li> </ul>

Stakeholder Group	Engagement Channel	Issue of Interest	Response
	<p>agency twice a year</p> <ul style="list-style-type: none"> <li>Regular community relations activities/visits to communities and people with possible direct and indirect impacts, as well as promoting and supporting various community activities</li> <li>Power plant visits by local community members (Open House)</li> <li>Public hearings to solicit people's opinions on Environmental Impact Assessment (EIA) reports and the Code of Practice (CoP)</li> <li>Perspective survey on expectations of representatives of communities and the society as part of the preparation or improvement of the company's action plan</li> <li>Various channels for communication and complaints via website, e-mail, phone calls, letters, social media, local media, and others. Organizing media relations activities</li> <li>Invitation to the media to participate in the company's activities</li> </ul>	<p>consumption</p> <ul style="list-style-type: none"> <li>Promoting and developing the quality of life of the community for sustainable self-reliance.</li> <li>Provision of opportunities and promoting growth of the local economy in the area of operation through employment and use of local raw materials</li> </ul>	

## 3.3 Managing the Environmental Aspect of Sustainability

### 3.3.1 Environmental Policy and Approach

Natural resources and the environment represent crucial elements to power generation processes; absence of proper control may cause pollution that harms the environment and society. GPSC therefore focuses on monitoring and controlling pollution at sources along with efficient resource consumption based on the Circular Economy principle to create shared values for the environment, society, and governance (economy) to fulfill its mission of conducting business with socio-environmental responsibility. The established policies and guidelines for environmental responsibility are as follows.

#### Quality, Security, Safety, Occupational Health, and Environment Policy

GPSC recognizes that generation of power and steam may affect the hygiene of employees unless appropriate control measures are in place. We've therefore formalized the Quality, Security, Safety, Occupational Health, and Environment Policy. Further, we're committed to effective, continuous improvement for excellence so that GPSC may be recognized by stakeholders and consequently bring sustainability to the power and utility business.

In 2023 we applied the policy to all departments throughout the chain. To elaborate, all executives must provide role models and be responsible for ensuring that performance outcomes follow the direction of corporate design. All employees must acknowledge, understand, and continually conform to this policy by continually following all procedures. This includes planning, design, and execution to the end of operations. The President & CEO has reviewed and approved the policy for all employees' acknowledgment, understanding, and conformance.

For more details of the Quality, Security, Safety, Occupational Health, and Environment Policy, please log on to <https://www.gpscgroup.com/th/downloads/policy/gpsc-group-quality-security-safety-health-and-environment-policy>

#### Climate Change Policy

GPSC has established a Climate Change Policy for all units

across its supply chain to apply to their planning, design, execution, to the end of operations.

For details of this policy, please log on to <https://www.gpscgroup.com/th/sustainability/environmental/clean-energy-future-and-climate-resilience>

#### Commitment to Biodiversity Management

GPSC has stipulated management to reduce impacts on biodiversity in its Quality, Security, Safety, Occupational Health, and Environment Policy, which reflects commitment to biodiversity protection and management. Moreover, GPSC has declared its intent of biodiversity management as a principle of basic operation in a uniform direction for the entire Group. We aim to conduct environmental impact assessment of biodiversity in all new projects and expansion projects to ensure no-net-loss biodiversity.

For additional information on the commitment to biodiversity management, please refer to <https://www.gpscgroup.com/storage/download/sustainability/environmental/biodiversity/biodiversity-procedures-th.pdf>

#### Approach for Greenhouse Gas Management

GPSC strives to become a low-carbon organization to lower GHG emissions by up to 35% from the base year (2020) by 2030. We comply with eco-efficiency in the use of efficient, sustainable resources to cut energy consumption and GHG emissions from all activities through efficiency improvement of production processes with efficient innovation and technology, as well as through projects on continuous reduction of GHG emissions. GPSC plans to distribute more investment in renewables by setting a goal to increase the share of renewable energy by 50% by 2030. We plan to be ready for internal carbon pricing (ICP) in the consideration and decision for investment in conventional electricity generation in the form of shadow prices. To this end, GPSC appointed a taskforce and a sub-taskforce to support and drive climate change activities so that its work on climate change strategies may become efficient and achieve our GHG reduction goals.



We seek new business opportunities and innovation to support low-carbon operations. We support R&D of batteries and energy storage systems to ease the changing mode of future energy consumption. Moreover, we encourage awareness and participation of employees in the reduction of GHG emissions such as employees' participation in assessment of risks and opportunities in climate change and a campaign for reduced consumption of energy and resources within the organization to ensure our good culture.

For additional information on Greenhouse Gas Management, please consult <https://www.gpscgroup.com/th/sustainability/environmental/clean-energy-towards-Net-Zero>

## Environmental Management Approach

### Air Pollution

GPSC values investment in technology to improve process efficiency. We've developed a plan to continuously reduce air pollutants, such as oxides of nitrogen (NOx), sulfur oxides (SOx), and total suspended particles (TSPs). We focus on strict control, surveillance, and monitoring of air pollutant quantities from sources in line with the control measure recommendations described in environmental impact assessment (EIA) reports and environmental and health impact assessment (EHIA) reports with strict actions as follows.

- Used low-nitrogen oxide burners to reduce nitrogen oxide emission from both combustion chambers of gas turbines and pulverized coal-fired boilers
- At our coal-fired power plants, quality bituminous coal with less than 1% sulfur content is used. In addition, the limestone spraying technology is used in the circulating fluidized bed (CFB), and a seawater flue gas desulfurization system (FGD) is installed with pulverized coal-fired boilers
- Installed TSPs with bag filters and electrostatic precipitation (ESP) together with elimination systems for impurities such as mercury
- Installed continuous emission monitoring systems (CEMs) at chimneys to continuously monitor air emissions. Real-time air quality data are displayed in front of power plants.

- Conducted air quality monitoring under measures to prevent and mitigate environmental impacts every six months by a central agency registered with applicable government agencies
- Created a protection strip of trees around GPSC's sites to confine the dispersion of air pollutants to the external environment.

### Waste and Scrap

GPSC is committed to minimizing process waste because such commitment denotes production efficiency, mitigation of environmental impacts, and reduced waste treatment costs. We therefore adhere to the principle of 3Rs (Reduce, Reuse, and Recycle) by minimizing waste at sources. When waste is generated, we'll first reuse or recycle it. This results in so much continuous waste reduction to landfill that GPSC had achieved the goal of zero-waste disposal to landfill. At present, waste generated from production, maintenance, and other activities is managed effectively in compliance with international standards to prevent potential impacts on the environment and surrounding communities.

In addition, we regularly enforce, monitor, and audit waste management by all power plants, starting from the collection, storage, and transport of waste, including solar cells from its operations, treatment, to disposal to ensure compliance with procedures and industrial waste management regulations to minimize environmental impacts. We've also raised environmental awareness among contractors, partners, and customers by implementing the "Industrial Waste Management Process" at all power plants. Contractors must hold valid licenses from applicable authorities before the transport of all waste and scrap from the power plants. GPSC implements procedures to evaluate and approve disposal facilities for toxic and non-toxic waste each time before it leaves power plants as well as complying with the Factory Act and the Hazardous Substance Act enforced by the Ministry of Industry. In addition, through regular hazardous waste manifest audit of waste disposal contractors, GPSC ensures that all waste, including scrap, solar cells, and hazardous waste from production processes, is accounted for without unauthorized treatment and disposal, as well as the preparation of Form Sor Kor 3,

The annual report summarizing the amount of waste that GPSC ships and disposes of every year to confirm compliance with applicable regulations.

## Water Management

### • Water Management outside GPSC

GPSC manages external water by actively participating in the PTT Group Water Management Task Force, which holds monthly meetings. Each meeting addresses water situation reports from the survey and analysis of the water situation model, consequently formulating a water management plan, guidelines for monitoring water management targets, risk reduction, and assessment of impacts of water use in all operating areas. We finally communicate to responsible business units for efficient implementation of plans.

The PTT Group Water Management Task Force also participates in the Water Management Working Group of the Eastern Region of Rayong. The working group, made up of governmental agencies, East Water Plc, Vong Siam Construction Co., Ltd. (VSK), and representatives of the private sector, monitors, assesses, analyzes the water situation and maps out measures to promptly reduce risks and impacts.

GPSC also leverages the Aqueduct Water Risk Atlas of the World Resources Institute (WRI) to identify water stress areas and determine guidelines for the management of water sources outside all operating areas.

### • Water Management within GPSC

GPSC clearly expresses its intention for internal water management to maximize the benefit of water usage with the community. By following the 3Rs, it efficiently manages internal water usage by reducing usage in power generation, recycling water from the cooling system for further use with wastewater from boilers, and reusing condensed water in steam processes. In addition, we continue to regularly monitor the quality of effluents to ensure that the water that leaves our operation is safe for the communities and complies with legal standards.

Since GPSC draws no water directly from natural sources, there is no impact from its operations. However, we continue monitoring water in all surrounding areas. We also continue monitoring water quality before discharging it into the industrial estate's central water treatment system and natural waterways to ensure that the quality of effluents meets the standards required by law and local authorities. Based on the data, it was concluded that the quality of our effluents was better than applicable standards at every facility. As for each solar power plant, water is used to clean dust from solar panels. The used and non-contaminated water is discharged on the ground.

For further details on environmental management, please log on to <https://www.gpscgroup.com/th/sustainability/environmental/environmental-management>

## Biodiversity Management

Here are our guidelines for biodiversity management:

- Committed to safeguarding and managing biodiversity by prohibiting operations in the areas of IUCN Category I-IV
- Committed to no-net-loss of biodiversity under a manageable scope
- Conduct a study and an analysis of environmental impacts from projects, domestic and international
- Conduct a study on biodiversity for international projects prudently by formulating an action plan, management plan, and environment monitoring
- Measures are issued to prevent and lower environmental impacts and to monitor and audit for environmental impacts
- Provide a manual on GPSC's biodiversity and ecosystem service management procedure under the "mitigation hierarchy" principle (avoid, minimize, restore, and offset) to avoid serious impacts on biodiversity.

For further details on Biodiversity, please log on to <https://www.gpscgroup.com/th/sustainability/environmental/biodiversity>

### 3.3.2 Environmental Performance

#### Energy Management

In 2023 GPSC implemented an efficient energy management system, cutting power consumption.

#### Air Quality

GPSC continues improving process efficiency to trim air emissions resulting from the use of natural gas for power generation. In 2023 the emission of oxides of nitrogen (NOX) amounted to 18,600.74 tons.

#### Water Management

In 2023 we consumed 24.6 million cubic meters in processes. However, no water was drawn directly from public water sources, hence no sources of water were affected by our operations. In addition, process water was recycled and reused, totaling 7,403.15 cubic meters, under efficient wastewater management.

#### Waste and Scrap Management

In 2023 GPSC achieved its goal of reducing hazardous waste landfill to zero.

#### Greenhouse Gas Management

Climate change is a current global problem requiring immediate action. One cause is the activities using electricity, which constitutes a major source of GHG emissions. We're aware of this and are committed to lessening the impact through strategies to reduce GHG emissions and a goal to reduce the intensity of GHG emissions by no less than 35% from the 2020 base year by 2030. We're also seeking opportunities to evolve innovation to support the production of clean energy and pursue a low-carbon society to cope with and adjust to climate change.

We focus on efficient resource utilization and sustainability under the eco-efficiency economy through improving the efficiency of power and steam production. In 2023 we implemented projects recommended by Thailand Greenhouse Gas Management Organization (Public Organization) (TGO) to reduce emissions of GHG, such as Carbon Footprint of Production (CFP), Low Emission Support Scheme (LESS), and Thailand Voluntary Emission Reduction Program (T-VER).

For more information on climate change management, please log on to

<https://www.gpscgroup.com/th/sustainability/environmental/clean-energy-towards-Net-Zero>

	<b>Organization</b> In 2023 GPSC added registration with TGO for Carbon Footprint of Production (CFP) for CUP 1-3 in addition to CUP 4, Glow SPP 2, Glow SPP 3, GHECO-One, Glow Energy Phase 1 and 2, and Glow SPP 11. The products are electricity, steam, and demineralized water.
	<b>LESS</b> In 2023 GPSC garnered a certificate of honor from TGO under the Low Emission Support Scheme (LESS) category for CUP 1-4, Sriracha (SRC), Glow Energy Phase 2, Glow SPP 2 Phase 4, Glow SPP 2, Glow SPP 3, GHECO-One, and Glow IPP. This represented a total GHG emission reduction of 51,292.54 tons of carbon dioxide equivalent.
	<b>T-VER</b> In 2023 GPSC enrolled in the Thailand Voluntary Emission Reduction Program (T-VER) by developing a solar farm project in Wangchan Valley and an RFD project in Rayong, which are expected to trim GHG emissions by a total of 20,993 tons of carbon dioxide equivalent.

## 3.4 Managing the Social Aspect of Sustainability

### 3.4.1 Policies and Social Guidelines

#### Human Rights Policy and Guidelines

GPSC is committed to the management of human rights by formalizing its Human Rights Policy under the principles of the UN Guiding Principles on Business and Human Rights (UNGP) to avoid, prevent, and mitigate human rights risks and violations across the value chain. We relentlessly implement human rights due diligence processes, which include identification of human rights issues and affected groups, and the formulation of preventive and corrective plans while introducing measures to mitigate damage with outcome monitoring to ensure that our operations are founded on strict protection of human rights. We've developed and declared throughout the organization the Human Rights Policy under the provisions of Thai and international laws as well as various criteria of the United Nations Global Compact (UNGC) and the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work for managerial staff and employees to strictly follow. The Human Rights Policy embraces all sectors.

For more details on Human Rights Policy, please log on to <https://www.gpscgroup.com/th/downloads/policy/human-rights-policy>.

#### Human Resource Management Policy

We value employees as an essential driver of business growth toward goals. Our human resource management is therefore aligned with business strategies. Our human resource policy sets out a direction for efficient and fair human resource management, consistent with the strategies and goals of GPSC under the ever-changing global economy. The policy completely covers the three aspects of ESG and creates staff motivation and their bond with the organization. The policy aims to bring about mutual success and sustainable progress for both employees and the organization. To this end, the 2023 target for the succession plan has been completely established (100%).

#### Strategy for Success

1. Succession Plan - drawn up for executive posts to ensure business continuity
2. SPARK Accelerator program - intended for employees with high potential to support business growth
3. ACT SPIRIT activity - organized to enhance staff unity and bond with the organization
4. Employer Branding - initiated to foster corporate image among external parties.

For more details on Human Resource Management Policy, please log on to <https://www.gpscgroup.com/th/sustainability/social/Employee-Focused-Organization>.

#### Corporate Social Responsibility (CSR) Policy and Strategy

We strive to become the leader of PTT Group's power business innovation with a clear intention to grow business with social responsibility for internal and external stakeholders. This includes responsibility for community and environmental sustainability by conducting business in peaceful harmony with communities and society as well as fostering appropriate stakeholder engagement processes. We've established a policy on social and environmental responsibility to be observed.

- Conduct business with transparency, fairness, and auditability with a focus on business growth along with improvement of the quality of life for employees, communities, society, and the environment while meeting stakeholders' interests in accordance with the vision and mission set out by GPSC
- Fully exploit natural resources with minimal impacts on stakeholders, society, community, and the environment
- Be committed to continuous social and environmental responsibility along with all stakeholders to jointly strengthen social and environmental sustainability
- Encourage and enable stakeholders to participate in projects or activities for society and the environment by leveraging GPSC's strength and resources to achieve goals and objectives efficiently

- Communicate and make projects or activities for society and the environment known to community members.

We've executed assorted social and community development programs under the sustainability framework mapped out in line with business strategy and direction. The sustainability framework features power accessibility, quality of life, natural resources and environment, and sustainable innovation. Our strategy on social responsibility rests on three important principles:

1. It is an activity that relates to organizational missions and operations.
2. It harnesses GPSC's expertise as well as core skills and competencies to transfer knowledge and extend it to support community development.
3. It recognizes the needs and expectations of stakeholders, especially those living around the neighborhood of our operations.

### 3.4.2 Social Performance

#### Human Rights Management

Valuing human rights, GPSC promotes its mastery among all executives and employees to identify, prevent, and mitigate the impacts of human rights risks in our operations throughout the value chain. The human rights risk assessment encompasses activities at the national level, industrial level, and operational level in areas where GPSC Group operates. The assessment-featuring identification of applicable human rights issues and possible impacts on vulnerable groups such as children, ethnic groups, foreign workers-ranges from national, operational, to individual levels. Our human rights risk assessment is based on two factors, potential and consequential, covering labor rights, community rights, supply chains, security and safety, environment, and consumer rights. In 2023 there was no complaint or malpractice filed regarding human rights laws and violations in any area.

For more details on Human Rights Policy, please log on to <https://www.gpscgroup.com/th/sustainability/social/human-rights>.

## Human Resource Management

### 1. Workforce Planning

In 2023 GPSC managed a strategic manpower planning and improved the organizational structure together with operating processes resulting from mergers and acquisitions to support rapid growth. We improved our personnel selection process to ensure alignment with the business expansion plan with a 100% succession plan mapped out for key positions.

### 2. Employee Development

We've developed an employee development program for all job positions to support business growth, both domestically and internationally. Plans for new business development were also drawn up to pursue the vision of becoming "the global leading innovative and sustainable power company".

### 3. Corporate Culture and Employee Engagement

We focus on strengthening employee engagement through various activities to enhance employee awareness of organizational values, leading to a corporate culture that shapes a collective behavior for efficient collaboration. In 2023 the staff engagement level was 61%.

### 4. Diversity and Equal Opportunity

With a workforce of diverse races, genders, and ages, we've been able to meet the different needs of stakeholders and respond constructively to business changes. Requirements set for staff recruitment and human resource development provide employees equal opportunity for their career growth. In 2023 GPSC Group had 30.52% female executives.

### 5. Employee Wellbeing

Our welfare board is the venue where elected employee representatives can express their views equally. Currently, there are 25 employee representatives on this board.

For more details on the achievement of Human Resource Management, please log on to <https://www.gpscgroup.com/th/sustainability/social/Employee-Focused-Organization>.



## Safety, Occupational Health, and Work Environment

We continuously develop and improve the efficiency of safety operations to reduce chances of illness, injury, or fatality and take proper care of the quality of life for employees and contractors by the following key actions:

- Compliance with applicable laws that govern occupational health and safety
- Occupational health and safety supervision
- Process safety management
- Occupational health risk assessment and preventive process
- Personal safety
- Occupational health and safety training
- GPSC Web-accident reporting program
- Employees' health and occupational health promotion
- Promotion of a safety-oriented corporate culture.

In 2023, four contractor employees sustained work injuries (Medical Treatment Cases). For details, please see Hygiene and Workplace Safety.

For more details on Safety, Occupational Health, and Work Environment, please log on to <https://www.gpscgroup.com/th/sustainability/social/occupational-health-and-safety>.

## Corporate Social Responsibility (CSR)

We've established a long-term CSR goal (2021-2025) to achieve sustainable co-existence with the community as follows:

- Evaluation of social return on investment (SROI) must cover ten activities a year, with SROI > 1.05 as a target.
- An increase of 1% in every community satisfaction survey. The satisfaction rate is to be maintained at 80% or no lower than the average rate of peer companies.
- At least 1,000 tons of carbon dioxide equivalent is to be reduced per year by 2025.
- Communities should be able to access 1,000 kilowatts of electricity produced from renewables by 2025.

In 2023 GPSC evaluated 10 activities, the SROI of which ranged from 1.22 – 8.63 include:

	Project	Strategy
1	EV One-Stop Service	All aspects
2	SE Solar Energy (phase 1)	Access to energy
3	Khon Me Fai Project	Access to energy
4	Installation of solar power system at Mab Yang Phon Community Hospital	Access to energy
5	Solarman Project (Class 1-2)	Quality of life
6	Nuan La-or Bamboo Mushroom Serum	Quality of life
7	Smart Farming Project, Baan Huay Khab (year 3)	Quality of life
8	Smart Farming Project, Wang Chan (year 2)	Quality of life
9	Huay Khab Smart Community Project	Quality of life
10	ZWV Project: Baan Phai Waste Management Center	Quality of life



## Goals and achievements of CSR and sustainable co-existence with communities in 2023

SROI of at least 10 activities per year, with  
**SROI > 1.05**



**Target**

at least 10 activities

2023



**Result**

10 activities SROI = 1.22 - 8.63

2023



**Goal**

10 activities SROI > 1.05

2024

Community satisfaction rising  
**by 1%** with every biennial survey



**Target**

≥ 75%

2023



**Result**

82.74%

2023



**Goal**

78.78%

2024

**GHG reduction** of at least 1,000 tons of CO<sub>2</sub> equivalent per year (tCO<sub>2</sub>e/year)



**Target**

≥1,000 tCO<sub>2</sub>e/year by 2025

2023



**Result**

695.62 tCO<sub>2</sub>e/year

2023



**Goal**

≥1,000 tCO<sub>2</sub>e/year by 2025

2024

**Community able** to access 1,000 kW of electricity produced from renewables by 2025



**Target**

1,000 kW by 2025

2023



**Result**

515.33 kW

2023



**Goal**

1,000 kW by 2025

2024

Our overall performance has proved remarkably successful against the defined targets. Yet, we remain committed to upgrading CSR performance further by setting even more challenging targets in support of our vision to become a global leading innovative and sustainable power company.

In addition to these four targets, we recognize the need for CSR performance evaluation in a concrete manner, which is briefly shown in the following KPI terms.

### Summary of CSR performance in 2023

#### Economy



**Community posting higher income by 2.53 million baht/year**

Results of Smart Farming, Baan Phai Waste Management Learning Center, and waste purchasing projects, as well as expansion of YSI Project

**Community having lower spending by 800,000 baht/year**

Results of Light for a Better Life Project

#### Society and Community



**Stakeholders > 100,000 persons**  
(direct stakeholders > 20,000 persons)

Direct and indirect stakeholders

**SROI** SOCIAL RETURN ON INVESTMENT

10 activities

**1.22 - 8.63**

Target to evaluate 10 activities per year with SROI > 1.05

#### Environment



**GHG emissions down by 695.62 t/CO<sub>2</sub> eq**

Combined results of LBL, reforestation, and Zero Waste projects

\*Remarks: Carbon capture in the reforestation project is based on the rate of 0.95 tons CO<sub>2</sub>/rai/year captured by slow-growth native plants

#### Employee engagement



**Volunteer Staff = 320 persons**

Accumulated volunteer time = 4,181.5 hours

#### Corporate image



**PR Value = 26.88 million baht**

Data from January to December 2023 (only for CSR projects)



## GPSC Baan Phai Community Waste Management Summarized results from January to December 2023

1. Total visitors	5,022 people
2. Reduced garbage resulting from garbage sale	552.35 kg
3. Reduced garbage under the garbage bank project	6,285 kg
4. Income earned from garbage sale	233,439 baht
5. Income earned from speaker honoraria	33,638 baht
6. Income earned from study trips and exhibition booths	507.969 baht

**Total income 775,046 baht**

Increased by 84.25% from the same period in 2022

**10.68 tCO<sub>2</sub>eq\* was reduced from the Waste Bank Project**

\*based on TGO's calculation table called LESS





## Purchase of High-Calorific Waste from Community Project

Four communities currently participating (January – September 2023)

1. Recyclable Waste Separation Center, Chak Look Ya Community	3,130 kg
2. Waste Bank, Khao Phai Community	1,170 kg
3. Environment Bank, Noen Phayom Community	1,130 kg
4. Baan Phai Community Waste Management Learning Center	50 kg
<b>Total</b>	<b>5,460 kg</b>
<b>GHG reduction equivalent</b>	<b>2.38 tCO<sub>2</sub> eq</b>
<b>Reforestation equivalent</b>	<b>329 trees</b>



## GPSC RDF WASTE TO ENERGY LEARNING CENTER



Visitors 9,473 people  
(January - December 2023)



### 3.4.3 Projects and Activities in 2023

Implementation of our CSR activities is divided into Community Relations and Corporate CSR. In 2023, CSR activities were carried out in both areas simultaneously, embracing all four aspects defined under the CSR Strategic Plan.

#### 1. Community Relations

Most of our CSR work was done in conjunction with PTT Group in Rayong and Community Partnership Association, while GPSC conducted some activities alone to preserve our image and relations with communities around our operating areas. Our CSR activities fall into four aspects, described below.

##### Education

One finding from the 2023 Community Satisfaction Survey indicated that a well-known and highly appreciated CSR activity is the scholarship program. This undergraduate scholarship program has been offered for 16 consecutive years. Three scholarships are granted annually to eligible Mathayom 6 (Grade 12) students who live in Rayong and Chon Buri. Each scholarship of Baht 400,000 per student is for public university tuition, education-related expenses, and monthly allowances covering all four years of education. We also offer GPSC RDF Brand Ambassador Scholarships of Baht 90,000 each to vocational students residing around the RDF power plant, enabling them to complete their three-year curriculum.

Further, we run another scholarship program for children in 38 communities in Map Ta Phut Municipality and 10 fishing groups around our plants. Grants under this program have been continued for 15 consecutive years since 2007 to provide academic opportunities to exemplary needy youths. This program eases the burdens of parents while inspiring children with pride in themselves.



##### Quality of Life

We've implemented projects to promote career advancement and employment opportunities for community members and support local community products and community enterprises. In 2023 our major activities in this area included

- Giving support to the development of Phu Lam Yai Community Enterprise to make processed agricultural products, resulting in the longan leaf tea novelty. The project was run in collaboration with the Faculty of Business Administration, Thammasat University, to enhance knowledge and raise community income.
- Acting as a mentor to emergency drills arranged for Huay Pong Nai 1 and Nong Bua Daeng communities to review and improve their emergency response plans
- Mobile medical unit project around the public areas of the community.
- Launching a mobile clinic in the community's public areas launching the Digital Marketing Model Project in collaboration with the Faculty of Business Administration of King Mongkut University of Technology North Bangkok (Rayong Campus) to encourage university students to help community enterprises develop an online market in a bid to open up more marketing channels for their local products.



## Environment

### • Reforestation, Check Dam (Weir), and Aquatic Species Release Project

GPSC values its business along with mitigating challenges from climate change by increasing green space and preserving the environment as well as ecosystems to increase biodiversity. Key ongoing activities include a reforestation project, a check dam project, and an aquatic species release project. We've engaged in a reforestation project since 2013 with 65,450 trees already planted. We also signed a memorandum of understanding with related government agencies and communities to continue our stewardship for five years.

Apart from reforestation activities, we've implemented a project to build check dams to maintain moisture in the forest, thus reducing soil erosion as well as providing a habitat for aquatic and small wildlife. Since 2015, 167 dams have been built. We remain committed to building them to restore a fertile ecosystem.



We've also been working with network partners on a project on releasing aquatic animals for 21 consecutive years, striving to preserve the marine environment to multiply the number of aquatic lives, keep a balance of marine and coastal ecosystems, and grow income for fishermen. Apart from these three ongoing main projects, our environmental activities in 2023 included

- A project on the upkeep of 34 rai of green areas in community areas
- A project operated with a group of small fishing boats, consisting of Sung Kaw artificial-reef making, marine animal cage-making, and a serrated mud crab nursery. The project yielded livelihoods while enriching fishery resources and contributing to sustainable fishery livelihoods.
- A project to promote International Coastal Conservation Day participated by volunteer staff to collect beach waste.





## Environmental Conservation Projects



**Khao Huay Mahad Reforestation (plot 1)**  
**3,450 trees planted**



**Khao Huai Mahad Reforestation (plot 2)**  
**2,700 trees planted**



**Klong Phla Reforestation**  
**3,000 trees planted**



**Check Dam Construction at Baan Phu Don - Huay Mahad and Baan Noen Kraprok Bon Community Forest**  
**167 dams**





**Khao Huai Mahad Reforestation (plot 3)**  
1,700 trees planted



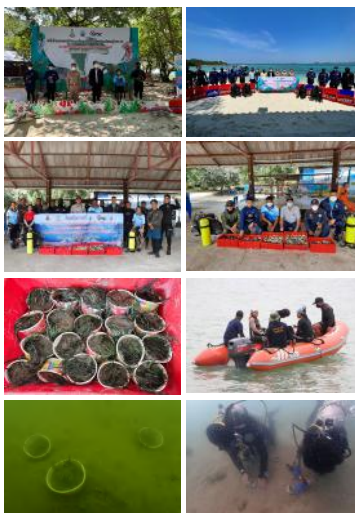
**Khao Jom Hae Reforestation**  
2,600 trees planted



**Baan Maab Chan Reforestation**  
6,000 trees planted



**Reforestation in Loei (230 rai)**  
46,000 trees planted



**Seagrass Planting at Naphatharaphirom Beach (EOD) and Seagrass Planting at Ko Kham**  
10,000 trees planted

#### Remarks:

- Reforestation project (2013-2023): 65,450 trees planted on 334 rai total
- Check dam construction project (2015-2023): 167 dams constructed
- Seagrass planting project (2021-2023): 10,000 trees planted on six rai



## Public Participation

Over time, GPSC has invited the public and government agencies to participate in monitoring operations through various channels and committees, including a tripartite committee responsible for the protection, mitigation, and monitoring of environmental impacts, a working group for monitoring our implementation of environmental measures, a working group to visit and audit industrial plants in Map Ta Phut Industrial Estate (White Flag - Green Star), an EIA monitoring committee in Map Ta Phut Industrial Estate, evaluation of eco-factories, as well as an open forum of public hearing based on transparency and auditability to obtain suggestions for operation improvement.

Moreover, we regularly arranged visits and engaged in dialogues with surrounding communities to maintain good relations with them under the “Khang Ba Khang Lai (Side by Side)” project. Communities could regularly keep up with what we’ve been doing through a CSR summary report handed over to them. In 2023 we arranged visits and held talks at 10 communities.



## 2. Corporate CSR

Our implementation of corporate CSR primarily aims to enhance the overall corporate image. Our activities included joint projects with PTT Group or partners and GPSC’s own projects in local areas and others. The focus is on projects aligning with the corporate vision, core missions, or expertise.

To carry out CSR activities, GPSC pays attention to four main areas:

1. Power accessibility
2. Quality of life
3. Natural resources and environment
4. Sustainable innovation.

### Power Accessibility

#### • **Light for a Better Life (LBL) Project (Electricity for community’s and society’s good quality of life)**

Light for a Better Life is a community support project that deploys the expertise and specialized skills of GPSC and its employees to take care of the community’s electrical system. The efforts reflected PTT Group’s leadership in power innovation and smart energy. In this project, employees leveraged their expertise to take care of people in community, society, and the country (People of the Planet) in the aspects of safety, saving, energy security, and socio-economy.

1. **Safety:** The project upgrades and repairs electrical systems for public places like local schools, temples, and healthcare facilities to minimize risks to lives and properties resulting from fires and short-circuited power systems. It is also meant for helping repair and restore electrical systems to local government agencies in the event of natural disasters.
2. **Saving:** The project provides replacement of energy-intensive electrical devices and appliances with energy-efficient ones or installation of rooftop solar systems to reduce costs while the savings can be used for other development or useful activities of each organization.
3. **Security:** The project installs alternative power systems in remote areas to improve community people’s quality of life and ease their hardship while strengthening energy security, such as installation of solar rooftops at hospitals, public health facilities, and schools.
4. **Socio-Economic:** The project promotes the career of “Electricity Doctors” to generate income for community people. It equips them with professional skills so that they might become electricians with basic knowledge, be able to take care of their own households and communities, earn extra income, or even make it a primary source of income.

Since it corresponds to the organization's business and expertise, as well as UNSDGs, and a global energy trend, LBL is considered a strategic CSR project.

No.	Project/Location	Type	kWp	Annual CO <sub>2</sub> reduction (kgCO <sub>2</sub> e/year)
1.	Schools in remote areas of Kanchanaburi and Mae Hong Son*	Off-grid	12	9,303.96
2.	Mab Yang Phon Subdistrict Health Promotion Hospital	On-grid	10.45	7,433.21
3.	Baan Phai Waste Separation Community Enterprise	On-grid	3.3	2,347.33
4.	Nam Khok Municipality	On-grid	3.3	2,347.33
5.	Wat Phra Ram Kao (phase 2)	On-grid	5.5	3,912.22
6.	Khon Me Fai Project in five areas	On-grid	107-46	74,687.76
7.	WeDesign Project in three areas	On-grid	15	10,669.68
8.	Wat Map Ta Phut	On-grid	6.59	4,694.66
9.	Rayong Industrial Estate Technical College	On-grid	5.5	3,912.22
10.	Wat Khiri Phawanaram School	On-grid	3.3	2,347.33
<b>Total</b>			<b>172.4</b>	<b>121,655.70</b>

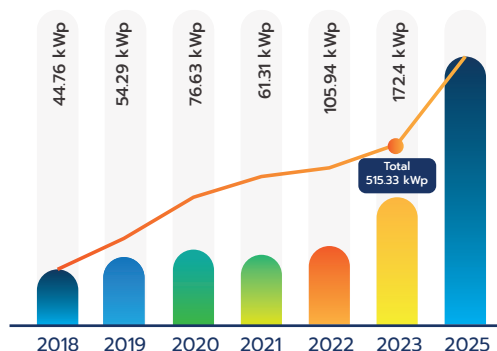
**Remark:** \*In collaboration with Power for Sustainable Future Foundation

GPSC Group improved, installed, and handed over 44 projects of solar power and power storage systems, especially in remote areas and communities without access to electricity to ensure their energy security and equality. In 2023 we launched a new project, dubbed as 'Khon Mi Fai' (energized man), in partnership with the Renewable Energy Industry Club of the Federation of Thai Industries (FTI) to provide clean energy from solar cells to non-profit government agencies and public organizations in education, public health and natural resources and environment sectors to lower their electric bills. The savings could then be used for community development in a sustainable manner. GPSC aims to provide on-grid solar systems for target groups in a total amount of 500 kW by 2027. In this first year of the project, as many as 43 organizations expressed their interest in receiving support from the project. However, five organizations were selected, namely 1) Science Park Ubon Ratchathani University, Ubon Ratchathani (30 kW); 2) Nakhon Sawan College of Agriculture and Technology, Nakhon Sawan (30 kW); 3) Thai Traditional and Integrative Medicine Hospital, Health Zone 8, Udon Thani (20 kW); 4) Newspaper Association of Thailand under the Royal Patronage (20 kW); and 5) Na Muen Si Woven Cloth Community Enterprise, Trang (5 kW); totalling 105 kW. This has brought the total capacity of solar power systems installed by GPSC for communities to 515.33 kW at the end of 2023, against the target of 1,000 kW by 2025.

By year-end 2023, all LBL projects had successfully reduced greenhouse gases by 322,549 kg of carbon dioxide equivalent a year, with cumulative GHG reduction of 854,884.46 kg of carbon dioxide equivalent. For 2023 alone, 121,655.70 kg of carbon dioxide equivalent per year was reduced.

Installed capacity of solar power systems for social-benefit establishments during 2018-2023 = 515.33 kW peak  
1,000 kW target to be reached by 2025

Overall target  
1,000 kWp



## Quality of Life

### SE Solar Energy Project in collaboration with Sarn Palung Social Enterprise Company Ltd. (PTTSE)

Initiated on the joint interest between GPSC and PTT, this project is intended for developing renewable energy projects into a social enterprise (SE), which can not only generate income but also solve social and environmental problems. Phase 1 of the project, piloted by SE of Talad Hua Plee Community in Sara Buri, showed its potential to generate income for the underprivileged. It is scalable from a project that provides solar power free of charge into a project that earns income from power sale. Income is earned under the project and used for funding skill development training provided for underprivileged people with electrical skills. Skills of installation and maintenance of the solar power system, expected to be in high demand in the future could raise these people's revenue, considered a sustainable method for solving social problems.

We're planning for phase 2 of the project for new customers who wish to take part in this power cost-saving project in parallel with career development for the underprivileged. Should there be a higher number of potential customers and underprivileged people who can be developed to meet demand, the project will then be able to scale up and eventually become fully commercial. Underprivileged people receiving training and employment under this project include 36 good-grade inmates (two batches) from Khao Mai Gaew Prison, who were released and received on-the-job training for solar power system installation in 4-5 CSR projects.





- **GPSC Smart Farming Project and Huay Khab SMART Community, Ban Huay Khab, Bo Kluea District, Nan**

GPSC's Smart Farming Project was initiated under PTT Group's Smiles Project following the spread of Covid-19, which caused economic and social impacts. The project aims to apply GPSC's and PTT Group's innovation and technology for raising the quality of life, upgrading cultivation processes, and developing agricultural produce in Ban Huay Khab, Bo Kluea District of Nan, and in the EECi area of Wang Chan District of Rayong. The project has been implemented for three consecutive years (2021-2023).

Today, more parties have joined the project and expanded it to provide more opportunities for communities. These parties are the National Science and Technology Development Agency (NSTDA), which has introduced the application of crop rotation innovation and LED bulbs in Huay Khab, while providing knowledge that benefits bamboo mushroom planting to yield products of higher value for communities in the EECi area; and the Renewable Energy Industry Club, Federation of Thai Industries (FTI), which has introduced a powerful marketing channel for the Huay Khab community, while providing coffee roasters for community people; and Local Alike Company, which has helped develop community-based tourism in Bo Kluea District.

GPSC and PTT Group were ready to hand over the project to communities. Banners for promoting the project and providing knowledge about the project in Baan Huay Khab were put up. Other companies in PTT Group also jointly organized the "PTT Group Innovation for Future Society Activity - to fuel the future and to drive communities toward sustainability" event during November 14-15, 2023, at PTT Head Office. These companies have expressed their will to open doors to development for communities nationwide in all dimensions, whether agriculture, marketing, or integrated tourism to strengthen communities and society.

Baan Huay Khab has been selected for eight project areas out of 45 around the country as project models. Ms. Tipsukhon Krueatham, staff of Restart Thailand at

Bo Kluea district of Nan, was also honored as an outstanding Restart Thailand staff and was invited to talk on the "Soft Power and Community Economy" panel organized at the event.





## Natural Resources and Environment

### • 2-million Rai Reforestation with PTT

After an MOU on the 2-million-rai reforestation project was signed with government agencies, GPSC has been determined to expand the country's green space by planting trees and restoring forests, according to the spirit of PTT Group, to achieve 10,000 rai by 2030. We'll also take care of the forests for at least 10 years. In this first year of the project, GPSC received a plot of 230 rai of the national forest reserved area in Pak Chom and Na Duang districts of Loei from the Royal Forest Department to plant trees and share with the department carbon credits under the Thailand Voluntary Emission Reduction Program (T-VER). In the following years, we aim to expand reforestation to other forests across the country. The planned 10,000-rai reforestation will capture around 114,237.5 tons of carbon dioxide equivalent and will restore and keep the ecosystem in a good balance, resulting in higher biodiversity and better income generation for community members.



## Sustainable Innovation

### • YSI Return Home-Techsauce Business Matching Project

Since 2018, GPSC has run the Young Social Innovator Project to encourage students at upper secondary schools or equivalent to take part in an energy and environmental innovation contest. The project urges the young generation to come up with innovative ideas about efficient consumption of energy and natural resources, while reducing environmental problems and helping build a strong and sustainable community economy in parallel with national development. In 2023, we expanded the YSI project by selecting 12 outstanding pieces of work with high potential out of 140 in the YSI contest organized during the past five years for expanding into the commercial scale. Students who owned these 12 pieces of work were invited to join the YSI Return Home Camp for skill development training, which will equip them with startup business concepts. The 12 teams must present their business plans in search of a modern entrepreneur with high potential. In addition to a cash reward, the winning teams were invited to present their efforts at the Techsauce Global Summit 2023 event, Asia's largest international seminar

on technology. Four teams were eventually selected for Techsauce:

- Sorn Ram 1 Team: Chitosan and local woven cloth development
- Better Life Battery Team: Lithium-sulfur battery from radiated and improved waxy activated sticky-rice carbon cathode
- Acheta Team: Extracted protein from crickets, product for health-conscious and green people
- Sunflower Type3 Team: Fingerprint tracing material made from natural polymers.

Two additional teams were selected from the Greenovation Startup Sandbox project, which represented another project initiated by GPSC to encourage the young generation to expand their efforts into a commercial scale, to attend the same event: One Charge and Electron+. These six teams not only won a chance to present their efforts at this international event, but took part in an exhibition and had an opportunity to talk to investors and entrepreneurs from various countries who are interested in commercializing their efforts.

Able to raise Thai students' capability, GPSC YSI Return Home was considered successful. Students were encouraged to come up with projects on energy innovation and efficient consumption of natural resources to tackle social, economic, natural resource and environment problems, which could be commercially scaled up. Their experience accrued from the project as well as recommendations received from investors and experts would benefit further development of their own project outcomes and groom them for becoming future entrepreneurs.





- **EV One-Stop Service**

In collaboration with Rayong Industrial Estate Technical College, GPSC launched the “EV One-Stop Service” project as a hub for integrated repair service for motorcycles and electric motorcycles in neighboring communities. The project aims to develop vocational skills concerning electric vehicles (EVs) for college students in our vicinity to raise their capability and

create jobs. The center will also serve as a workshop for students studying in the EV field. Students and teachers in the project jointly set up a payment-required solar-cell charging station, a combined result between clean energy innovation and GPSC’s expertise. We also have a plan to provide short-term training on basic EV maintenance for communities in our neighborhood to spread knowledge for sustainability.



# 4 | Management Discussion and Analysis (MD&A)

## Overview

### 1. Overall performance of 2023

This year GPSC reported a net profit of THB 3,694 million (up THB 2,803 million or 314 percent from last year), due largely to the increasing gross profit of SPPs, thanks principally to their greater production efficiency, designed to optimally curb production costs. Also contributing to the profit was the Ft factor, which reflected energy costs better than last year, when electricity tariffs were not raised as quickly as peak energy costs. This year, with lower energy costs, GPSC managed to reflect them through its improving sales revenue, including booked claims from power plant insurance.

### 2. Economic and Industrial Overviews

**Domestic Economic Overview:** The Bank of Thailand (BOT) has projected 3.2-percent GDP growth next year and up to 3.8 percent if the Digital Wallet Project could materialize. The overall domestic economy is on a recovery trend due mainly to improving private consumption, employment rate, labor wages, in line with the likely tourism sector recovery and the expansion of the exports sector, while the headline inflation rate is likely to be within the target 1.3 percent for 2023 and 2.0 percent for 2024. Headline inflation in 2023 was down from the high inflation of 2024, due partly to a temporary factor in the government's measures to tackle the cost of living resulting from high energy prices. For next year's headline inflation, the Bank of Thailand should still closely monitor inflation risks associated with the El Nino phenomenon, which might result in rising costs of food items as well as the uncertainty of conflicts in the Middle East, which might cause higher global energy prices. As for the current monetary policy, the Monetary Policy Committee (MPC) has estimated a policy interest rate at 2.5 percent per year, seen as suitable for the

gradually improving economy as well as for sustainably keeping inflation within the target range. Meanwhile, the MPC still monitors future economic and inflation trends, fraught with uncertainty due to the mentioned factors. The Ministry of Finance and the MPC have projected a medium-term policy interest and that for 2024 at 1-3 percent, which suits domestic economic growth, consistent with economic potential while maintaining price stability.

In addition, on January 10, 2024, the Energy Regulatory Commission (ERC) endorsed a formal decrease in electricity tariffs for the January – April 2024 billing period from THB 4.68 to THB 4.18 per unit (that is, the Ft for the January – April 2024 billing period was adjusted to THB 0.3972 per unit from THB 0.8955 per unit of the previous billing period). This was in accordance with the resolution of the Cabinet of December 19, 2023, in agreement with the measure to lessen the burden on electricity expenses for the public through Ft adjustment as proposed by the Ministry of Energy. Details of ERC's considerations consist of the following:

- Improved the measure for EGAT to bear the burden on cumulative arrears for the January – April 2024 billing period of THB 15,963 million, resulting in a decrease in Ft of THB 0.2357 per unit.
- The pool gas price was down to THB 333 per mmBTU through 1) the adjustment of the estimated spot LNG price to USD 14.3 per mmBTU, 2) improvement in the measure on GSP input and output gas price adjustment to the pool gas price, and 3) shortfall payment call if offshore producers could not deliver the gas as specified in gas sales agreements (GSAs) during 2020-2022. As a result, the Ft factor came down by THB 0.2446 per unit.

# Results of Operations

## Operating results of GPSC Group

Unit: THB million

GPSC Group's operating results	2022 (revised)	2023 (revised)	Chang YoY
Operating revenue	123,685	90,303	(27%)
Cost of sales (exclusive of depreciation and amortization)	(111,324)	(71,096)	(36%)
<b>Gross profit</b>	<b>12,362</b>	<b>19,207</b>	<b>55%</b>
Selling operating revenue, and administrative expenses (SG&A)	(1,868)	(2,103)	13%
Other operating revenue	372	104	(72%)
<b>EBITDA</b>	<b>10,865</b>	<b>17,208</b>	<b>58%</b>
Depreciation and amortization	(9,088)	(9,309)	2%
<b>EBIT</b>	<b>1,777</b>	<b>7,899</b>	<b>345%</b>
Financial cost	(4,298)	(5,297)	23%
Other non-operating revenue and expenses	1,815	1,203	(34%)
Dividend received & share of profits from associates & joint ventures	1,731	1,236	(29%)
Income tax expense	376	(507)	(235%)
<b>Profit before FX and extraordinary items</b>	<b>1,400</b>	<b>4,534</b>	<b>224%</b>
Net profit/(loss) from foreign exchange	58	275	374%
<b>Net Profit</b>	<b>1,547</b>	<b>4,809</b>	<b>230%</b>
Non-controlling interests	(567)	(1,115)	97%
<b>Net profit for the Company</b>	<b>891</b>	<b>3,694</b>	<b>314%</b>
Parent company's net profit, excluding amortization (Adjusted net income) <sup>1</sup>	<b>2,779</b>	<b>5,434</b>	<b>96%</b>
Gross profit margin (%)	10%	21%	11%
Net profit gross margin (%)	1%	4%	3%
Adjusted net income margin (%)	2%	6%	4%

### Remarks:

<sup>1</sup> Adjusted net income is the net profit attributed to GPSC, excluding the fair value of intangible assets from the acquisition of GLOW.



## Comparison of Performance (2023 vs. 2022)

### 1. Revenue from Operations

This year's revenue totaled THB 90,303 million (down THB 33,382 million or 27 percent from last year) mainly because of the following:

- **Revenue from IPPs**

This amounted to THB 14,039 million (down THB 28,284 million or 67 percent from last year) largely because:

- Sriracha Power Plant's revenue fell THB 14,857 million, most of which stemmed from the decrease in Energy Payment (EP), consistent with the lower electricity volume sold to EGAT to compensate for the excess volume EGAT called last year, for the same period, using diesel instead of high-price gas. Meanwhile, the availability payment (AP) revenue surged this year on account of fewer maintenance turnarounds than last year.
- GLOW power plants posted THB 13,427 million lower this year, mainly from: (1) GHECO-One posted lower revenue due to lower EP revenue from the sales volume to meet EGAT's order of its suspension from March – December 2023. (2) GIPP posted lower revenue because of its lower EP revenue, consistent with the electricity volume sold to EGAT.

- **Revenue from SPPs**

This equaled THB 74,754 million (down THB 5,714 million or 7 percent) due largely to the drops in the average electricity price and steam price, consistent with the lower average gas price than the previous year, as well as the decline in steam delivery to industrial users because of fewer maintenance turnarounds.

- **Revenue from VSPPs and others**

This totaled THB 1,511 million (up THB 617 million or 69 percent from last year) largely because CHPP made THB 680 million more from its EPC revenue.

### 2. Cost of Sales and Service Provision (Excluding Depreciation and Amortization)

The cost of sales and service provision this year totaled THB 71,096 million (down THB 40,228 million or 36 percent from last year) due to:

- **Cost of sales and service provision for IPPs**

totaled THB 7,604 million (down THB 28,226 million or 79 percent from last year). The principal factor was the costs of other raw materials, which fell THB 18,023 million with less consumption of diesel as the main fuel (instead of natural gas) at both Sriracha Power Plant and GIPP. This was because last year EGAT had called for diesel-fired electricity instead of high-price gas-fired electricity. In addition, the coal expenses at GHECO One were also down THB 10,621 million on account of EGAT's call for its suspension from March to December 2023.

- **Cost of sales and service provision for SPPs**

amounted to THB 62,259 million (down THB 12,449 million or 17 percent). This was due mainly to the lower gas costs of THB 10,969 million, thanks to lower average gas prices by 17 percent, coupled with a 2-percent decline in gas consumption from last year. Another is coal expenses, which fell THB 1,345 million due to the 8-percent lower average coal price and the 7-percent dip in coal consumption.

- **Cost of sales and service provision for VSPPs and others**

amounted to THB 1,233 million (up THB 446 million or 57 percent from last year) due mainly to the higher booking of other costs, including the EPCs of more projects of CHPP in addition to the solar rooftop installation services.

### 3. Gross Profit

The gross profit in 2023 amounted to THB 19,207 million (up THB 6,846 million or 55 percent from last year) mainly due to:

- **Gross profit of IPPs**

The gross profit of IPPs this year registered THB 6,435 million (down THB 59 million or 1 percent) mainly due to the reduced consumption of diesel instead of natural gas by Sriracha Power Plant and Glow IPP (GIPP), which lowered their power distribution margins while both plants commanded higher APs on account of fewer maintenance shutdowns.

- **Gross profit of SPPs**

The gross profit of SPPs this year surged to THB 12,495 million (up THB 6,734 million or 117 percent) mainly due to the Ft value, which reflected energy costs better than last year. As a result, one saw a rise in margins of power supplied to industrial users. At the same time, energy costs proved lower, coupled with greater total distribution of electricity despite the lower sales of steam to industrial users.

- **Gross profit of VSPPs and others**

The gross profit of VSPPs and others totaled THB 278 million (up THB 170 million or 159 percent) mainly due to the increasing income from CHPP's EPC contracts consistent with its greater number of projects, CHPP's higher sales of power and chilled water, and a higher revenue from the RDF Power Plant, consistent with the rising sales and the average electricity price.

### 4. Selling and Administrative Expenses (SG&A)

SG&A expenses in 2023 totaled THB 2,103 million (up THB 235 million or 13 percent) mainly due to the IT-related expense to increase efficiency of data management.

### 5. Financial Cost

The financial cost for 2023 equaled THB 5,297 million (up THB 999 million or 23 percent) mainly due to rising interest rates and the interest derived from green bonds, sold in June 2022, along with borrowings from related businesses and financial institutions for investment in GPSC's power projects.

### 6. Profit/Loss from Foreign Exchange

The net foreign exchange gain in 2023 totaled THB 275 million (up THB 152 million or 373 percent) mainly due to the profit from fair value valuation of derivatives.

### 7. Income Tax

The income tax expenses for 2023 amounted to THB 507 million (up THB 883 million or 235 percent) in view of higher income tax expenses consistent with the superior performance this year.

### 8. Dividend Received and Share of Profits from Investment in Associates and Joint Ventures

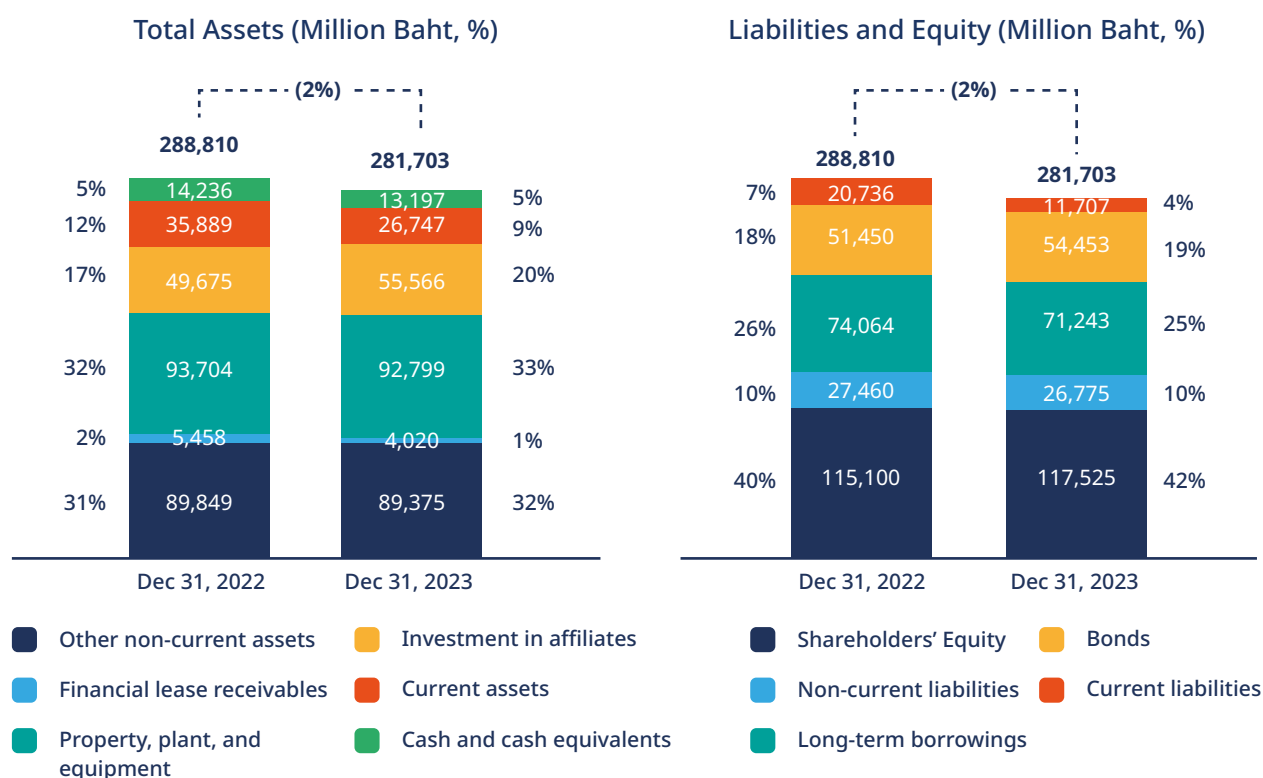
In 2023, the dividend received and the share of profits from investment in associates and joint ventures equaled THB 1,236 million, down THB 495 million or 29 percent. This is mainly because these two items dropped THB 531 million on account of the declining share of profits from Xayaburi Hydro Power Plant, with lower water volumes than last year. Meanwhile, the share of profits from CI Changfang Limited and Ci Xidao Limited (CFCD) had dropped with no profit booking from the interest rate swap like last year, as hedge accounting was applied. Finally, the share of profits from Avada Energy Private Limited rose, consistent with the much higher capacity than last year and the greater volume of electricity generated.

## 8.1 Share of Profits from Investment in Associates and Joint Ventures

(Unit: THB million)

Performance	Equity	2022	2023	Change YoY
<b>Independent Power Producer (IPP)</b>				
Xayaburi Power Co., Ltd. (XPCL)	25%	1,274	532	(58%)
<b>Small Power Producer (SPP)</b>				
Bang Pa-In Cogeneration Co., Ltd. (BIC)	25%	43	122	184%
Nava Nakorn Electricity Generating Co., Ltd. (NNEG)	30%	(100)	121	(221%)
Nam Lik 1 Power Co., Ltd. (NL1PC)	40%	59	4	(94%)
<b>Very Small Power (VSPP)</b>				
Thai Solar Renewable Co., Ltd. (TSR)	40%	342	339	(1%)
Eastern Seaboard Clean Energy Co., Ltd. (ESCE)	33%	12	26	112%
Avaada Energy Private Limited (AEPL)	43%	(301)	304	(201%)
Global Renewable Power Co., Ltd. (GRP)	50%	5	(41)	(973%)
NUOVO PLUS Co., Ltd. (NUOVO Plus)	49%	(44)	(258)	492%
CI Changfang Ltd. and CI Xidao Ltd. (CFXD)	25%	250	(141)	(156%)
<b>Total share of profits (losses) from investment in associates and joint ventures</b>		<b>1,539</b>	<b>1,008</b>	<b>(35%)</b>

## Statements of Financial Position



### Total Assets

At year-end 2023, GPSC Group commanded THB 281,703 million in total assets (down THB 7,107 million or 2 percent year-on-year). Key elements of this decrease are described below.

- Cash and cash equivalents dropped THB 1,039 million or 7 percent
- Investment in affiliates rose THB 5,891 million or 12 percent, due largely to payment of right offering of Avaada Energy Private Limited (AEPL) in 2023, which resulted in THB 6,028 million increase in AEPL's investment value.
- Property, plant, and equipment fell THB 905 million or 1 percent
- Other current assets fell by THB 9,152 million (or 25 percent) due largely to the fall in trade account receivables of THB 9,081 million from the decrease in IPPs' revenue from electricity, consistent with EGAT's call.
- Financial lease receivables dropped THB 1,438 million or 26 percent
- Other non-current assets dropped THB 464 million or 1 percent.

### Total Liabilities

At year-end 2023, GPSC Group posted THB 164,178 million in total liabilities (down THB 9,532 million or 5 percent year-on-year). Key elements are described below.

- Current liabilities decreased THB 9,029 million or 44 percent, mainly because of a drop in trade payables of THB 3,827 million, repayment of short-term borrowings from financial institutions of THB 3,260 million, and contractor payables down THB 1,157 million
- Bonds and long-term borrowings gained THB 181 million or 0.1 percent
- Other non-current liabilities fell THB 684 million or 2 percent.

### Total Equity

GPSC Group's equity at year-end 2023 amounted to THB 117,525 million (rising THB 2,425 million or 2 percent year-on-year) due largely to cumulative earnings for the period rising THB 4,809 million, whereas other comprehensive income items and other items fell THB 515 million and dividends paid out in Q1 and Q3 this year came to THB 1,869 million.

## Statement of Cash Flows

At year-end 2023, GPSC Group posted a decrease of THB 1,039 million in cash and cash equivalents year-on-year, largely because of the following:

(Unit: THB million)

Cash Flow	2023
Net cash flow from operating activities	23,160
Net cash flow from investing activities	(14,050)
Net cash flow from financing activities	(10,192)
<b>Net increase (decrease) in cash and cash equivalents (before the effect of FOREX)</b>	<b>(1,082)</b>
Effect of foreign exchange on cash and cash equivalents	43
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>(1,039)</b>
Cash and cash equivalents at the beginning of the period	14,236
<b>Cash and cash equivalents at the end of the period</b>	<b>13,197</b>

## Cash Flow from Operating Activities

At year-end 2023, GPSC Group posted THB 23,160 million in cash flow from operating activities, of which THB 24,120 million came from operating activities during the year and THB 960 million was in the form of corporate income tax payment.



## Cash Flow from Investing Activities

At year-end 2023, GPSC Group commanded THB 14,050 million in cash flow from investing activities:

1. Cash paid for investment in fixed assets of THB 7,620 million
2. Cash paid for investment in subsidiaries of THB 6,319 million, mainly from right offering (RO) of Avaada Energy Private Limited of THB 6,062 million
3. Cash received from lending to related businesses of THB 1,479 million
4. Cash received from dividends and interest of THB 1,085 million
5. Cash received from other financial assets of THB 283 million.

## Cash Flow from Financing Activities

At year-end 2023, GPSC Group commanded THB 10,192 million in cash flow from financing activities:

1. Net cash paid from short-term and long-term borrowings from financial institutions of THB 5,820 million
2. Interest payment and fees for borrowings from financial institutions of THB 5,355 million
3. Dividend payment of THB 1,869 million
4. Debt repayment under financial leases of THB 180 million
5. Cash received from the issuance of investment bond of THB 3,000 million
6. Cash received from other financing activities of THB 32 million.

## Key Financial Ratios

Key Financial Ratios	Unit	2021	2022	2023
<b>Profitability Ratios</b>				
Gross Profit Margin*	%	26.27	9.99	21.27
Net Profit Margin	%	9.77	0.72	4.09
<b>Liabilities Ratios</b>				
Interest Coverage Ratio	Times	2.36	0.41	1.49
Net Debt to Equity Ratio (Net D/E)	Times	0.78	0.99	0.95
Total Debt to Equity Ratio (Total D/E)	Times	1.30	1.51	1.40
<b>Liquidity Ratios</b>				
Liquidity Ratio*	Times	1.96	1.61	1.08
Quick Ratio	Times	1.35	1.09	0.64

### Remarks:

\* For 2022, items in the Financial Statements have been recategorized.

\* For 2023, items in the Statements of Income have been recategorized.

## Financial Calculation Formulas

Total Debt to Equity Ratio	Total liabilities / total shareholders' equity
Net Debt to Equity Ratio	(Interest-bearing debts – (cash & cash equivalents + deposits with withdrawal limitations + temporary investment) / shareholders' equity
Interest Coverage Ratio	Profit before interest expenses and income tax / interest expenses
Net Profit to Equity Ratio	Net profit attributable to parent company / average shareholders' equity
Liquidity Ratio	Current assets / current liabilities
Quick Ratio	(Cash & cash equivalents + deposits with withdrawal limitations temporary investment + trade account receivables) / current liabilities







## 5 | General and Key Information

### 5.1 General Information, Name, Location, Phone, Fax, and Other References

<b>Company Name</b>	:	Global Power Synergy Public Company Limited
<b>Security Name</b>	:	GPSC
<b>Establishment Date</b>	:	January 10, 2013
<b>Registered as Public Company Limited</b>	:	November 27, 2014
<b>First Day of Trade on SET</b>	:	May 18, 2015
<b>Company Registration Number</b>	:	0107557000411
<b>Registered Capital</b>	:	THB 28,197,293,710 as of December 31, 2023, comprising 2,819,729,367 paid-up common shares, with a par value of THB 10 per share for paid-up capital of THB 28,197,293,670
<b>Business</b>	:	GPSC operates as a power, steam, and utilities producer and distributor. In addition, the Company invests in other companies that generate and distribute power, steam, and utilities, including related businesses, both domestic and overseas.
<b>Business Sector</b>	:	Energy and Utilities
<b>Industry Group</b>	:	Resources
<b>Number of Employees</b>	:	835 <sup>(1)</sup> (as of December 31, 2023)
<b>Website</b>	:	www.gpscgroup.com

#### Contact Information

##### Investor Relations

Phone: 0-2140-4646, 0-2140-1808

Fax: 0-2140-4601

E-mail: ir@gpscgroup.com

##### Company Secretary and Corporate Governance/ Company Secretary

Phone: 0-2140-4605, 0-2140-5317

Fax: 0-2140-4601

E-mail: company-secretary@gpscgroup.com

**Remarks:** <sup>(1)</sup> Total 835 employees, including three PTT Group and GPSC Group secondees

## Head Office and Branches

<b>Head Office</b>	555/2 Energy Complex Building B, 5th Floor, Vibhavadi Rangsit Road, Chatuchak Subdistrict, Chatuchak District, Bangkok 10900, Thailand Phone: 0-2140-4600 Fax: 0-2140-4601
<b>Branch 1 - Central Utility Plant 1 (CUP-1)</b>	24 Pakorn Songkro Rat Road, Huai Pong Subdistrict, Mueang Rayong District, Rayong 21150, Thailand Phone: 0-3897-4333 Fax: 0-3897-4500
<b>Branch 2 - Central Utility Plant 2 (CUP-2)</b>	92/9 Rayong Highway No. 3191, Map Ta Phut Subdistrict, Mueang Rayong District, Rayong 21150, Thailand Phone: 0-3897-4333 Fax: 0-3897-4500
<b>Branch 3 - Central Utility Plant 3 (CUP-3)</b>	5/11 Pakorn Songkro Rat Road, Map Ta Phut Subdistrict, Mueang Rayong District, Rayong 21150, Thailand Phone: 0-3897-4333 Fax: 0-3897-4500
<b>Branch 4 - Sriracha Power Plant</b>	42/3 Moo 1, Sukhumvit Road, Thung Sukhla Subdistrict, Si Racha District, Chon Buri 20230, Thailand Phone: 0-3840-7407 Fax: 0-3840-7400
<b>Branch 5 - Maintenance Center</b>	98/19 Rayong Highway No. 3191, Map Ta Phut Subdistrict, Mueang Rayong District, Rayong 21150, Thailand Phone: 0-3897-4560
<b>Branch 6 - RDF Plant</b>	94/4 Moo 3, Nam Khok Subdistrict, Mueang Rayong District, Rayong 21000, Thailand
<b>Branch 7 - Central Utility Plant 4 (CUP-4)</b>	1/2 Moo 2, Ban Chang Subdistrict, Ban Chang District, Rayong 21130, Thailand
<b>Branch 8 - Branch Office</b>	94/7 Moo 3, Nam Khok Subdistrict, Mueang Rayong District, Rayong 21000, Thailand.



## References

<b>Securities Registrar</b> <b>Thailand Securities Depository Company Limited</b>	Stock Exchange of Thailand Building (next to the Embassy of the People's Republic of China) 93 Ratchadaphisek Road, Din Daeng Subdistrict, Din Daeng District, Bangkok 10400, Thailand Phone: 0-2009-9999 Fax: 0-2009-9991
<b>Bondholder Representative</b> <b>Bank of Ayudhya PLC</b> <b>Head Office:</b>	1222 Rama III Road, Bang Phongphang Subdistrict, Yan Nawa District, Bangkok 10120, Thailand Phone: 0-2296-3582 Fax: 0-2683-1298
<b>Bond Registrar</b> <b>(1) Bank of Ayudhya PLC</b> <b>Head Office:</b> <b>(2) Siam Commercial Bank PLC</b>	1222 Rama III Road, Bang Phongphang Subdistrict, Yan Nawa District, Bangkok 10120, Thailand Phone: 0-2296-3582 Fax: 0-2683-1298 9 Ratchadapisek Road, Chatuchak Subdistrict, Chatuchak District, Bangkok 10900, Thailand Phone: 0-2777-7777
<b>Auditor</b> <b>PricewaterhouseCoopers ABAS Limited</b>	179/74-80 Bangkok City Tower, South Sathon Road, Thung Maha Mek Subdistrict, Sathon District, Bangkok 10120, Thailand Phone: 0-2824-5000 Fax: 0-2286-0500
<b>Legal Consultant</b> <b>(1) TTT &amp; Partners Co., Ltd.</b>  <b>(2) Baker &amp; McKenzie Ltd.</b>	29 Unit DE, Tower B, 18th Floor, Vanissa Building, Chit Lom Alley, Ploen Chit Road, Lumpini Subdistrict, Pathum Wan District, Bangkok 10330, Thailand Phone: 09-6956-6424 540 Mercury Tower, 22nd Floor, Ploen Chit Road, Lumpini Subdistrict, Pathum Wan District, Bangkok 10330, Thailand Phone: 02-666-2824 Fax: 02-666-2924

## 5.2 Other Key Information

- None-

## 5.3 Litigation

GPSC and subsidiaries are currently parties to pending litigation and engaged in the following dispute with potentially adverse effects on their operations:

### 5.3.1 Dispute with EGAT

Glow Energy PLC (“Subsidiary”) is currently involved in a legal dispute with the Electricity Generating Authority of Thailand (EGAT) regarding different interpretation of a provision about the expiry date of the Power Purchase Agreement (PPA) for the Glow Energy Phase 2 Project 1 (90 MW) power plant. On February 6, 2018, the subsidiary, as claimant, filed a statement of claim with the Thai Arbitration Institute (“TAI”). EGAT, as respondent, submitted its statement of defense to TAI on July 26, 2018. On November 20, 2018, TAI considered the statements, determined the points in dispute, and, together with the parties, established a preliminary procedural timetable for the proceedings. A list of witnesses and evidence was submitted to TAI on February 28, 2019, and the hearing of witnesses and presenting of evidence were completed on March 26, 2019. Both parties submitted their closing statements to TAI on May 17, 2019. On November 21, 2019, TAI ruled that the expiry date of the PPA was March 31, 2017, as claimed by the subsidiary. EGAT, in disagreement, filed a suit with the Central Administrative Court on February 18, 2020, to revoke TAI’s ruling, which the court received for consideration. On September 25, 2020, the subsidiary submitted its testimony to the Administrative Court, and EGAT also filed its counter-testimony stating additional evidence. The subsidiary on April 30, 2021, filed additional testimony to the court. At present, the case is under the consideration of the Administrative Court.

## 5.4 Secondary Market

GPSC is not listed on the stock exchange of any other country.



## 5.5 Financial Institutions with Regular Contacts (only in the cases of bonds)

(1) <b>Bangkok Bank PLC</b>	333 Silom Road, Bang Rak Subdistrict, Bang Rak District, Bangkok 10500, Thailand Phone: 0-2230-2295, 0-2230-2328, 0-2626-3646, and 0-2353-5421
(2) <b>Kasikorn Bank PLC</b>	Head office 400/22 Phahonyothin Road, Samsen Nai Subdistrict, Phya Thai District, Bangkok 10400, Thailand Phone: 0-2222-0000
(3) <b>Bank of Ayudhya PLC</b>	Head office 1222 Rama III Road, Bang Phongphang Subdistrict, Yan Nawa District, Bangkok 10120, Thailand Contact Address: 550 Ploenchit Road, Lumpini Subdistrict, Pathumwan District, Bangkok 10330, Thailand Phone: 0-2296-3999, 0-2296-4776
(4) <b>Krungthai Bank PLC</b>	Head office 35 Sukhumvit Road (Building 1), Khlong Toei Nuea Subdistrict, Watthana District, Bangkok 10110, Thailand Phone: 0-2111-1111
(5) <b>Siam Commercial Bank PLC</b>	9 Ratchadapisek Road, Chatuchak Subdistrict, Chatuchak District, Bangkok 10900, Thailand Phone: 0-2777-7777
(6) <b>Standard Chartered Bank (Thai) PCL</b>	100 North Sathorn Road, Silom Subdistrict, Bang Rak District, Bangkok 10500, Thailand Phone: 0-2267-7228







## 6 | Corporate Governance

Global Power Synergy Public Company Limited (GPSC) conforms to its code of corporate governance and code of business conduct to ensure that, in the pursuit of success and business growth, our business is still marked by good governance, transparency, and responsibility to all stakeholders.

We've revised our Corporate Governance and Code of Business Conduct Handbook in line with current applicable laws. Effective from 2020, the revised handbook guides all employees in their operation toward efficiency, effectiveness, management excellence, transparency, and accountability as well as fostering confidence among all stakeholders that GPSC is a leading listed company that observes corporate governance and sustainable growth.

### 6.1 Overview of Corporate Governance Policy and Guidelines

#### 6.1.1 Corporate Governance Policy and Guidelines for the Board of Directors

The Board of Directors is committed to promoting GPSC as an efficient organization with good governance and management excellence to benefit shareholders, employees, customers, stakeholders, and all relevant parties. Our executives and employees operate with transparency and accountability. The Corporate Governance Policy therefore guides the Board, executives, and employees in carrying out their duties as detailed below.

1. To uphold good governance, the Board, executives, and employees of GPSC must observe the six following principles in fulfilling their duties:
  - **Accountability:** Responsibility for one's decisions and actions, and the ability to justify them
  - **Responsibility:** Responsibility for fulfilling one's duties with due competency and efficiency
  - **Equitable Treatment of Stakeholders:** Treating stakeholders equally with fairness and justification
  - **Transparency:** Transparency for conducting work with accountability and information disclosure
  - **Vision to Create Long-Term Value**
  - **Ethics:** Code of conduct and business ethics.
2. The Board must fulfill its duties with dedication, responsibility, and independence and must clearly separate the roles and responsibility between the Chairman of the Board and the President & CEO.
3. The Board and executives must play a key role in determining GPSC's vision, strategies, policies, and key plans while taking into consideration risk factors and formulating proper management of such risks and must ensure the reliability of the accounting system, financial reports, and account auditing.
4. The Board and executives must serve as role models of integrity and conformance to GPSC's corporate governance guidelines as well as overseeing the management of conflicts of interest and connected transactions.
5. The Board may appoint subcommittees (committees) as appropriate to review significant matters.
6. The Board must perform self-assessment and cross-assessment annually to frame its performance.
7. The Board and executives must define GPSC's Code of Conduct as guidelines for the Board, executives, and all employees in tandem with GPSC's rules and articles of association.
8. The Board and executives must institute sufficient, reliable, and timely disclosure of information on financial and non-financial matters to ensure equal access to GPSC's information by shareholders and stakeholders as well as appointing public relations and investor relations units for information disclosure to the public and investors.
9. GPSC's shareholders must receive equitable treatment, have access to information, and be able to communicate with GPSC through proper channels.

10. The Board and executives must implement an appropriate, transparent, and fair recruitment system for personnel in all key positions.
11. The Board and executives must implement an efficient anti-corruption system to ensure that management value anti-corruption and conform to anti-corruption measures.

Apart from the above policy, the Board has determined other guidelines based on GPSC's corporate governance as follows.

**Guidelines for Serving in Other Companies, Organizations, or Juristic Persons of the President & Chief Executive Officer, Senior Management and Employees**

- (1) If any of GPSC's senior management is appointed under an applicable law or by the Cabinet under its authority to assume a position in the government sector or a position for other public service, in addition to performing the Company's duties, management must report such matter to the Board for acknowledgment.
- (2) If GPSC's top executive is appointed by a government agency, state enterprise, another public organization, independent organization, or governmental educational institution as a director, subcommittee member, working group member, expert, qualified person, adviser or to any position for government service or for other public service in addition to performing GPSC's duties, management must report such matter to the Board for acknowledgment and comments before such top executive takes up the duties under such position.
- (3) If any of GPSC's senior management is taking up the duty as a director, subcommittee member, working group member, expert, qualified person, adviser or any position in other companies or juristic persons besides those mentioned in (2) or besides performing GPSC's duties, such person must submit the matters to the Board for approval before taking up the position.
- (4) Other executives and employees who are not senior management but fall under (1), or (2), or (3) above must submit such matter to the Management Committee (MC) meeting for acknowledgment or approval, as applicable, before taking up the position.

## 6.1.2 Corporate Governance Policy and Guidelines for Shareholders and Stakeholders

GPSC respects the rights of shareholders through equitable treatment of all shareholders. Our actions in 2023 were highlighted as follows.

### 1. Rights of Shareholders and Equitable Treatment

The 2023 Annual General Meeting of Shareholders (AGM) was held on Friday, March 31, 2023, beginning at 14.00 hours, in the E-AGM format under the applicable rules for electronic meetings. GPSC facilitated the shareholders attending the AGM as follows.

#### Pre-Meeting

- GPSC shareholder(s), either one person or more, holding no less than one percent of the total voting rights, were invited to propose agenda items and nominate directors from October 1 to December 30, 2022 (at least three months before the AGM). The selection criteria and processes were published on GPSC's website.
- GPSC notified SET to publicize the resolutions of the Board about the AGM date and agenda items as well as the record date to determine the shareholders entitled to attend and vote at the AGM and receive dividends, which were published via SET's disclosure system as soon as the resolutions were reached on February 10, 2023.
- The meeting notice, in Thai and English, meeting documents, and proxy forms were made available on GPSC's website on March 2, 2023 (28 days before the AGM) and delivered to shareholders via post on March 10, 2023, (21 days before the AGM) to allow time for shareholders to study the information for the AGM. Foreign shareholders were given the English version of the documents.
- Shareholders who were unable to attend the meeting were invited to appoint a representative (proxy) or grant proxy to independent directors to attend the meeting and vote on their behalf. Proxy Form B (in which shareholders could cast their votes) was encouraged and enclosed with each meeting notice sent via post to each shareholder.

- Shareholders were invited to submit questions about AGM attendance and the agenda before the meeting. The inquiry channels were disclosed in the meeting notice.
- For institutional investors, GPSC coordinated with their representatives the provision of information for these investors on their preparation of accurate and complete documents before the meeting.
- GPSC allowed the shareholders or proxy persons to register electronically for the meeting from March 22, 2023, to the meeting date. Also, GPSC manned the call center to serve the shareholders should they have questions or wish to inquire about registration methods or meeting attendance.

#### **At the Meeting**

- GPSC manned the call center and assigned an administrator to look after the meeting application, facilitate the shareholders' and proxy persons' access to the application, and answer queries about the use of the application. We allowed the shareholders and proxy persons to access the application two hours ahead of the actual meeting to ensure that all of them received accurate and complete information about the meeting, asked questions, and voted under the meeting's objectives.
- For the 2023 AGM, all 14 directors of the Board were in attendance along with senior management, external auditor, and legal consultants. A legal officer served as witness to ballot tallying. A Shareholders' Right Protection Volunteer duly evaluated the quality of the AGM.
- Before the meeting, GPSC spelled out the voting method and tallying for the resolution of each agenda item for the shareholders' understanding. It also organized voting on each applicable agenda item: approval, disapproval, or abstain.
- During the meeting, the Chairman conducted the meeting by the order of the agenda and provided opportunities for the shareholders to pose questions and express views in an equitable way. During the presentation of each agenda item, the shareholders and proxies could submit their questions ahead of time by typing

messages or asking questions through videos and audios through the meeting application. GPSC duly noted the questions and answers, along with essential views, accurately and completely in the meeting minutes.

#### **Post-Meeting**

- After the AGM, the resolutions of the 2023 AGM were published via SET's news system along with the results and the numbers of votes (approval, disapproval, and abstention) for each agenda item.
- The minutes, which identified the directors and top executives attending the meeting, information presented by the directors, inquiries and answers, and the voting outcome for each resolution were submitted to SET and published on GPSC's website within 14 days from the date of the AGM.

#### **2. Vested Interests of Directors and Executives**

GPSC has stipulated that its directors and executives must declare any vested interests of their own and their related parties so that the Board may consider transactions potentially involving conflicts of interest and make decisions in the interest of GPSC. Any directors and executives with conflicts of interest in such transactions must play no part in any decision-making on those transactions. To this end, the Board approved report forms for directors, executives, and related parties, and the applicable criteria, which comprised an initial report, a report with each change in interests, and a yearly report.

#### **3. Roles of Stakeholders**

GPSC values the roles of all stakeholders, from shareholders, investors, customers, associated government agencies and other applicable agencies, employees, business partners, suppliers, contractors, to society and communities. To this end, we've defined our policy on the roles of stakeholders in the 2020 Corporate Governance and Code of Business Conduct Handbook.

## 6.2 Code of Business Conduct

The Board has formulated a Code of Business Conduct describing desirable standards of behavior and conduct for all personnel in carrying out business operations and performing their duties, and has included it as part of the agreement on GPSC's business.

The Code of Business Conduct comprises 15 categories:

1. Compliance with laws and human rights
2. Political rights and political neutrality
3. Conflicts of interest
4. Confidentiality, information retention, and use of inside information
5. Treatment of customers and consumers
6. Treatment of business competitors
7. Procurement and treatment of business partners
8. Community, social, and environmental responsibility
9. Treatment of employees
10. Treatment of creditors
11. Internal control and internal audit
12. Giving and acceptance of gifts, assets, and other benefits
13. Safety, health, and environment
14. Intellectual properties and the application of ICT
15. Prevention of money laundering.

Details and guidelines of the principles of our corporate governance code and the code of business conduct appear in the Corporate Governance and Code of Business Conduct Handbook 2020, which is publicized on GPSC's website.

In addition, we value the work of Investor Relations and stress disclosure of information and strict compliance with applicable laws and regulations in the best interests of shareholders and stakeholders. We've formulated the following code of practice for Investor Relations:

1. Perform duties with integrity and professionalism without discrimination
2. Ensure timely, complete, and accurate disclosure of key information for making investment decisions, with equal access for all stakeholders and under applicable rules
3. Provide equal access to information and allow queries from all stakeholders
4. Safeguard GPSC's confidential information and refrain from exploiting inside information for personal or others' gain before public disclosure
5. Conform to GPSC's rules and policy on safeguarding inside information.

## 6.3 Highlights of Changes and Development of Corporate Governance Policy, Guidelines, and Systems

### 6.3.1 Highlights of Changes and Development of the Review of Corporate Governance Policy, Guidelines, and Systems, or the Directors' Charters, in 2023:

#### 1. Corporate Governance

- Reviewed the Corporate Governance and Code of Business Conduct Handbook to ensure alignment and appropriate contents suiting GPSC's operations as well as prevailing circumstances. No amendment was made this year.



- Reviewed the charters of the Board and its committees. No amendment was made this year.
- Reviewed and amended the Anti-Corruption Policy and applicable guidelines for the giving and acceptance of gifts, entertainment, or other benefits for alignment with CAC's assessment criteria and for clarity and simplicity for executives and employees. All these have been related to the executives and employees.
- Reviewed and amended best practices in line with SET's CG code on the use of inside information and the policy on company information disclosure to prevent insider trading. To elaborate, we declared our policy barring the Board, executives, and employees whose jobs involve such data from trading GPSC securities during the 30 days and 45 days before the notification of the quarterly and annual financial statements to SET and at least 24 hours after the publicity of the statements.

## 2. GPSC Group Way of Conduct

GPSC announced its Group management guidance or the GPSC Group Way of Conduct with the following objectives:

- To scope and provide tools as well as guidelines for the oversight of GPSC Group's policy and operations at levels suiting the business through teamwork and efficient group management
- To guide and oversee GPSC affiliates through
  - Its representative directors or executives or representative supervisors
  - GPSC units assigned to oversee affiliates
- To serve as a common agreement on individual policy guidelines between GPSC and its affiliates
- To forge cooperation and synergy for management in pursuit of investment objectives
- To raise the capability and caliber of business and risk management, and pursue sustainability of GPSC Group in parallel with the achievement of clarity over GPSC's activities.

GPSC reviewed such management guidance for alignment with the PTT Group Way of Conduct and its affiliate governance. This year saw no amendment made.

## 3. Compliance

- GPSC reviewed the applicable Compliance Policy and duly amended it against the law and its own regulations for business efficiency
- GPSC reviewed the policy and guidelines for compliance with the Personal Data Protection Act of 2019. No amendment was made.

### 6.3.2 Application of SEC's CG Code

The Board considered and assigned management to duly apply SEC's CG Code in the context of GPSC's business and monitored the outcomes. In 2023 the Company duly applied such code to the context of its business.

### 6.3.3 Other Corporate Governance Practices

1. Regular review and improvement of the Table of Authority regularly in line with GPSC's circumstances and operations.
2. Handling of complaints on the violation of the Code of Business Conduct involving corruption between January 1 to December 31, 2023: GPSC received one complaint categorized as fraudulent and bribery practice. The investigation was completed and disciplinary action was duly taken. This matter was reported to the Corporate Governance and Sustainability Committee, the Audit Committee, and the Board.
3. 2023 AGM assessment (AGM Checklist) by the Thai Investors Association for Thai listed companies to achieve an international standard against assessment criteria for various meeting procedures: GPSC achieved a perfect score of 100.

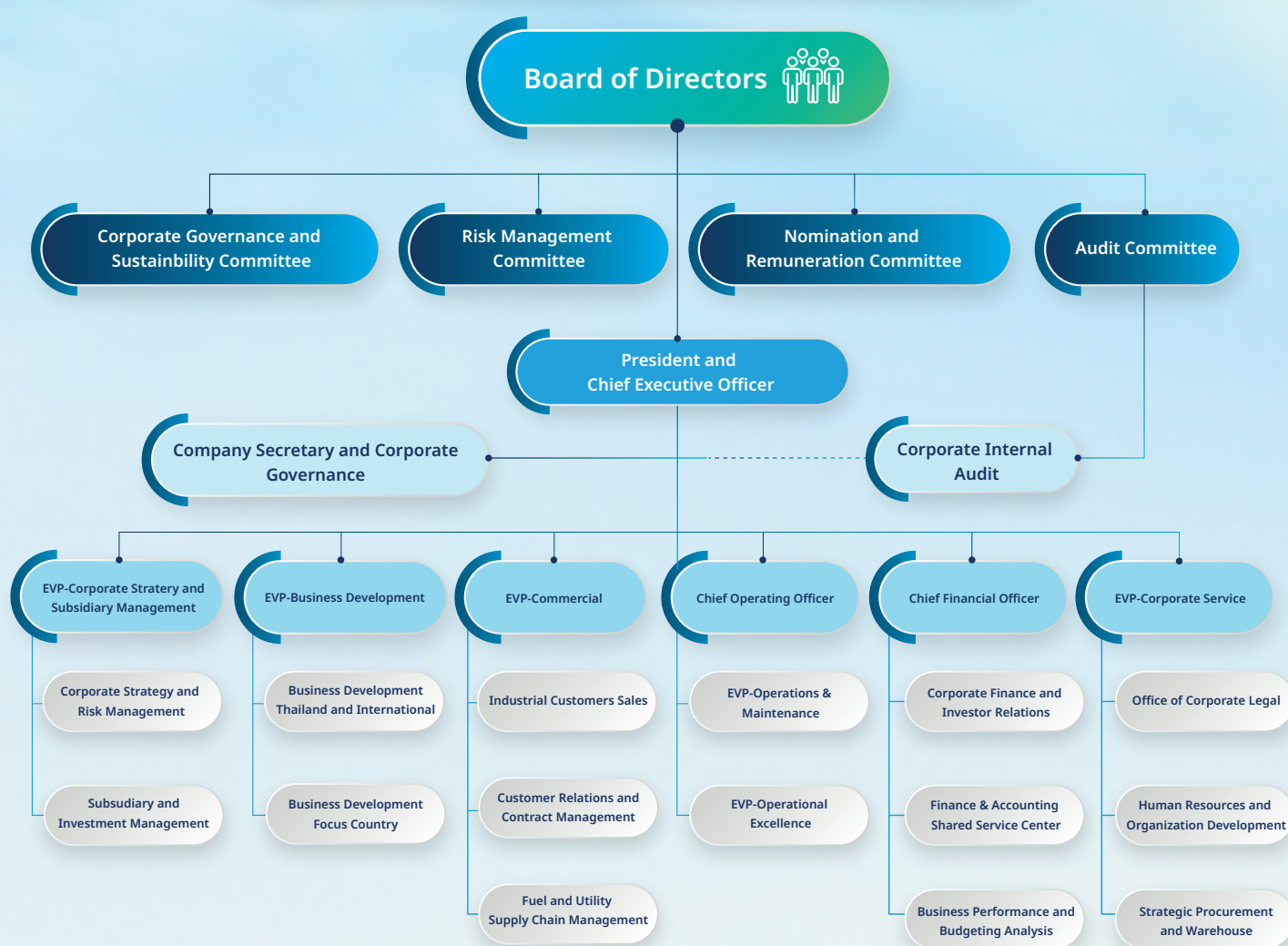
## 7 | Corporate Governance Structure and Key Information on the Board of Directors, Subcommittees, Management, Employees, and Others

### 7.1 Corporate Governance Structure

As of December 31, 2023, the management structure of Global Power Synergy Plc (GPSC) consisted of the Board of Directors, four subcommittees (or committees), namely Corporate Governance and Sustainability,

Risk Management, Nomination and Remuneration, and Audit Committee. The management team is led by the President & Chief Executive Officer (CEO).

#### Organization Structure (Senior Vice President upward)



## 7.2 Board of Directors

### 7.2.1 Composition of the Board

As of December 31, 2023, the GPSC Board consisted of 13 directors, 12 of whom were non-executive directors, six were independent directors (46.15%), two female directors (15.38%), and one executive director, namely the President & Chief Executive Officer. Such composition comes under the Articles of Association, which require that the Board must be made up at least five but not more than 15 directors and that no fewer than half of them must reside in Thailand.

The Board consists of qualified professionals with a wide range of skills, expertise, and experience suitable for supervising GPSC's operations to achieve its main objectives and goals. The Board set up a Board Skill Matrix, including clearly defined definitions of skills and expertise of a total of 12 subject matters, which fall into two categories:

1. Core Skills/Experience are essential skills for performing the duties as a GPSC director, including policy development, business acumen, strategic planning, human resource (HR) management and organizational development, finance and accounting, internal audit, law, risk management and internal control, and corporate governance and corporate social responsibility (CSR).
2. Specific Skills/Experience are essential skills for GPSC's business operations, such as power industry, international business, and innovation management expertise.

### Composition of the Board (as of December 31, 2023)

Name-Surname		Director Pool	Skill / Expertise											
			Core Skills									Specific Skills		
			Policy Development	Business Judgment	Strategic Planning	Finance & Accounting	Internal Audit	Law	Corporate Governance & CSR	Risk Management Internal Control	HR & Organization Development	Power Industry Expertise	International Business	Innovation Management
1	Mr. Pailin Chuchottaworn	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Gen. Prachaphat Vatchanaratna		✓	✓	✓		✓	✓	✓	✓	✓			
3	Gen. Santipong Thampiya		✓		✓		✓	✓	✓	✓	✓	✓		✓
4	Mrs. Nicha Hiranburana Thuvatham		✓		✓		✓		✓	✓	✓			
5	Mr. Chalermphol Pensoot		✓	✓	✓	✓		✓	✓		✓			
6	Mr. Somchai Meesen		✓	✓	✓		✓		✓		✓	✓		
7	Mr. Noppadol Pinsupa		✓	✓	✓				✓	✓	✓	✓		✓
8	Mr. Wuttikorn Stithit		✓	✓	✓	✓				✓	✓	✓		
9	Mr. Kongkrapan Intarajang		✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
10	M.L. Peekthong Thongyai		✓	✓	✓	✓			✓	✓	✓		✓	✓
11	Miss Pannalin Mahawongtikul	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
12	Mr. Bandhit Thamprajamchit		✓	✓	✓	✓			✓	✓	✓	✓		✓
13	Mr. Worawat Pitayasiri		✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
		2	13	11	13	8	5	4	12	11	13	9	5	8

# Board of Directors



**Mr. Pailin Chuchottaworn**

Independent Director,  
Chairman



**Gen. Santipong Thampiya**

Independent Director,  
Chairman of the Nomination and  
Remuneration Committee,  
Member of the Risk Management Committee



**Gen. Prachapat Vachanaratana**

Independent Director,  
Member of the Corporate Governance  
and Sustainability Committee,  
Member of the Audit Committee



**Mr. Somchai Meesen**

Independent Director,  
Chairman of the Corporate Governance  
and Sustainability Committee,  
Member of the Audit Committee



**Mrs. Nicha Hiranburana Thuvatham**

Independent Director,  
Member of the Corporate Governance and  
Sustainability Committee,  
Member of the Audit Committee



**Mr. Chalermphol Pensoot**

Independent Director,  
Chairman of the Audit Committee



**Mr. Kongkrapan Intarajang**

Director,  
Member of the Risk Management  
Committee



**Mr. Bandhit Thamprajamchit**

Director





**Mr. Noppadol Pinsupa**

Director,  
Chairman of the Risk Management  
Committee,  
Member of the Nomination and  
Remuneration Committee



**Mr. Wuttikorn Stithit**

Director,  
Member of the Nomination and  
Remuneration Committee



**Ms. Pannalin Mahawongtikul**

Director



**M.L. Peekthong Thongyai**

Director



**Mr. Worawat Pitayasiri**

Director,  
Secretary to the Board,  
Member of the Risk Management Committee,  
President & Chief Executive Officer



## 7.2.2 Board of Directors

As of December 31, 2023, the Board was made up of 13 directors:

No.	Name – Last Name	Position	Appointment Date
1	Mr. Pailin Chuchottaworn	Independent Director Chairman	April 2, 2021 (re-elected) April 2, 2021
2	Gen. Santipong Thampiya <sup>(1)</sup>	Independent Director Chairman of the Nomination and Remuneration Committee Member of the Risk Management Committee	April 1, 2022 April 1, 2022 January 25, 2023
3	Gen. Prachapat Vachanaratana <sup>(2)</sup>	Independent Director Member of the Corporate Governance and Sustainability Committee Member of the Audit Committee	March 31, 2023 March 31, 2023 October 16, 2023
4	Mr. Somchai Meesen <sup>(3)</sup>	Independent Director Chairman of the Corporate Governance and Sustainability Committee Member of the Audit Committee	March 31, 2023 (re-elected) March 31, 2023 (re-elected) March 31, 2023 (re-elected)
5	Mrs. Nicha Hiranburana Thuvatham <sup>(4)</sup>	Independent Director Member of the Corporate Governance and Sustainability Committee Member of the Audit Committee	April 2, 2021 (re-elected) April 28, 2021 March 31, 2023
6	Mr. Chalermphol Pensoot	Independent Director Chairman of the Audit Committee	April 1, 2022 April 1, 2022
7	Mr. Kongkrapan Intarajang	Director Member of the Risk Management Committee	April 1, 2022 (re-elected) April 1, 2022 (re-elected)
8	Mr. Bandhit Thamprajamchit <sup>(5)</sup>	Director	February 1, 2023
9	Mr. Noppadol Pinsupa	Director Chairman of the Risk Management Committee Member of the Nomination and Remuneration Committee	April 1, 2022 (re-elected) April 1, 2022 (re-elected) April 1, 2022 (re-elected)
10	Mr. Wuttikorn Stithit <sup>(6)</sup>	Director Member of the Nomination and Remuneration Committee	April 1, 2022 (re-elected) January 25, 2023
11	Ms. Pannalin Mahawongtikul <sup>(7)</sup>	Director	March 31, 2023 (re-elected)
12	M.L. Peekthong Thongyai <sup>(8)</sup>	Director	March 31, 2023 (re-elected)
13	Mr. Worawat Pitayasiri	Director / Secretary to the Board Member of the Risk Management Committee President & Chief Executive Officer	April 2, 2021 (re-elected) April 28, 2021 December 1, 2020

### Remarks:

<sup>(1)</sup> Gen. Santipong Thampiya was appointed to the Risk Management Committee at Board Meeting No. 1/2023 of January 24, 2023, with effect from January 25, 2023.

<sup>(2)</sup> Gen. Prachapat Vachanaratana was appointed as an independent director replacing Mr. Kurujit Nakornthap, whose term expired, at the 2023 AGM of March 31, 2023, with effect from March 31, 2023, and was appointed to the Corporate Governance and Sustainability Committee at Board Meeting No. 4/2023 (Special Meeting) of March 31, 2023, with effect from March 31, 2023, and was appointed to the Audit Committee at Board Meeting No. 12/2023 of October 16, 2023, with effect from October 16, 2023.

<sup>(3)</sup> Mr. Somchai Meesen was re-appointed as an independent director at the 2023 AGM of March 31, 2023, with effect from March 31, 2023, and was appointed Chairman of the Corporate Governance and Sustainability Committee and a member of the Audit Committee at Board Meeting No. 4/2023 (Special Meeting) of March 31, 2023, with effect from March 31, 2023.

<sup>(4)</sup> Ms. Nicha Hiranburana Thuvatham was appointed to the Audit Committee at Board Meeting No. 4/2023 (Special Meeting) of March 31, 2023, with effect from March 31, 2023.

<sup>(5)</sup> Mr. Bandhit Thamprajamchit was appointed as a director, replacing Mr. Jeerawat Pattanasomsit, who resigned, at Board Meeting No. 1/2023 of January 24, 2023, with effect from February 1, 2023.

<sup>(6)</sup> Mr. Wuttikorn Stithit was appointed to the Nomination and Remuneration Committee at Board Meeting No. 1/2023 of January 24, 2023 with effect from January 25, 2023.

<sup>(7)</sup> Ms. Pannalin Mahawongtikul was re-appointed as a director at the 2023 AGM of March 31, 2023, with effect from March 31, 2023.

<sup>(8)</sup> M.L. Peekthong Thongyai was re-appointed as a director at the 2023 AGM of March 31, 2023, with effect from March 31, 2023.

### Directors who resigned and retired in 2023

No.	Name - Last Name	Position	Date of resignation / retirement
1.	Mr. Kurujit Nakornthap	Independent Director Chairman of the Corporate Governance and Sustainability Committee Member of the Audit Committee	Completed the term at the 2023 AGM
2.	Mr. Lavaron Sangsnit	Director Member of the Corporate Governance and Sustainability Committee	Completed the term at the 2023 AGM
3.	Ms. Pantip Sripimol	Director Member of the Corporate Governance and Sustainability Committee	Resigned with effect from October 1, 2023

### Authorized Directors

As of December 31, 2023, the directors authorized to represent GPSC as stated in its affidavit were Mr. Worawat Pitayasiri, President & CEO (with his signature and the corporate seal affixed), or Mr. Kongkrapan Intarajang, or Mr. Wuttikorn Stithit, or Mr. Noppadol Pinsupa, or M.L. Peekthong Thongyai, or Ms. Pannalin Mahawongtikul (with signatures of any two and the corporate seal affixed).

### 7.2.3 Roles and Duties of the Board Duties and Responsibility of the Board

The Board has the roles, duties, and responsibility to oversee GPSC's operations to strictly comply with the laws, objectives, articles of association, and resolutions of the shareholders' meetings under the code of corporate governance and best practices for boards of directors of SET's listed companies for the benefit of GPSC and its shareholders. The main duties and responsibility of the Board are as follows:

1. Dedicate time and accord importance to determine the vision, mission, direction, and strategies of GPSC
2. Review and approve the key strategies and policies, including the objectives, plans, and financial goals of GPSC as well as supervising and following up to ensure that management has consistently implemented the work plans set out under its directions and strategies and that management can execute the defined vision, directions, and strategies successfully and efficiently.
3. Determine the appropriate policy of corporate governance and code of business conduct that consists of codes and best practices for the directors, executives,

by jointly expressing their opinions fully and seeking information that is useful in determining the direction of GPSC.

and employees. To this end, they strive for recognition of responsibility for duties, nurture understanding, and require strict adherence in tandem with GPSC's articles of association, rules, and regulations for fairness to all stakeholders.

4. Approve the expenditure of investment funds for various operations, borrowing, or applying for credit from financial institutions, lending money as well as becoming the guarantor for normal business operations of GPSC without budget limits under its articles of association, rules and regulations, including applicable laws, rules, and regulations of SET and the Securities and Exchange Commission (SEC).
5. Consider potential key risk factors and define comprehensive and complete risk management guidelines. Ensure that executives command an effective system and process for risk management, including potential risk factors for seeking business opportunities.
6. Provide adequate and effective internal control as well as establishing a process to regularly assess the suitability of GPSC's internal-control system.
7. Oversee and manage potential conflicts of interest, including connected transactions, by valuing consideration of key transactions for maximum benefits of the shareholders and stakeholders.
8. Consider and approve the appointment of qualified persons with no prohibited characteristics as specified in the Public Limited Companies Act B.E. 2535 (1992) (including amendments), the Securities and Exchange Act B.E. 2535 (1992) (including amendments), and various laws, including applicable notifications, rules, and/or other regulations, for appointment as directors if a position becomes vacant due to reasons other than retirement by rotation, retirement by rotation, and appointment of a new director, including the determination of compensation for directors, to propose to shareholders' meetings for approval.
9. Consider and amend the list of authorized directors.
10. Appoint the Audit Committee or any other subcommittee, and determine the authority and duties of such subcommittee to assist and support the performance of the Board.
11. Set up a system for personnel selection to duly fill key management positions with a transparent and fair recruitment process.
12. Appoint Company Secretary and executives as defined by SEC or the Capital Market Supervisory Board and consider their compensation.
13. Set up a system or mechanism for determining compensation for top executives that is appropriate and in line with the performance for their short-term and long-term motivation.
14. Conduct regular self-performance assessment and the President & CEO's performance assessment.
15. Provide a reliable accounting system, financial reporting and auditing as well as ensuring an efficient and effective internal-audit process.
16. Prepare financial statements at the end of the accounting year and countersign them and present them to the AGM for approval.
17. Consider and approve the selection and appointment of the external auditor, and consider appropriate compensation as presented by the Audit Committee before submitting it to the AGM for approval.
18. Value business operations with socio-environmental responsibility as well as promoting the sustainable wellbeing of Thai society.
19. Institute assessment of GPSC's performance under its corporate governance policy and the code of business conduct at least once a year.
20. Provide appropriate channels for communicating with each group of shareholders and supervise information disclosure to ensure accurate, clear, transparent, reliable, and high-standard practices.
21. Encourage directors and executives to attend various seminars and courses of the Thai Institute of Directors applicable to their duties and responsibility.
22. Organize meetings among non-executive directors and independent directors as seen necessary or appropriate to discuss management problems of current interest in the absence of management and inform the President & CEO of meeting outcomes.
23. Formulate policies to ensure a system that supports efficient anti-corruption to ensure that management recognizes and values anti-corruption, and instill them into the corporate culture.
24. Comply with anti-corruption measures and impose penalties for non-compliance.



The Board can authorize and/or assign other parties to perform specific tasks on its behalf. Such authorization or delegation must be within the scope of authorization under the power of attorney provided, and/or under the rules, regulations, or orders prescribed by the Board or GPSC. However, the delegation of authority and responsibility of the Board will not be in the form of authorization or delegation that enables the Board or the authorized parties to approve transactions between them and parties with potential conflicts of interest (as defined in SEC's notifications or the Capital Market Supervisory Board) or a stake or benefit in any form, or any other conflict of interest with GPSC or its subsidiaries, except for the approval of transactions under the policy and criteria already approved by the shareholders' meetings or the Board.

In addition, the businesses of the Board which must be approved by shareholders' meetings are:

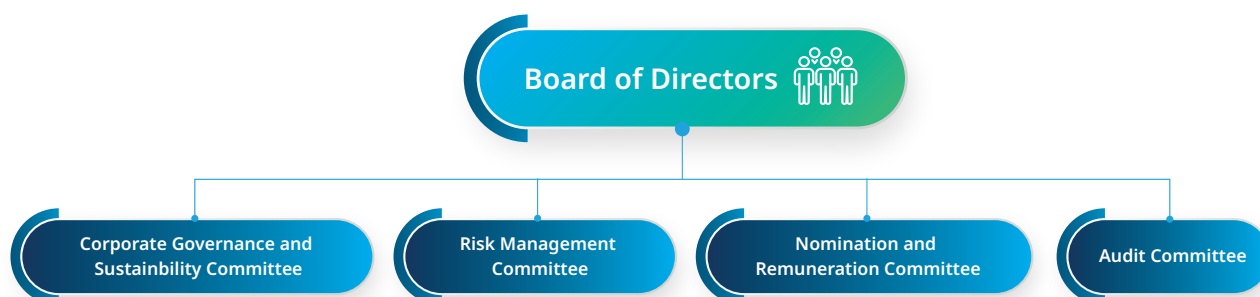
- Engagement in connected transactions and the acquisition or disposition of key assets of GPSC as required by law and the Capital Market Supervisory Board.
- Sale or transfer of GPSC's business, in whole or in part, to another party.
- Preparation, amendment, or termination of contracts concerning the lease of all or parts of GPSC's business, assignment to any other party to manage GPSC's business, or merger with another party for profit and loss sharing.
- Amendment of GPSC's memorandum of association or articles of association.
- Increase or decrease of GPSC's registered capital.
- GPSC's dissolution or merger with another company.
- Issuance of GPSC's bonds.

## **Roles and Responsibility of the Chairman**

1. Supervise, follow up, and oversee the performance of the Board to ensure efficiency and achieve GPSC's objectives and main goals under the law, corporate governance code, and scope of duties and responsibility of the Board.
2. Play a key role in setting Board meeting agenda by discussing this matter with the President & CEO and ensuring that essential matters are included.
3. The Chairman or delegate is responsible for convening Board meetings by delivering meeting notices to the directors at least seven days before meeting dates so that they have time to consider the information for decision-making.
4. Preside over Board meetings for controlling the proceedings for efficiency, allocating sufficient time for presentations and discussions on significant issues of every agenda, and encouraging all directors to consider matters carefully and express opinions independently, as well as leading meetings to vote and summarizing the resolutions of meetings.
5. Preside over the AGM by controlling the meeting's effectiveness and legitimacy under GPSC's articles of association and the defined agenda as well as allocating sufficient time for making presentations and answering shareholders' questions thoroughly.
6. Supervise and encourage all directors to comply with the corporate governance code. Contribute to fostering an ethical corporate culture and corporate governance.
7. Strengthen good relations between the Board and management.

## 7.3 Data on Subcommittees (Committees)

### 7.3.1 Structure



### 7.3.2 Lists of Subcommittees (Committees)

#### 1. Audit Committee

The Audit Committee consists of four members:

No.	Name – Last Name	Position
1.	Mr. Chalermphol Pensoot	Chairman of the Audit Committee (Independent Director) Expert with knowledge and experience in accounting and financial statement audit
2.	Mrs. Nicha Hiranburana Thuvatham	Member (Independent Director)
3.	Mr. Somchai Meesen	Member (Independent Director)
4.	Gen. Prachapat Vachanaratana	Member (Independent Director)

Ms. Attayar Sukotanang, Senior Vice President, Corporate Internal Audit, served as Secretary.

The Audit Committee consists of four independent directors who are experts in accounting and finance, engineering and energy business, law, and management, that are qualified to review the credibility of financial statements under the regulations of SEC and SET.

#### Composition

The Audit Committee consists of one chairman and 2-4 members. Each member must be an independent director and have qualifications on independence as defined by SEC on the qualifications and scope of work. At least one member must command knowledge, understanding, and experience in finance and accounting to be able to verify the credibility of financial reports Scope of Duties, and Responsibility .

1. Establish regulations to ensure that its practices conform to the Audit Committee Charter and regularly review the suitability of such regulations.

#### 2. Financial reports and auditing

- 2.1) Review GPSC's financial process and reports to ensure that financial reports reflect an accurate and credible financial position and disclose material information completely under accounting standards, laws, and related standards.
- 2.2) Consider, select, nominate, and propose compensation for the external auditors to obtain independent auditors as well as proposing their removal if they are unable to perform the duties or neglect their duties or act improperly.

- 2.3) Promote independence and provide opinions on the suitability of the external auditors as well as attending the meeting with them in the absence of management at least once a year.
3. Internal control
    - 3.1) Review to ensure that GPSC commands an internal-audit system, an internal-control system, and a risk management system under an appropriate and effective internal-control framework and supervise Corporate Internal Audit to perform under appropriate internal-audit standards.
    - 3.2) Guide management to improve business processes or systems to reduce risks in various matters for an efficient business systems, including accurate and useful financial reports.
    - 3.3) Guide the formulation of the corporate governance policy and monitor, evaluate, and report the performance against corporate governance guidelines.
    - 3.4) Review GPSC's operations and processes of corporate governance under applicable policies, rules, regulations, requirements, operational procedures, and laws as well as applicable instructions.
    - 3.5) Ensure that management sets up a process to deal with complaints and whistleblowing.
  4. Internal Audit
    - 4.1) Review to ensure GPSC's appropriate and efficient internal-audit system and supervise Corporate Internal Audit's conformance to internal-audit standards and consider the adequacy of the personnel and the independence of Corporate Internal Audit.
    - 4.2) Determine the scope of internal auditing by reviewing and approving the annual internal-audit plan and changes to the plan and consider the audit findings of the internal auditors.
    - 4.3) Evaluate the performance of the chief of Corporate Internal Audit.
    - 4.4) Consider and approve the appointment, transfer, and removal of the chief of Corporate Internal Audit.
  - 4.5) Review and approve the Internal-Audit Charter.
  - 4.6) Coordinate and foster common understanding among the Audit Committee, management, Corporate Internal Audit, and the external auditors and consider the scope of the audit with the external auditors so that they are interrelated and mutually supportive.
5. Compliance with applicable laws and regulations
    - 5.1) Review compliance with the securities and exchange laws, SET's requirements, and other applicable laws.
    - 5.2) Consider related-party transactions or transactions of potential conflicts of interest or potential corruption that may impact operations under SET's laws and regulations. This is to ensure that such transactions are sensible and in GPSC's best interests.
    - 5.3) Approve the Audit Committee Charter before presenting it to the Board for approval, and institute a review at least once a year.
    - 5.4) Evaluate its own performance by self-assessment and report findings together with obstacles and inform the Board every year.
  6. Reporting
    - 6.1) Prepare the report of the Audit Committee for disclosure in the annual report. Such report must be signed by the Chairman of the Audit Committee and must contain at least the following information:
      - Opinions on the accuracy, completeness, and credibility of financial reports.
      - Opinions on the adequacy of the internal-control system.
      - Opinions on compliance with the Securities and Exchange Act, SET's requirements, or applicable laws.
      - Opinions on the suitability of the external auditors.
      - Comments on transactions with potential conflicts of interest.
      - Number of meetings of the Audit Committee and meeting attendance of each member.
      - Opinions or overall observations received by

the Audit Committee from its performance under the Charter.

- Other items that the shareholders and general investors should know under the scope of duties and responsibility assigned by the Board.

## 7. Other Duties

7.1) If any auditing or any other operation of the Audit Committee requires knowledge and competency from experts on a particular subject, the Audit Committee may propose to the Board to invite or hire experts on a particular subject at GPSC's expenses. However, the hiring process must be under GPSC's regulations. The Audit Committee is also empowered to appoint a working group to support its performance.

7.2) When the Audit Committee receives an internal-audit report of violation of the laws, rules, regulations, work practices, notifications, or orders related to GPSC's operations, it must notify senior executives to consider ordering the unit responsible for GPSC's operations to rectify it to comply with the policies, rules, regulations, requirements, practices, and applicable laws, and orders related to GPSC's operations.

If the Audit Committee receives an internal-audit report suspecting that there is a transaction or action that may cause serious damage to operations, namely:

- Conflicts of interest,
  - Corruption or irregular transactions or significant deficiency in the internal-control system, or
  - Violation of securities and exchange laws, SET's requirements, or other applicable laws,
- the committee must report it to the Board immediately so that improvement or rectification can be promptly made. If the Board or management

fails to make due improvement or rectification within due time, any member of the Audit Committee may report this to SEC.

7.3) After the Audit Committee has been notified that the external auditors find suspicious circumstances where a director, management, or person responsible for GPSC's operations committed an offense concerning duties and responsibility under the Securities and Exchange Act, Section 281/2, paragraph 2, Section 305, Section 306, Section 308, Section 309, Section 310, Section 311, Section 312, or Section 313, the Audit Committee must inspect and report the preliminary internal-audit result to the Board for acknowledgment and report it to SEC, SET, and the external auditors within 30 days from the date of receiving the notification from the auditors.

7.4) Perform any other task as assigned by the Board or the shareholders with the approval of the Audit Committee or as prescribed by law.

Regarding changes in the scope of duties and responsibility of the Audit Committee, GPSC must disclose the resolution of changes in duties, list of names, and scope of work of the Audit Committee that have been changed under the format prescribed by SET, to SET within three workdays from the date of such change, by the method under the regulations under SET's notification on e-reporting.



## 2. Nomination and Remuneration Committee

The Nomination and Remuneration Committee consists of three members:

No.	Name - Last Name	Position
1.	Gen. Santipong Thampiya	Chairman of the Nomination and Remuneration Committee (Independent Director)
2.	Mr. Noppadol Pinsupa	Member
3.	Mr. Wuttikorn Stithit	Member

Mr. Noranat Simarat, Senior Vice President, Company Secretary and Corporate Governance / Company Secretary, served as Secretary.

### Composition

The Nomination and Remuneration Committee consists of at least three members, at least one person of whom must be an independent director. The members have the same tenures as their directorship. Retiring members are eligible for re-appointment.

1. Select qualified candidates to be nominated as new directors and the President & CEO by establishing criteria and procedures for such selection. Ensure that the selection criteria and processes are rigorous and transparent before proposing them to the Board and/or shareholders' meetings for approval.
2. Consider compensation guidelines for directors and the President & CEO by ensuring that the criteria or procedures are fair and reasonable before proposing them to the Board and/or shareholders' meetings for approval.
3. Nominate qualified directors as members of subcommittees before proposing them to the Board for appointment as seen fit.
4. Provide opinions to the Board on the compensation structure and composition of directors annually.
5. Evaluate the performance of the President & CEO and duly advise the Board on his/her remuneration.
6. Review the succession plan for the President & CEO as well as the list of qualified candidates.
7. Report the performance of the Nomination and Remuneration Committee to the Board for acknowledgment and prepare a report of the Committee, signed by the Chairman, for disclosure in the annual report.
8. Perform other Board-assigned tasks.

### 3. Corporate Governance and Sustainability Committee

The Corporate Governance and Sustainability Committee consists of three members:

No.	Name - Last Name	Position
1.	Mr. Somchai Meesen	Chairman of the Corporate Governance and Sustainability Committee (Independent Director)
2.	Mrs. Nicha Hiranburana Thuvatham	Member (Independent Director)
3.	Gen. Prachapat Vachanaratana	Member (Independent Director)

Mr. Noranat Simarat, Senior Vice President, Company Secretary and Corporate Governance / Company Secretary, served as Secretary.

#### Composition

The Corporate Governance and Sustainability Committee consists of at least three members, no less than half of whom are independent directors. The members have the same tenures as their directorship. Retiring members are eligible for re-appointment.

#### Scope of Duties, and Responsibility

##### Corporate Governance

1. Determine, review, and recommend policies about business ethics and the code of business conduct as well as anti-fraud and anti-corruption under the corporate governance system, and propose them to the Board for approval and implementation as part of GPSC's standard practices.
2. Advise and supervise the performance of directors and management to ensure adherence to the corporate governance code stipulated by supervisory institutions such as SET, SEC, and/or other applicable regulatory agencies.
3. Encourage internal assessment of corporate governance standards and regularly apply for assessment by recognized external organizations.
4. Advocate dissemination of the culture of corporate governance among GPSC's workforce for practical results in both GPSC and its affiliates.

##### Sustainability

1. Determine and review policies and strategies and improve GPSC's sustainable development goals with an appropriate balance in various aspects, including environmental, social, and governance (ESG), compliance with corporate governance guidelines by national and international standards, as well as the corporate social responsibility (CSR) of surrounding communities.
2. Advise and encourage the formulation of GPSC's principles, policies, strategies, and operations under the principles of sustainable development of the business and the corporation to achieve objectives, and prepare for CG ranking performed by neutral external organizations, and support the Board, executives, and employees to ensure their efficient compliance with GPSC's sustainable development guidelines.
3. Supervise, monitor, and assess sustainable development performance to ensure balance and efficiency in the best interests of GPSC and stakeholders.

### Other Duties

1. Consider and approve the assessment forms and the performance assessment outcomes of the Board before presenting them to the Board.
2. Report the performance of the committee to the Board for acknowledgment and disclose it in Form 56-1 One Report. If there are factors or events that may significantly affect GPSC, the committee must immediately report them to the Board for acknowledgment and consideration.
3. Regularly review the suitability of the Corporate Governance and Sustainability Committee Charter.
4. The committee is responsible for appointing its secretary as seen fit.
5. Perform other Board-assigned tasks.

## 4. Risk Management Committee

The Risk Management Committee consists of four members:

No.	Name - Last Name	Position
1.	Mr. Noppadol Pinsupa	Chairman of the Risk Management Committee
2.	Gen. Santipong Thampiya	Member (Independent Director)
3.	Mr. Kongkrapan Intarajang	Member
4.	Mr. Worawat Pitayasiri	Member

Mr. Perapol Umpaivit, Senior Vice President, Corporate Strategy and Risk Management, served as Secretary.

### Composition

The Risk Management Committee consists of at least three directors, comprising executives and independent directors. The tenure is three years in line with the tenures of directors. Members who retire by rotation may be re-appointed by the Board.

### Scope of Duties, and Responsibility

1. Define and review the applicable corporate risk management framework policies.
2. Supervise and support the implementation of corporate risk management in line with the business strategy and goals, including shifting circumstances.
3. Provide recommendations on guidelines, and monitor and assess risk management for the Risk Management and Internal Control Committee (RMCC, management level) for further implementation.
4. Consider corporate risk management reports and comment on the potential risks, including guidelines for setting control or mitigation measures and development of a corporate risk management system for RMCC to ensure continuous efficiency.
5. Supervise risk management plans and risk management systems or processes to reduce impacts on GPSC's business. Monitor and assess the implementation of the risk management framework across the organization to ensure that GPSC commands adequate and appropriate risk management.
6. Supervise and support risk management operation that covers all aspects of risks, including environmental, social, and governance risks (ESG risks) as well as anti-corruption of GPSC and GPSC Group.
7. Support and develop risk management at all levels of the organization, including various tools, continuously and efficiently, and advocate a risk management culture.
8. Report corporate risk management outcomes to the Board for acknowledgment. If there are factors or events that may significantly affect GPSC, the Committee must immediately report them to the Board for acknowledgment and consideration.
9. Meetings of the Risk Management Committee must be held at least once every quarter.
10. Perform other Board-assigned tasks.

# Management Team



**Mr. Worawat Pitayasiri**  
President & CEO



**Mr. Sirimet Leepagorn**  
Chief Operating Officer



**Mr. Thitipong Jurapornsiridee**  
Chief Financial Officer



**Mrs. Sriprapha Sumruatruamphol**  
Executive Vice President, Commercial



**Mr. Kulapat Permbhusri**  
Executive Vice President,  
Corporate Strategy  
and Subsidiary Management



**Mrs. Prinda Ma-imjai**  
Acting Executive Vice President,  
Corporate Services and  
Acting Senior Vice President,  
Government Relations & Public Affairs



**Mr. Manatchai Kongrakkawin**  
Acting Executive Vice President,  
Business Development



**Mr. Adrianus Josephus Van Den Broek**  
Executive Vice President,  
Operations and Maintenance



**Mr. Sutthi Chuesook**  
Executive Vice President,  
Operational Excellence





**Mr. Narongchai Visutrachai**  
Senior Vice President,  
attached to the Chief Executive Officer



**Mrs. Sirobon Boontaworn**  
Senior Vice President, attached to the  
Chief Executive Officer



**Ms. Attayar Sukotanang**  
Senior Vice President,  
Corporate Internal Audit



**Mr. Noranat Simarat**  
Senior Vice President,  
Company Secretary  
and Corporate Governance



**Ms. Dutdao Suksamran**  
Senior Vice President,  
Office of Corporate Legal



**Mr. Laksanapreecha Krutkuntode**  
Senior Vice President,  
attached to the Executive  
Vice President, Business Development,  
and seconded as Manager,  
Business Development  
and Commercial, to NUOVO PLUS



**Mr. Reungpong Reunghirun**  
Senior Vice President, attached to the  
Executive Vice President,  
Corporate Strategy and Subsidiary  
Management,  
seconded as General Manager to CHPP



**Mr. Somsak Lertcharoensermusuk**  
Senior Vice President,  
Project Construction Management



**Mr. Saochai Sookkasem**  
Senior Vice President, SSHE

# Management Team



**Mr. Surajit Bourtherng**

Senior Vice President,  
Plant Operations and Maintenance,  
Rayong Area



**Mr. Rujirote Kasirerk**

Senior Vice President, Plant Operations  
and Maintenance, Other Areas



**Mr. Chartchai Sae Lim**

Senior Vice President,  
Power Plant Phase 3



**Mr. Suratchai Bangluang**

Senior Vice President,  
Central Maintenance Execution



**Mr. Augsuthon Puboonterm**

Senior Vice President, Plant and  
Production Optimization



**Mr. Thananchai Chaisrakaew**

Senior Vice President,  
Plant Engineering and Improvement



**Mrs. Mantana Kunakorn**

Senior Vice President



**Mrs. Patchara Jaroenvuthitham**

Senior Vice President, Business Performance  
and Budgeting Analysis



**Ms. Sukittee Chaiyarak**

Senior Vice President,  
Corporate Finance  
and Investor Relations



**Mr. Krittapong Tangsitthisilpa**  
Senior Vice President,  
Finance and Accounting Shared  
Service Center



**Mr. Nutthapong Puangmanee**  
Senior Vice President,  
Business Development Thailand and  
International



**Mr. Jaruwat Singsomdee**  
Senior Vice President,  
Subsidiary and Investment  
Management



**Ms. Sirichan Chotchaisathit**  
Senior Vice President,  
Industrial Customers Sales



**Mr. Perapol Umpaivit**  
Senior Vice President,  
Corporate Strategy and Risk Management



**Mr. Suabtragool Khowinij**  
Acting Senior Vice President,  
Business Development  
Focus Country



**Mr. Pruet Kampee**  
Acting Senior Vice President,  
Strategic Procurement and Warehouse



**Mr. Renaud Pilleul**  
Acting Senior Vice President,  
Customer Relations and Contract Management

## 7.4 Management Information

### 7.4.1 As of December 31, 2023, GPSC's senior vice presidents upward were:

No.	Name	Position
1.	Mr. Worawat Pitayasiri	President & CEO
2.	Mr. Sirimet Leepagorn	Chief Operating Officer
3.	Mr. Thitipong Jurapornsiridee	Chief Financial Officer
4.	Mrs. Sriprapha Sumruatruamphol	Executive Vice President, Commercial
5.	Mr. Kulapat Permbhusri	Executive Vice President, Corporate Strategy and Subsidiary Management
6.	Mrs. Prinda Ma-imjai	Acting Executive Vice President, Corporate Services and Acting Senior Vice President, Government Relations & Public Affairs
7.	Mr. Manatchai Kongrakkawin	Acting Executive Vice President, Business Development
8.	Mr. Adrianus Josephus Van Den Broek	Executive Vice President, Operations and Maintenance
9.	Mr. Sutthi Chuesook	Executive Vice President, Operational Excellence
10.	Mr. Narongchai Visutrachai	Senior Vice President, attached to the Chief Executive Officer
11.	Mrs. Sirobon Boontaworn	Senior Vice President, attached to the Chief Executive Officer
12.	Ms. Attayar Sukotanang	Senior Vice President, Corporate Internal Audit
13.	Mr. Noranat Simarat	Senior Vice President, Company Secretary and Corporate Governance
14.	Ms. Dutdao Suksamran	Senior Vice President, Office of Corporate Legal
15.	Mr. Laksanapreecha Krutkuntode	Senior Vice President, attached to the Executive Vice President, Business Development, and seconded as Manager, Business Development and Commercial, to NUOVO PLUS
16.	Mr. Reungpong Reunghirun	Senior Vice President, attached to the Executive Vice President, Corporate Strategy and Subsidiary Management, and seconded as General Manager to CHPP
17.	Mr. Somsak Lertcharoensermsuk	Senior Vice President, Project Construction Management
18.	Mr. Saochai Sookkasem	Senior Vice President, SSHE
19.	Mr. Surajit Bourtherng	Senior Vice President, Plant Operations and Maintenance, Rayong Area
20.	Mr. Rujirote Kasirerk	Senior Vice President, Plant Operations and Maintenance, Other Areas
21.	Mr. Chartchai Sae Lim	Senior Vice President, Power Plant Phase 3
22.	Mr. Suratchai Bangluang	Senior Vice President, Central Maintenance Execution
23.	Mr. Augsuthon Puboonterm	Senior Vice President, Plant and Production Optimization
24.	Mr. Thananchai Chaisrakaew	Senior Vice President, Plant Engineering and Improvement
25.	Mrs. Mantana Kunakorn	Senior Vice President
26.	Mrs. Patchara Jaroenvuthitham	Senior Vice President, Business Performance and Budgeting Analysis



No.	Name	Position
27.	Ms. Sukittee Chaiyarak	Senior Vice President, Corporate Finance and Investor Relations
28.	Mr. Krittapong Tangsitthisilpa	Senior Vice President, Finance and Accounting Shared Service Center
29.	Mr. Nutthapong Puangmanee	Senior Vice President, Business Development Thailand and International
30.	Mr. Jaruwat Singsomdee	Senior Vice President, Subsidiary and Investment Management
31.	Ms. Sirichan Chotchaisathit	Senior Vice President, Industrial Customers Sales
32.	Mr. Perapol Umpaivit	Senior Vice President, Corporate Strategy and Risk Management
33.	Mr. Suabtragool Khownij	Acting Senior Vice President, Business Development Focus Country
34.	Mr. Pruet Kampee	Acting Senior Vice President, Strategic Procurement and Warehouse
35.	Mr. Renaud Pilleul	Acting Senior Vice President, Customer Relations and Contract Management

Executives No. 1-9 are the first four “executives” according to SEC’s definition.

## Duties and Responsibilities of the President & CEO

The President & CEO has the authority and duties concerning the management of GPSC's operations as assigned by the Board and must manage under the Board-approved plans and budgets with stringency, honesty, and caution while guarding the best interests of GPSC and shareholders. These authority and duties include the following matters and activities:

1. Carry out GPSC’s day-to-day operations
2. Implement Board-approved plans and budgets
3. Prepare GPSC’s reports, plans, and financial statements and present them to the Board every quarter
4. Prepare GPSC’s commercial policies and engage in any contracts or obligations concerning the sale of products on behalf of GPSC, now and in the future, for a period of up to 20 years and worth up to THB 5,000 million. If there is an additional investment, he/she must conform to GPSC’s regulations on investment criteria before approving any contract or obligation.
5. Engage in or cancel any contract or obligation other than those specified in Item 4. up to a value of THB 300 million.
6. Employ, appoint, remove, transfer, promote, demote, deduct salary or wages, take disciplinary action, or terminate employees on behalf of GPSC, and appoint

executives and delegate authority and duties to such personnel as seen fit.

In addition, the Board has granted a power of attorney to the President & CEO for managing GPSC under the following principles and scope of authority:

- Authority to manage business against GPSC’s objectives, articles of association, regulations, policies, rules, requirements, orders, and resolutions of the Board and /or the shareholders' meetings in all respects.
- Authority to command, contact, order, and operate, and sign juristic acts, contracts, orders, announcements, or any necessary and appropriate documents to fulfill the above operations.
- Authority to delegate and/or assign others to perform specific tasks and such delegation and/or assignment must be within the scope of authorization under the specific letter of authorization and/or under the rules, regulations, requirements, or orders of the Board and/or GPSC.

However, the exercise of authority of the President & CEO as mentioned above cannot be applied if he/she has a vested interest or may have a conflict of interest in any manner with GPSC.

### 7.4.2 Compensation Policy for Executive Directors and Executives

The compensation for all executives is under the key performance indicators (KPIs) jointly set by the Board, President & CEO, and senior management executives. These KPIs comprise four perspectives, namely financial, stakeholder, internal work process, and learning and growth of GPSC and its employees, covering both annual performance (short-term) and assessment of competency and leadership to ensure that the organization will pursue its long-term strategic goals. All executives have respective performance indicators corresponding to their roles. Each year the Board considers salary adjustments for the President & CEO, while the President & CEO considers salary adjustments of senior executives, based on their performances. Such salary adjustments must fall under GPSC's criteria.

### 7.4.3 Total Compensation for Executive Directors and Executives

#### Cash compensation

- Executives

	2023
Persons	35
Compensation (Baht)	161,660,830.00

#### Other compensation

- Other cash compensation, including provident fund contribution and other income:

	2023
Persons	35
Compensation (Baht)	100,264,797.88



## 7.5 Employee Data

Below is GPSC's employee headcount (excluding senior vice presidents upward) by function as of December 31, 2023, with the following details:

No.	Function	Persons as of December 31, 2023
1.	President & CEO	4
2.	Chief Operating Officer	451
3.	Chief Financial Officer	74
4.	EVP, Corporate Strategy and Subsidiary Management	29
5.	EVP, Business Development	36
6.	EVP, Commercial	48
7.	EVP, Corporate Services	136
8.	Company Secretary and Corporate Governance	15
9.	Corporate Internal Audit	7
<b>Total</b>		<b>800</b>

### Employee Compensation (excluding senior vice presidents upward)

Below is compensation, which consists of salary, bonus, provident fund contributions, and other income in 2023 (from January 1 to December 31, 2023) with the following details:

No.	Function	Remuneration (Baht) as of December 31, 2023
1.	President & CEO	8,604,158.55
2.	Chief Operating Officer	745,758,409.51
3.	Chief Financial Officer	112,938,135.62
4.	EVP, Corporate Strategy and Subsidiary Management	45,578,305.69
5.	EVP, Business Development	72,503,978.52
6.	EVP, Commercial	73,605,905.96
7.	EVP, Corporate Services	191,763,614.30
8.	Company Secretary and Corporate Governance	26,182,045.82
9.	Corporate Internal Audit	15,425,288.95
<b>Total</b>		<b>1,292,359,842.92</b>

## HR Management Policy

GPSC recognizes that employees are priceless resources and key to driving business growth. We therefore value human resource (HR) management, covering development of caliber, employee care, long-term talent retention, as well as incentives and employee engagement. We believe that efficient HR management raises business competitiveness and drives the organization toward its goals, which leads to the vision of being an international leading power company in innovation and sustainability.

Our challenge in HR development for sustainable operations is to prepare and develop employees' capability in line with the strategic direction of the corporation under ever-changing world conditions of the economy, society, environment, and technology, which may affect the skills, knowledge, and abilities of employees, as well as promoting employee engagement. In 2023 the leadership capability of executives and employees was strengthened to support future growth of the organization, including recruitment of internal personnel who were ready to fill vacancies promptly.



## Performance of HR and Organizational Development Strategies

In HR management this year, we defined an HR management strategic plan that was connected, consistent, and in the same direction as our 4S business strategy as well as shifting situations both in and outside GPSC, as follows:

1. **Organization Transformation & Agile.** The plan strives to transform the organization for agility by reviewing the organization structure and operating model of GPSC Group while preparing a plan to improve the business process and workflow for efficiency and agility to support the new way of work and the SMART working environment to underlie future business transformation.
2. **Lean Process with Single Data Platform.** The plan improves business processes, reduces those that do not create value, investigates guidelines for applying technology to work (automation), and improves a corporate-wide employee database through business processes on Enterprise Resource Planning (ERP) system for more efficient, more accurate, and faster work. It includes continuous improvement of such processes in all aspects to support operational excellence and long-term business growth.
3. **Develop Core Competency and Functional Competency.** The plan strives to develop employees' capability in core competencies expected from all employees and functional competency suitable for their career paths to ensure that they can drive the organization in the desired direction and strategy under the ever-changing environment. Strengthen Core Value
4. **Strengthen Core Values.** The plan cultivates ACT SPIRIT values among employees in every business process so that they may adopt these values as their own way of work. This in turn fosters a culture and environment that promotes creativity, flexibility, adaptability, and continuous learning, commitment for success with a focus on innovation, and aspiration to be pioneers in creating new energy-related innovations in the market. Included is continuous development of business processes and collaboration from every sector to achieve sustainable growth and maximum benefit for GPSC.



5. **Develop Employer Branding.** The plan focuses on understanding employees' appreciated values and communicates GPSC's values through employer branding with employees and external individuals whose potential aligns with our strategic needs. This aims to instill pride among employees, raise awareness, and attract capable people to work for GPSC in the future.
6. **Create a positive employee experience** to foster their engagement and work happiness through studying and analyzing data from interviews with executives and employees to design good work experiences for employees throughout their GPSC careers.

## **Key Performance Aligning with HR and Organizational Development Strategies**

GPSC values organizational development in parallel with HR development across all levels. Personnel with high potential will spearhead GPSC's sustainable growth. GPSC implements holistic employee stewardship and capacity building as follows:

### **1. Organizational Development**

We strive to create and promote ACT SPIRIT as corporate values by adjusting new behaviors in line with the strategy and global transformation while fostering the corporate culture through efficient work collaboration, communication, and creative activities. We provide useful information in working with each group of employees to ensure their happiness at work and a uniform move toward GPSC's direction and goals.

### **2. HR Development**

Employees' potential is key to increasing GPSC's competitiveness, especially amid the ongoing transformation of the power and energy business. Hence, GPSC recognizes the development of employees to command essential knowledge and skills suiting GPSC's direction by setting clear and appropriate guidelines for employee development fitting our operations through the establishment of GPSC Academy as the center for employee development programs.

### **3. Spark Accelerator Management Trainee Program**

GPSC has set a key strategy to create New S-Curve Businesses. Therefore, fostering and honing skilled leaders of the future is accorded high importance. Consequently, it has initiated a "Spark Accelerator Management Trainee Program" to develop future leaders of GPSC Group, the leading innovation flagship in the power and smart energy business of PTT Group. Preparing high-potential employees to become GPSC's future leaders through learning mechanisms that are diverse and challenging, both domestically and internationally, the project is open to both employees and external personnel. Participants go through five key job rotations of GPSC in three years, such as corporate strategy and subsidiary management, business development, commerce, financial management, and operation.

The Spark Accelerator Management Trainee Program selected four people for the first-generation program. This project started in July 2020. For the second generation, seven were selected, and the project started in February 2023. The program provides a mentor at the executive level to take care of the employees. In addition, there is a system to clearly report the outcomes to GPSC's senior executives. In addition, GPSC has arranged for the employees to attend training courses on leadership and business programs to groom them and enhance their potential.

This program is also our project to actively retain high-potential employees through playing a key role in driving GPSC's essential strategies in line with our business growth plan.

### **4. Succession Planning**

GPSC established a succession management strategy, prepared a succession plan for key positions, and prepared potential executives to develop and inherit key positions from incumbent executives that will vacate those positions upon retirement or take up new positions arising from business expansion plans. The systematic succession plan for key positions and the key actions under the succession plan are:

1. Preparation of success profiles of key positions.
2. Grouping of potential executives for key management positions.
3. Assessment of these executives' competency through an assessment center covering competency, interpersonal, business/management, and personal attributes.
4. Applying the assessment outcomes to determine individual development plans (IDPs).

In addition, to ensure that GPSC has well prepared its leaders at various levels to support its growth, the success profiles and succession plans are prepared for mid-level executives along with career paths for all employees to aid them to participate in setting their own career progression goals to ensure shared success and sustainable progress between the employees and GPSC.

## 5. Knowledge Management

GPSC conducts this to develop its employees' competencies to ensure reduced risks, improved work efficiency, and operational excellence to support its achievement of goals by nurturing the ambience and creating a culture conducive to learning and exchange of knowledge. We aim for all employees to command the concept of lifelong learning and creating new knowledge and innovation, focusing on common learning among GPSC for the transfer and exchange of knowledge, experience, and skills in parallel with receiving knowledge from the outside continually. These moves further develop knowledge and creativity toward best practices by using technology to support convenient access to knowledge through the Knowledge Management Portal system. Under the system, employees can create a body of knowledge, knowledge sharing, and study the knowledge from fellow employees to lead to extend knowledge and innovation.

## 6. Learning Management System (LMS)

GPSC relies on LMS, which administers learning activities. LMS houses online e-learning in various categories, totaling some 100 courses, including business, technology, and finance. Employees can access learning around the clock through the website and the iSPARK application. LMS has slashed training expenses as well as related expenses, including travel, food, venue, and accommodation.

This year it trimmed expenses from estimated training expenditure by about Baht 8.35 million for a total of 1,104 trainees (the entire workforce). LMS consists of:

1. Course Management system, which consists of classroom learning and e-Learning. Users are of three levels: trainee, trainer, and system administrator. Access to the system can occur anywhere, anytime.
2. Content Management, which consists of tools for creating contents, which work well with lessons of all forms: text-based, VDO, and Infographic.
3. Test and Evaluation System, which consists of test batteries and individual course evaluation
4. Course Tools, which consist of assorted communication tools between GPSC, trainees, and trainers, made possible by News Feed.
5. Data Management System and Training Records.

## Performance Evaluation

Our performance management system (PMS) has provided a clear and systematic evaluation of employees' performance to drive our performance toward goals and continuous development. We adjusted the behavioral assessment in line with the core competencies and ACT SPIRIT corporate values. Evaluation of employees was divided into two aspects, namely behavioral evaluation and performance evaluation through their KPIs. All employees must set individual indicators aligned with GPSC's strategy and goals. Assessment outcomes would be applied to identify suitable career development directions for employees in the short and the long terms. It was also used as part of the consideration to adjust the compensation and promotion in line with corporate performance.

## Key Projects

### GPSC Academy Core Program

GPSC develops its employees through "GPSC Academy", a center for employee development programs. For core competencies, it aims to develop all employees. GPSC designs curricula in collaboration with leading personnel development and leadership consultants. It organizes development programs focusing on business management, people management, and teamwork by using a program entitled the "Core Program". Under this program, there is

a special program for employees at each group level, ranging from the self-development Intensive Development Program, the Team Management Program to the Leadership Development Program. This ensures that employees are developed at appropriate levels of potential. The design of each year's leadership development courses is based on the key business strategy and issues concerning personnel stewardship.

#### **Leadership Transformation Program**

GPSC develops the group of leader employees to ensure that they appreciate their leadership roles as people managers, which will help them understand teams and support them efficiently while enabling teams to see an overview of GPSC's strategy that must be jointly driven to succeed. We also ensure that those leaders understand the strategic direction of the organization under an ever-changing world in all aspects and can create targets that align with and support GPSC's goals.

#### **Labor Treatment and Labor Rights**

As for labor treatment and labor rights, GPSC Group abides by its personnel administration policy and aligns with the Labor Protection Act of 1998, which contains policies on hiring and fair dismissal. In addition, GPSC Group has formed a welfare committee representing the three provinces it operates in, namely Rayong, Chon Buri, and Bangkok. The committee provides a negotiation channel for employees on welfare, work conditions, and other employee matters. Any GPSC Group employee is eligible to file for candidacy on the committee. In recruitment, the committee relies on representative election so that views may be equitably expressed. Today there are 25 members on the committee, serving a two-year term. The committee formally discusses issues on labor treatment and labor rights with representatives of the employer every quarter.

#### **Diversity**

GPSC accepts the culture of differences and diversity of each individual, including gender, race, nationality, religion, political view, socio-economic status, age, domicile, disability, and physical disorder. We complied with the Empowerment of Persons with Disabilities Act of 2007 (including amendments) and supported those with disability through contribution to the Empowerment of Persons with Disabilities Fund as and when required by law. We recognize that diversity in the organization will help GPSC respond creatively to different needs of stakeholders and changing nature of business, resulting in sustainable corporate benefit. Therefore, we specify the qualifications for recruiting personnel and provide HR development equality to prepare all employees for career advancement. In 2023 GPSC had 30.52% female executives. Information on diversity and the compensation ratio of female employees to male employees are disclosed on our official website under Sustainability Performance Data.

#### **Work Safety**

GPSC takes seriously employees' work safety and has declared related policies on the management of quality, security, safety, health, and the environment to ensure all employees' safety, namely:

1. A policy on anti-narcotics and the drinking or consumption of alcoholic beverages of other substances that affect the nervous system
2. A policy on hearing conservation
3. Vision, corporate culture, and values on quality, security, safety, health, and the environment
4. Warning symbols about safety, occupational health, and work environment as well as messages about employer's and employee's rights and responsibility
5. A policy on 5S and maintenance of a good work environment
6. A policy on safe driving.

In addition, GPSC has appointed a work safety, health, and work environment committee and appointed a work safety officer and a safety chief for every province and every site.

## Employee Compensation and Welfare

We assess and determine employees' compensation and benefits annually to ensure appropriate and competitive compensation with peer companies.

In addition to salaries and bonuses, GPSC provides benefits to all employees in various forms that correspond to their needs:

1. Social Security Fund for those in the social security system to receive compensation benefits when experiencing mishaps, illnesses, disability, or deaths which are not work-related, including maternity, child allowances, old age, and unemployment.
2. Provident Fund for employees and their families for those that voluntarily become members. GPSC contributes to the fund whereas employees contribute to the fund as part of their savings as defined by GPSC. In 2023, 94.38% of our employees were members of the fund.
3. Medical coverage for employees and family members (spouses and children) under the conditions set by GPSC. We also provide annual check-ups for employees.
4. Life insurance offers security to employees and their families.
5. Housing allowances for employees who work full time outside Bangkok, Nonthaburi, Pathum Thani, Samut Prakan, Samut Sakhon, and Nakhon Pathom as specified by GPSC.
6. Extra allowances for shift employees who work on odd days and hours from other employees as specified by GPSC.
7. Additional allowances for on-duty employees to support them on duty or on standby in the areas or accommodation as specified by GPSC.
8. Children's educational fund according to the levels and types of educational institutions as specified by GPSC
9. Service awards are given when employees' years of service reach certain periods as specified by GPSC.
10. Optional welfare is the welfare that GPSC requires employees to express their intention to receive or waive the right to do so but choose alternative welfare as specified by GPSC.

11. Substitute welfare is the welfare that GPSC provides for employees who have waived their rights to optional welfare as specified by GPSC.
12. Uniforms.
13. Transport for employees working in Rayong and Chon Buri areas.
14. Other allowances as specified by GPSC, such as exercise gyms, parking fees, and funeral assistance.

## Enhancement of Employee Engagement

Since employee engagement is one of the driving forces of GPSC Group for its achievement of goals and a good corporate image, it requires an annual third-party survey. The findings are used to develop programs aiming at maintaining and promoting further engagement. Below is how it is done:

- Send out questionnaires
- Compile responses
- Present findings to executives
- Develop plans to maintain and promote further engagement.

GPSC focuses on enhancing employee engagement by relying on the ACT SPIRIT values to nurture the corporate culture, leveraging HR systems and communication tools in addition to activities so that employees may learn, understand, and apply them to their work, thus breeding the desired work behavior. It also focuses on efficient internal communication for mutual understanding among executives and employees as well as promoting satisfaction and employee engagement. This year the employee turnover rate was 5.89%, and the employee engagement score stood at 61%.



## 7.6 Other Key Information

### 7.6.1 List of Officers Responsible for the Following Key Duties at GPSC:

#### Company Secretary

Board of Directors' Meeting No. 5/2023 of April 25, 2023, appointed Mr. Norarat Simarat, Senior Vice President, Company Secretary and Corporate Governance, as Company Secretary with effect from May 1, 2023, with duties and responsibility as follows:

1. Prepare and maintain GPSC's documents such as the Director Rosters, notices and minutes of the Board meetings, notices and minutes of the shareholders' meetings, and annual reports.
2. Maintain reports of conflicts of interest as submitted by directors or management.
3. Arrange Board meetings and shareholders' meetings.
4. Advise on the requirements and regulations that the Board and management should be aware of.
5. Organize training and orientation and provide essential information for the performance of duties of current and new directors.
6. Supervise and coordinate to ensure that GPSC complies with laws, regulations, requirements, and resolutions of Board meetings and shareholders' meetings as well as corporate governance policies and the code of business conduct completely and accurately.
7. Perform other tasks as specified by the Capital Market Supervisory Board.

Mr. Norarat Simarat possesses the following educational background and Company Secretary training as follows:

- Master of Laws, Indiana University, U.S.A.
- Bachelor of Laws, Thammasat University
- Energy Academy for New Executives (TEA 9).

His profile and qualifications appear in Attachment 1.

#### Accounting Controller

GPSC has assigned Mr. Krittapong Tangsitthisilpa, Senior Vice President, Finance and Accounting Shared Service Center, to be directly responsible for supervising GPSC's accounting. His profile appears in Attachment 2.

#### Chief of Corporate Internal Audit

GPSC assigned Ms. Attayar Sukotanang, Senior Vice President, Corporate Internal Audit, to head Corporate Internal Audit. Her profile appears in Attachment 3.

#### Chief of Compliance

GPSC assigned Mr. Norarat Simarat, Senior Vice President, Company Secretary and Corporate Governance, to head Compliance and ensure corporate compliance with applicable regulations. His profile appears in Attachment 1.

## 7.6.2 List of Chief Contacts for Investor Relations

### Contact Information

**1. Ms. Sukittee Chaiyarak**

Position: Senior Vice President, Corporate Finance and Investor Relations

Phone: 0-2140-4600

Email: [sukittee.c@gpscgroup.com](mailto:sukittee.c@gpscgroup.com)

**2. Mr. Pongsak Plai-ngam**

Position: Investor Relations Division Manager

Phone: 0-2140-4646

Email: [pongsak.pl@gpscgroup.com](mailto:pongsak.pl@gpscgroup.com)

## 7.6.3 Audit and Other Fees

### Audit Fees

GPSC Group paid a total of THB 7.94 million in audit fees this fiscal year to the external auditors: THB 0.94 million for its own audit and THB 7.00 million for subsidiaries' audits.

### Other Fees

GPSC Group paid a total of THB 0.78 million in non-audit fees this fiscal year to the audit office where the external auditors belong for auditing GPSC Group's compliance with the terms and conditions of investment promotion certificates together with counsel on accounting and tax. The group paid THB 2.34 million to auditors' related parties or businesses.



## 8 | Key Corporate Governance Implementation

### 8.1 Performance of the Board of Directors in 2023

#### Corporate Governance and Code of Business Conduct

The Board of Directors has reviewed and improved the Corporate Governance and Code of Business Conduct Handbook (CG Handbook). The revision, first enforced in 2020, provides guidelines for all employees for performing their duties and conducting business to ensure that GPSC's operations are efficient and effective and that its management, characterized by development toward excellence, transparency, and accountability, will foster stakeholders' confidence in GPSC as a leading SET-listed company whose business is guided by governance toward sustainable growth.

#### Policies, Directions, Business Strategies, and Key Performance Indicators

- In 2023 the Board reviewed and defined the policies, directions, and business strategies of GPSC and its affiliates as well as its vision, mission, and goals.
- In 2023 the Board approved financial and non-financial Key Performance Indicators (KPIs) under the Balanced Scorecard: financial, stakeholder (customers' satisfaction), internal process, and learning & growth (employee engagement and succession planning) perspectives.

#### 8.1.1 Nomination, Development, and Performance Assessment of the Board

##### 1. Independent Directors

As of December 31, 2023, out of the 13 directors of the Board, GPSC had six independent directors, who are independent of its management and major shareholders, in line with the SEC's criteria which stipulated that at least one third of the directors, but no fewer than three, must be independent directors.

The Board has assigned the Nomination and Remuneration Committee to nominate directors, based on all shareholders' recommendations, and the Director's Pool of recognized

organizations, which provides a list of qualified persons in different fields. This Committee considers the qualifications of each qualified candidate based on GPSC's definition of independent directors, considering those set forth in the notification of the Capital Market Supervisory Board, as detailed below.

1. Holds no more than 0.5% of the voting shares of GPSC, its parent company, subsidiary, associated company, major shareholder, or controlling person of GPSC, including the shares held by persons related to the independent director.
2. Is not or has never been an executive director, employee, worker, salaried consultant, or controlling person of GPSC, its parent company, subsidiary, associated company, sister company, major shareholder, or controlling person, unless such status has ceased for at least two years. However, the prohibited characteristics exclude cases where the independent director used to be a government official or an adviser in a government agency that is a major shareholder or a controlling party of GPSC.
3. Is not related by blood or legally registered as the father, mother, spouse, sibling, and offspring, or spouse of the offspring of any other executive, major shareholder, controlling person, or any person who will be nominated as an executive, or controlling person of GPSC or its subsidiary.
4. Does not have or has never had any business relationship with GPSC, its parent company, subsidiary, associated company, major shareholder, or controlling person in a way that such relation may impede the person from exercising independent views, and should not be or has never been a key shareholder or controlling person for persons with business relations with GPSC, its parent company, subsidiary, associated company, major shareholder, or controlling person, unless such status has ceased for at least two years. Such "business relationship" includes engagement in ordinary business transactions, offering or taking on

leases of any immovable properties, conducting transactions concerning assets or services, or granting or accepting any financial support by way of offering or taking on loans, guarantees, asset-based collaterals, including any other similar action, which results in GPSC or the counterparty being indebted to the other party in the amount of 3% or more of the net tangible assets of GPSC or THB 20 million or more, whichever is lesser, based on the calculation of the related transaction value under the notification of the Capital Market Supervisory Board where the consideration of such indebtedness includes any indebtedness occurring in one year before the commencement date of the business relationship with such person.

5. Is not or has never been an auditor of GPSC, its parent company, subsidiary, associated company, major shareholder, or controlling person, and should not be or has never been a key shareholder, a controlling person, or a partner of the current auditing firm of GPSC, or of its parent company, subsidiary, associated company, major shareholder, or controlling person, unless such status has ceased for at least two years.
6. Is not providing or has never provided professional services, legal consulting, nor financial consulting services with a fee more than THB 2 million per year from GPSC, its parent company, subsidiary, associated company, major shareholder, or controlling person, and should not be or has never been a key shareholder, controlling person, or partner of such professional services provider, unless such status has ceased for at least two years.
7. Is not a director appointed to represent GPSC, a major shareholder, or a shareholder connected to a major shareholder.
8. Is not operating under a similar business nature and significant competition with GPSC or its subsidiaries, or not a significant partner of a partnership, executive director, worker, employee, or salaried consultant, or holding more than 1% of voting shares of any other company operating under similar business nature and significant competition to GPSC or its subsidiaries.
9. Is not under any conditions that may impede him or her from expressing independent views.

GPSC's definition of independent directors is more stringent than that of the Capital Market Supervisory Board, such as the requirement that its independent directors must not hold more than 0.5% of the voting shares in GPSC, its parent company, subsidiary, associated company, major shareholder, or controlling person of GPSC, including the shares held by persons related to the independent director (this is 1% under the Capital Market Supervisory Board's definition). It has also limited the consecutive terms of office for independent directors to no more than nine years (or three consecutive terms).

## 2. Nomination of Directors and Top Executives

The Board has appointed the Nomination and Remuneration Committee to select and screen suitable candidates for appointment as directors. In this process, the Committee reviews recommendations from major shareholders and free float as well as Director's Pools of reliable organizations, which provides a list of qualified persons in different fields, before reviewing the qualifications of the candidates in the following aspects:

- Must be qualified and have none of the prohibited characteristics under the laws and the Public Company Limited Act; possess no characteristics indicating a lack of suitability in respect of trustworthiness in managing businesses whose shares are held by public shareholders as specified by law and in SEC's notifications.
- Must not be over 70 years of age.
- Must be knowledgeable, capable, and possess diverse expertise, skills, and work experience in line with GPSC's business strategies and the Board's "Director Skill Matrix".
- Must be capable of devoting sufficient time to GPSC, in good health, capable of regularly attending, contributing to, and freely expressing opinions at Board meetings, and have a good record of work performance and ethics, recognized by society.
- Must command good leadership and oversee performance of executives with efficiency and effectiveness.
- Must hold directorship in not more than four listed companies.



The diversity perspective is incorporated in the selection process, which must be free from discrimination on grounds of gender, race, nationality, religion, age, cultural background, or other differences.

Nomination of directors to replace those who complete their terms and retire at the upcoming AGM is publicized on GPSC's website so that shareholders may propose qualified directors in advance of the meeting. The Board considers their qualifications and proposes qualified candidates at the AGM under GPSC's criteria.

## Appointment of Directors

### 1. Appointment of Directors to Replace Directors Retiring by Rotation

The Nomination and Remuneration Committee selects and nominates qualified candidates as defined by GPSC's nomination criteria to recommend to the Board for approval and to be subsequently proposed at the AGM for approval by a majority of votes by the shareholders attending the meeting. The candidates that win the next highest votes are also to be appointed to match the number of directorships up for appointment at the time.

- A shareholder commands one vote for each share held
- Shareholders must vote for each individual candidate nominated for directorship
- In case the votes cast for candidates in descending order are tied, which would otherwise cause the number of directors to be exceeded, the chairman of the meeting must cast the decisive vote.

### 2. Appointment of Directors to Fill Vacancies Incurred by Reasons other than Expiry of Tenure

The Committee selects and nominates qualified candidates as defined by GPSC's nomination criteria to recommend to the Board for appointment to fill vacancies. At least three-quarters of the total votes of the remaining directors are required for the appointment of new directors. Newly appointed directors are to be in office for as long as the remaining terms of office of their predecessors.

## Termination of Directorship

1. At each AGM, one third of the directors must retire from office by rotation. If the number is not a multiple of three, the number nearest to one third of the total number of the directors must retire by rotation. A retiring director may be re-elected.
2. Apart from retirement upon expiry of his or her tenure, a director leaves office upon death, resignation, lack of required qualifications, or having prohibited characteristics under the Public Company Limited Act, Securities and Exchange Act, resolution of the shareholders' meetings, or court order.
3. Any director who wishes to resign must submit a resignation letter to GPSC. The resignation is to become effective when the letter reaches GPSC. A director who resigns may inform the registrar of his or her resignation.
4. Shareholders' meetings may reach a resolution removing any director from office before the expiration of his or her tenure by a vote of no less than three-quarters of the total voting shareholders attending the meeting. The shares held by the voting shareholders must, in aggregate, be no less than one-half of the number of shares held by the shareholders attending the meeting and eligible to vote.



## Directors' Development

It is GPSC's policy to encourage its directors to constantly develop themselves to enhance their performance efficiency. The training sessions attended by these directors were as follows.

### Training with Thai Institute of Directors (IOD)

No.	Name – Last Name	DCP	DAP	RCP	SGP	AACP	RCL	Others
1.	Mr. Pailin Chuchottaworn	51/2004	24/2004					FND 14/2004 ACEP 4/2012
2.	Gen. Prachaphat Vatchanaratana				6/2023			
3.	Gen. Santipong Thampiya		144/2018					BNCP 14/2022
4.	Mrs. Nicha Hiranburana Thuvatham		164/2019					
5.	Mr. Chalermphol Pensoot		196/2022					RFP 7/2022: Financial Reporting Cases: A Monitoring Guide for Board
6.	Mr. Somchai Meesen		161/2019			44/2022		RFP 6/2022: Financial Reporting Cases: A Monitoring Guide for Board
7.	Mr. Noppadol Pinsupa	146/2011						FSD 12/2011 Briefing on International Anti-Corruption Cases and Practices
8.	Mr. Wuttikorn Stithit	158/2012						
9.	Mr. Kongkrapan Intarajang	119/2009		21/2009				
10.	M.L. Peekthong Thongyai	15/2002						
11.	Ms. Pannalin Mahawongtikul	279/2019					28/2022	SBM 9/2020 IOD National Director Conference 2019: “Board of the Future” IOD National Director Conference 2021: “Leadership Behind Closed Door”
12.	Mr. Bandhit Thamprajamchit	187/2014		52/2022				ELP 27/2022
13.	Mr. Worawat Pitayasiri	158/2012						

DCP : Director Certification Program  
 DAP : Director Accreditation Program  
 RCP : Role of the Chairman Program  
 SGP : Subsidiary Governance Program  
 AACP : Advanced Audit Committee Program  
 RCL : Risk Management Program for Corporate Leaders  
 ACEP : Anti-corruption for Executive Program

RFP : Refreshment Training Program  
 SBM : Strategic Board Master Class  
 FSD : Financial Statements for Directors  
 FND : Finance for Non-Finance Directors  
 ELP : Ethical Leadership Program  
 BNCP : Board Nomination & Compensation Program

## Additional Directors' Training in 2023

This year, the directors who attended training consisted of

- Gen. Prachaphat Vatchanaratana – Subsidiary Governance Program (SGP), Class 6/2023, IOD
- Gen. Santipong Thampiya – The Executive Program in Energy Literacy for a Sustainable Future, Class 18, Thailand Energy Academy
- M.L. Peekthong Thongyai – The Executive Program in Energy Literacy for a Sustainable Future, Class 18, Thailand Energy Academy
- Ms. Pannalin Mahawongtikul – TLCA CFO Professional Development Program (TLCA CFO CPD) 2023, Thai Listed Companies Association.

## Orientation of New Directors

GPSC organized orientation for new directors before their first Board meeting to inform them of its business policies and applicable information such as the nature of the business, business strategies, organizational structure, shareholding structure, operating results, corporate governance, and code of business conduct as well as laws and regulations beneficial to their roles as directors.

In 2023 the three following directors attended such orientation:

1. Mr. Bandhit Thamprajamchit
2. Gen. Prachaphat Vatchanaratana
3. Mrs. Pantip Sripimol

## Performance Assessment of the Board and Sub-committees

### Assessment Process and Criteria

In 2023 GPSC conducted the performance assessment of the Board covering three assessment forms: Board Assessment Form (entire Board), Individual Director Assessment Forms (self-assessment and cross-assessment), and Sub-committee Assessment Forms (entire committee) for the four sub-committees.

Assessment scales: the percentages represent the assessment results as follows:

- Over 85% = Practice regularly / Excellent / Most Appropriate
- Over 75% = Practice most of the time / Very Good / Very Appropriate
- Over 65% = Practice sometimes / Good / Appropriate
- Over 50% = Rarely practice / Satisfactory
- Below 50% = Never practice / Need Improvement

### Assessment Results of the Board and Sub-committees:

1. The Board Assessment (entire Board) comprises seven topics:
  1. Composition and qualifications of the Board
  2. Monitoring of GPSC's strategies and performance
  3. Results of GPSC's performance and succession plans for senior executives
  4. Monitoring of management and risk management
  5. Environment, society, and good governance
  6. Meeting of the Board
  7. Self-development of the Board.

 **Assessment result: "Excellent" (94.24%)**

2. Individual Director Assessment (self-assessment and cross-assessment) comprises five topics:

1. Accountability for decision-making and one's own actions on reasonable ground
2. Responsibility to perform duties to the full extent of ability and effectiveness
3. Uphold business ethics and the code of conduct in performing duties
4. Vision to create long-term value
5. Knowledge and capability

➤ **Assessment result (self -assessment): "Excellent" (97.00%)**

➤ **Assessment result (cross-assessment): "Excellent" (97.80%)**

3. Sub-committee Assessment (entire committee) for the four sub-committees comprises five topics:

1. Composition of the sub-committees
2. Meeting of the sub-committees
3. Satisfaction with the efficiency in performing duties of the sub-committees
4. Roles, duties, and responsibilities of the sub-committees
5. Relations with the internal auditor, external auditor, and management (Audit Committee only)

➤ **Assessment result (Audit Committee): "Excellent" (96.73%)**

➤ **Assessment result (Nomination and Remuneration Committee): "Excellent" (95.28%)**

➤ **Assessment result (Corporate Governance and Sustainability Committee): "Excellent" (96.53%)**

➤ **Assessment result (Risk Management Committee): "Excellent" (97.60%)**

## **Rights of Minority Shareholders for Nominating Directors**

One or more shareholders holding at least 1% of the total voting shares could propose meeting agenda item and nominate directors from October 1, 2022, to December 31, 2022 (at least three months before the 2023 AGM). Consideration criteria and process were disclosed on GPSC's website about the rights and equitable treatment of shareholders.

## **Nomination Criterion for the Chief Executive Officer (CEO)**

### **Nomination and Appointment of the President & CEO**

If the position of President & CEO becomes vacant, the Nomination and Remuneration Committee is required to review candidates with qualifications under applicable criteria and laws as well as other appropriate qualifications such as knowledge, competency, experience, leadership, and breadth of vision, and then nominate such candidates to the Board Meeting to be approved for appointment.

### **Performance Assessment and Compensation Policy of the President & CEO**

In 2023 the Board conducted performance assessment of the President & CEO against criteria consisting of performance versus the KPIs, which included annual performance (short-term) and performance in pursuing GPSC's strategies in the long term to achieve sustainable growth which required managerial ability and leadership to contribute to GPSC's long-term sustainability. The Board, with a careful review by the Nomination and Remuneration Committee, conducted performance assessment and determined the compensation of the President & CEO using such criteria in tandem with the self-assessment of the President & CEO.

### **Succession Plan and Management**

GPSC has devised a succession planning system for key positions under which a list of individuals with potential for executive positions is compiled before they are assessed for their capacity as executives on competency and personal attributes. Subsequently, the assessment results are applied to create Individual Development Plans (IDPs) to prepare these individuals for succession, by either taking offices left vacant by retirement or filling new positions created with future expansion of the business. The progress in succession planning is constantly being reported to management. In 2023, 39 executives were assessed and provided with IDPs, and more executives will be assessed soon.



### 8.1.2 Board Meeting Attendance

Under the corporate governance code, the Board designates dates of meetings in advance each year to enable the directors to allocate their time for the meetings. The Board may call special meetings to consider urgent matters if required. Directors who have unexpected engagement or urgent matters and are unable to attend a meeting must submit a leave of absence letter to the Chairman. Meeting notices and supporting documents are delivered to directors at least seven days before each meeting to give them adequate time to review the agenda before the meeting, except for urgent matters that require the calling of urgent meetings. If more information is needed, directors can request the Company Secretary to respond to queries in advance. In addition, the Board values appropriate handling of conflicts of interest; directors who have any conflict of interest with each agenda item must not take part in the decision-making process of such item. After the meeting, the minutes of the meeting are prepared for the Board's endorsement at the next meeting. The Chairman countersigns to endorse the minutes, which are systematically kept for reference.

In 2023 GPSC held 14 Board Meetings (12 ordinary meetings and two special ones), one Non-Executive Directors' Meeting, and one Independent Directors' Meeting. GPSC has also set up protocols for meetings of the Board to obtain a clear procedure embracing meeting management processes to ensure their efficiency.



## Meeting Attendance of Directors in 2023

Name - Last Name	Position	Board	Board (Special Meeting)	Audit Committee (AC)	Nomination and Remuneration Committee (NRC)	Corporate Governance and Sustainability Committee (CGSC)	Risk Management Committee (RMC)	Non-Executive Directors	Independent Director	Shareholders Meeting
		12 Meetings	2 Meetings	7 Meetings	3 Meetings	5 Meetings	9 Meetings	1 Meeting	1 Meeting	1 Meeting
1. Mr. Pailin Chuchottaworn	Independent Director/ Chairman of the Board	12/12	2/2	-	-	-	-	1/1	1/1	1/1
2. Gen. Prachaphat Vatchanaratana <sup>(1)</sup>	Independent Director/ Member of the Corporate Governance and Sustainability Committee/ Member of the Audit Committee	9/9	2/2	3/3	-	4/4	-	1/1	1/1	N/A
3. Gen. Santipong Thampiya <sup>(2)</sup>	Independent Director/ Chairman of the Nomination and Remuneration Committee/ Member of the Risk Management Committee	12/12	2/2	-	3/3	-	9/9	1/1	1/1	1/1
4. Mrs. Nicha Hiranburana Thuvatham <sup>(3)</sup>	Independent Director/ Member of the Corporate Governance and Sustainability Committee/ Member of the Audit Committee	12/12	2/2	5/5	-	5/5	-	1/1	1/1	1/1
5. Mr. Chalempchol Pensoot	Independent Director/ Chairman of the Audit Committee	11/12 <sup>(4)</sup>	1/2 <sup>(5)</sup>	7/7	-	-	-	1/1	0/1 <sup>(6)</sup>	1/1
6. Mr. Somchai Meesen <sup>(7)</sup>	Independent Director/ Chairman of the Corporate Governance and Sustainability Committee/ Member of the Audit Committee	12/12	2/2	7/7	-	5/5	-	1/1	1/1	1/1
7. Mr. Noppadol Pinsupa	Director/ Chairman of the Risk Management Committee/ Member of the Nomination and Remuneration Committee	12/12	2/2	-	3/3	-	8/9 <sup>(8)</sup>	1/1	-	1/1
8. Mr. Wuttikorn Sithit <sup>(9)</sup>	Director/ Member of the Nomination and Remuneration Committee	12/12	2/2	-	2/2	-	-	1/1	-	1/1

Name - Last Name	Position	Board	Board (Special Meeting)	Audit Committee (AC)	Nomination and Remuneration Committee (NRC)	Corporate Governance and Sustainability Committee (CGSC)	Risk Management Committee (RMC)	Non-Executive Directors	Independent Director	Shareholders Meeting
		12 Meetings	2 Meetings	7 Meetings	3 Meetings	5 Meetings	9 Meetings	1 Meeting	1 Meeting	1 Meeting
9. Mr. Kongkrapan Intarajang	Director/ Member of the Risk Management Committee	12/12	2/2	-	-	-	9/9	1/1	-	1/1
10. M.L. Peekthong Thongyai <sup>(10)</sup>	Director	12/12	2/2	-	-	-	-	1/1	-	1/1
11. Miss Pamalin Mahawongtikul <sup>(11)</sup>	Director	12/12	2/2	-	-	-	-	1/1	-	1/1
12. Mr. Bandhit Thamprajamchit <sup>(12)</sup>	Director	11/11	2/2	-	-	-	-	1/1	-	1/1
13. Mr. Worawat Pitayasiri	Director/ Secretary to the Board/ Member of the Risk Management Committee/ President and Chief Executive Officer	12/12	2/2	-	-	-	9/9	-	-	1/1
14. Mr. Kurujit Nakornthap <sup>(13)</sup>	Independent Director/ Chairman of the Corporate Governance and Sustainability Committee/ Member of the Audit Committee	3/3	N/A	2/2	-	1/1	-	N/A	-	1/1
15. Mr. Lavaron Sangsnit <sup>(14)</sup>	Director/ Member of the Corporate Governance and Sustainability Committee	3/3	N/A	-	-	1/1	-	N/A	-	1/1
16. Mrs. Pantip Sripimol <sup>(15)</sup>	Director/ Member of the Corporate Governance and Sustainability Committee	6/6	2/2	-	-	2/2	-	1/1	-	N/A

**Remarks:**

N/A: Not attended; either the Director was appointed or resigned during 2023.

<sup>(1)</sup> Gen. Prachaphat Vatchanaratana was appointed as an independent director, replacing Mr. Kurujit Nakornthap, who completed his term at the 2023 AGM on March 31, 2023, with effect from March 31, 2023. He was appointed to the Corporate Governance and Sustainability Committee at Board Meeting No. 4/2023 (Special Meeting) on March 31, 2023, with effect from March 31, 2023, and to the Audit Committee at Board Meeting No. 12/2023 on October 16, 2023, with effect from October 16, 2023.

<sup>(2)</sup> Gen. Santipong Thampiya was appointed to the Risk Management Committee at Board Meeting No. 1/2023 on January 24, 2023, with effect from January 25, 2023.

<sup>(3)</sup> Mrs. Nicha Hiranburana Thuvatham was appointed to the Audit Committee at Board Meeting No. 4/2023 (Special Meeting) of March 31, 2023, with effect from March 31, 2023.

<sup>(4)</sup> Mr. Chalermphol Pensoot submitted a letter of absence, as he was unable to attend Board Meeting No. 7/2023 (Special Meeting) on May 27, 2023, due to prior engagement.

<sup>(5)</sup> Mr. Chalermphol Pensoot submitted a letter of absence, as he was unable to attend Board Meeting No. 12/2023 on October 16, 2023, due to prior engagement.

<sup>(6)</sup> Mr. Chalermphol Pensoot submitted a letter of absence, as he was unable to attend the 2023 Independent Directors Meeting on October 16, 2023, due to prior engagement.

<sup>(7)</sup> Mr. Somchai Meesen was re-appointed as an independent director at the 2023 AGM on March 31, 2023, with effect from March 31, 2023, and was appointed Chairman of the Corporate Governance and Sustainability Committee and a member of the Audit Committee at Board Meeting No. 4/2023 (Special Meeting) on March 31, 2023, with effect from March 31, 2023.

<sup>(8)</sup> Mr. Noppadol Pinsupa submitted a letter of absence, as he was unable to attend the Risk Management Meeting No. 3/2023 on April 18, 2023, due to prior engagement.

<sup>(9)</sup> Mr. Wuttikorn Stithit was appointed to the Nomination and Remuneration Committee at Board Meeting No. 1/2023 on January 24, 2023, with effect from January 25, 2023.

<sup>(10)</sup> M.L. Peekthong Thongyai was re-appointed as a director at the 2023 AGM on March 31, 2023, with effect from March 31, 2023.

<sup>(11)</sup> Ms. Pannalin Mahawongtikul was re-appointed as a director at the 2023 AGM on March 31, 2023, with effect from March 31, 2023.

<sup>(12)</sup> Mr. Bandhit Thamprajamchit was appointed as a director, replacing Mr. Jeerawat Pattanasomsit, who resigned at Board Meeting No. 1/2023 on January 24, 2023, with effect from February 1, 2023.

<sup>(13)</sup> Mr. Kurujit Nakornthap completed his term at the 2023 AGM on March 31, 2023.

<sup>(14)</sup> Mr. Lavaron Sangsnit completed his term at the 2023 AGM on March 31, 2023.

<sup>(15)</sup> Mrs. Pantip Sripimol resigned from directorship with effect from October 1, 2023.



## Director Remuneration

In 2023 the Board, at the recommendation of the Nomination and Remuneration Committee, considered the compensation of the Board and the Subcommittees, taking into account various factors, including GPSC's operating results, dividend payouts to shareholders, the Board's performance, duties and responsibility of the Board and the Sub-committees, and comparison with peer listed companies of similar sizes. The following compensation scheme for the Board was proposed to and subsequently approved at the 2023 AGM.

### 1. Compensation for Directors

#### 1.1 Monthly compensation

- Chairman 65,000 THB/month
- Directors 45,000 THB/month

#### 1.2 Meeting allowance (only for those in attendance)

- Chairman 25,000 THB/meeting,  
for no more than 15 meetings per year
- Directors 20,000 THB/meeting,  
for no more than 15 meetings per year

### 2. Meeting allowance for Sub-committees

Meeting allowance for Sub-committees, namely the Audit Committee, Nomination and Remuneration Committee, Corporate Governance and Sustainability Committee, and Risk Management Committee (only for those in attendance):

- Chairman 37,500 THB/meeting;  
for no more than 15 meetings per year
- Members 30,000 THB/meeting;  
for no more than 15 meetings per year

### 3. Annual Bonus

The 2023 AGM approved annual bonuses for the directors, including those who completed their terms and/or retired during 2022, at the rate of 0.5 percent of the 2022 net profit and up to THB 40 million. The bonus portion was based on the term of each director. The Chairman of the Board would receive 25 percent higher than other directors under the criteria approved by the 2023 AGM.

### 4. Other Remuneration

- None

## Remunerataion of GPSC's Directors in 2023

Name - Last Name	Position	Board		Audit Committee		Nomination and Remuneration Committee		Corporate Governance and Sustainability Committee		Risk Management Committee		Bonus for 2022 <sup>(1)</sup>	Total
		Retention Fee	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance		
1. Mr. Palin Chuchottaworn	Independent Director/ Chairman of the Board	780,000.00	350,000.00	-	-	-	-	-	-	-	-	387,190.24	1,517,190.24
2. Gen. Prachaphat Vatchanaratana <sup>(2)</sup>	Independent Director/ Member of the Corporate Governance and Sustainability Committee/ Member of the Audit Committee	406,500.00	220,000.00	90,000.00	-	-	-	120,000.00	-	-	-	-	835,000.00
3. Gen. Santipong Thampiya <sup>(3)</sup>	Independent Director/ Chairman of the Nomination and Remuneration Committee/ Member of the Risk Management Committee	540,000.00	280,000.00	-	-	112,500.00	-	-	-	270,000.00	-	233,374.94	1,435,874.94
4. Mrs. Nicha Hiranburana Thuvatham <sup>(4)</sup>	Independent Director/ Member of the Corporate Governance and Sustainability Committee/ Member of the Audit Committee	540,000.00	280,000.00	120,000.00	-	-	-	150,000.00	-	-	-	309,752.19	1,399,752.19
5. Mr. Chalermphol Pensoot	Independent Director/ Chairman of the Audit Committee	540,000.00	240,000.00	225,000.00	-	-	-	-	-	-	-	233,374.94	1,238,374.94
6. Mr. Somchai Meesen <sup>(5)</sup>	Independent Director/ Chairman of the Corporate Governance and Sustainability Committee/ Member of the Audit Committee	540,000.00	280,000.00	180,000.00	-	-	-	180,000.00	-	-	-	309,752.19	1,489,752.19
7. Mr. Noppadol Pinsupa	Director/ Chairman of the Risk Management Committee/ Member of the Nomination and Remuneration Committee	540,000.00	280,000.00	-	-	90,000.00	-	-	-	300,000.00	-	309,752.19	1,519,752.19
8. Mr. Wuttikorn Stithit <sup>(6)</sup>	Director/ Member of the Nomination and Remuneration Committee	540,000.00	280,000.00	-	-	60,000.00	-	-	-	-	-	309,752.19	1,189,752.19
9. Mr. Kongkrapan Intarajang	Director/ Member of the Risk Management Committee	540,000.00	280,000.00	-	-	-	-	-	-	270,000.00	-	309,752.19	1,399,752.19
10. M.L. Peekthong Thongyai <sup>(7)</sup>	Director	540,000.00	280,000.00	-	-	-	-	-	-	-	-	26,307.72	846,307.72
11. Miss Pannalin Mahawongtikul <sup>(8)</sup>	Director	540,000.00	280,000.00	-	-	-	-	-	-	-	-	26,307.72	846,307.72
12. Mr. Bandhit Thamprajamchit <sup>(9)</sup>	Director	495,000.00	260,000.00	-	-	-	-	-	-	-	-	-	755,000.00

Name - Last Name	Position	Board		Audit Committee		Nomination and Remuneration Committee		Corporate Governance and Sustainability Committee		Risk Management Committee		Bonus for 2022 <sup>(1)</sup>	Total
		Retention Fee	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance		
13. Mr. Worawat Pitayasiri	Director/ Secretary to the Board/ Member of the Risk Management Committee/ President and Chief Executive Officer	540,000.00	280,000.00	-	-	-	-	-	-	270,000.00	-	309,752.19	1,399,752.19
Directors retired / resigned in 2023													
14. Mr. Kurujit Nakornthap <sup>(10)</sup>	Independent Director/ Chairman of the Corporate Governance and Sustainability Committee/ Member of the Audit Committee	135,000.00	60,000.00	60,000.00	-	-	-	37,500.00	-	-	-	309,752.19	602,252.19
15. Mr. Lavaron Sangsrit <sup>(11)</sup>	Director/ Member of the Corporate Governance and Sustainability Committee	135,000.00	60,000.00	-	-	-	-	30,000.00	-	-	-	309,752.19	534,752.19
16. Mrs. Pantip Sripimol <sup>(12)</sup>	Director/ Member of the Corporate Governance and Sustainability Committee	270,000.00	160,000.00	-	-	-	-	60,000.00	-	-	-	-	490,000.00
Directors retired/resigned in 2022 (bonus for the 2022 performance)													
17. Maj. Gen. Chaowalek Chayansupap <sup>(13)</sup>	Independent Director/ Chairman of the Nomination and Remuneration Committee/ Member of the Audit Committee	-	-	-	-	-	-	-	-	-	-	76,377.25	76,377.25
18. Mrs. Saowanee Kamolbutr <sup>(14)</sup>	Independent Director/ Chairman of the Audit Committee	-	-	-	-	-	-	-	-	-	-	76,377.25	76,377.25
19. Mr. Jeerawat Pattanasomsit <sup>(15)</sup>	Director	-	-	-	-	-	-	-	-	-	-	153,603.14	153,603.14
20. Mr. Atikom Terbsiri <sup>(16)</sup>	Director/ Member of the Nomination and Remuneration Committee	-	-	-	-	-	-	-	-	-	-	230,829.03	230,829.03
21. Mr. Wirat Uanarumit <sup>(17)</sup>	Director/ Member of the Risk Management Committee	-	-	-	-	-	-	-	-	-	-	230,829.03	230,829.03
22. Mr. Pakorn Apaphant <sup>(18)</sup>	Director/ Member of the Risk Management Committee	-	-	-	-	-	-	-	-	-	-	297,160.38	297,160.38
Total		7,620,000.00	3,870,000.00	675,000.00	262,500.00	577,500.00	1,110,000.00	4,449,749.16	18,564,749.16				

**Remarks:**

- <sup>(1)</sup> Bonus for 2022 performance, approved at the 2023 AGM, was paid to directors on April 25, 2023.
- <sup>(2)</sup> Gen. Prachaphat Vatchanaratana was appointed as an independent director, replacing Mr. Kurujit Nakornthap, who completed his term at the 2023 AGM on March 31, 2023, with effect from March 31, 2023, and was appointed to the Corporate Governance and Sustainability Committee at Board Meeting No. 4/2023 (Special Meeting) on March 31, 2023, with effect from March 31, 2023, and to the Audit Committee at Board Meeting No. 12/2023 on October 16, 2023, with effect from October 16, 2023.
- <sup>(3)</sup> Gen. Santipong Thampiya was appointed to the Risk Management Committee at Board Meeting No. 1/2023 on January 24, 2023, with effect from January 25, 2023.
- <sup>(4)</sup> Mrs. Nicha Hiranburana Thuvatham was appointed to the Audit Committee at Board Meeting No. 4/2023 (Special Meeting) off March 31, 2023, with effect from March 31, 2023.
- <sup>(5)</sup> Mr. Somchai Meesen was re-appointed as an independent director at the 2023 AGM on March 31, 2023 with effect from March 31, 2023, and was appointed Chairman of the Corporate Governance and Sustainability Committee and a member of the Audit Committee at Board Meeting No. 4/2023 (Special Meeting) on March 31, 2023, with effect from March 31, 2023.
- <sup>(6)</sup> Mr. Wuttikorn Stithit was appointed to the Nomination and Remuneration Committee at Board Meeting No. 1/2023 on January 24, 2023, with effect from January 25, 2023.
- <sup>(7)</sup> M.L. Peekthong Thongyai was re-appointed as a director at the 2023 AGM on March 31, 2023, with effect from March 31, 2023.
- <sup>(8)</sup> Ms. Pannalin Mahawongtikul was re-appointed as a director at the 2023 AGM on March 31, 2023, with effect from March 31, 2023.
- <sup>(9)</sup> Mr. Bandhit Thamprajamchit was appointed as a director, replacing Mr. Jeerawat Pattanasomsit, who resigned at Board Meeting No. 1/2023 on January 24, 2023, with effect from February 1, 2023.
- <sup>(10)</sup> Mr. Kurujit Nakornthap completed his term at the 2023 AGM on March 31, 2023.
- <sup>(11)</sup> Mr. Lavaron Sangsnit completed his term at the 2023 AGM on March 31, 2023.
- <sup>(12)</sup> Mrs. Pantip Sripimol resigned from directorship with effect from October 1, 2023.
- <sup>(13)</sup> Maj. Gen. Chaowalek Chayansupap completed his term at the 2022 AGM of April 1, 2022.
- <sup>(14)</sup> Mrs. Saowanee Kamolbutr completed her term at the 2022 AGM of April 1, 2022.
- <sup>(15)</sup> Mr. Jeerawat Pattanasomsit resigned as a director, with effect from July 1, 2022.
- <sup>(16)</sup> Mr. Atikom Terbsiri resigned as a director / member of the Nomination and Remuneration Committee, with effect from September 30, 2022.
- <sup>(17)</sup> Mr. Wirat Uanarumit resigned as a director / member of the Risk Management Committee, with effect from September 30, 2022.
- <sup>(18)</sup> Mr. Pakorn Apaphant resigned as a director/ member of the Risk Management Committee, with effect from December 26, 2022.



Compensation of GPSC's Independent Directors Seconded to GPSC's Parent Company, Subsidiaries, or Sister Companies, as of December 31, 2023

Name - Last Name	Company	Position	Term Duration in 2023	Remuneration (THB)
1. Mr. Pailin Chuchottaworn <sup>(1)</sup>	Thai Oil Plc	Independent Director	January 1, 2023 – April 10, 2023	3,685,563.14
Total				3,685,563.14

**Remarks:** <sup>(1)</sup> Mr. Pailin Chuchottaworn completed his term as director of Thai Oil Plc at the 2023 AGM on April 10, 2023.

### 8.1.3 Governance of Affiliates

Valuing the policies and operations of its affiliates (subsidiaries, associates, and related companies) and in ensuring their efficient operations and sustainable growth, GPSC has established a “GPSC Group Way of Conduct” as a management mechanism for the group. This is a collection of guidelines and processes in GPSC and GPSC Group to align all practices and create a standard for business connection and coordination of all GPSC companies to attain investment targets. The GPSC Group Way of Conduct comprises five governance practices:

#### 1. Key Strategic Positions

GPSC boasts a long-standing practice of seconding executives and employees to key strategic positions in its affiliates under agreed commitment or business conditions. It has defined “Criteria for Recruitment and Appointment of Directors of Invested Companies” for its selection of directors and executives of subsidiary companies and associates. The number of directors in subsidiary companies and associates depends on GPSC's equity or as agreed.

The responsibility of GPSC's representatives is to provide due diligence for subsidiaries, associates, and related companies and ensure strict adherence to operational and management requirements as well as best practices in line with the policy framework and strategic directions of GPSC, including policies on corporate governance, legal compliance, accounting and finance, quality, safety, health, and environmental management (QSHE), human resource (HR) management as well as other key policies.

In addition, GPSC has defined clear operational indicators to ensure that the management of GPSC Group is effectively and efficiently driven.

#### 2. Rules and Regulations

GPSC requires that rules, regulations, requirements, policies as well as orders are part of the governance code to generate linkage and coordination under GPSC's governance policies and successful application of these policies. The various rules, regulations, requirements, and policies as well as orders are what GPSC representatives will be applying in performing their duties as directors, top executives, executives, or operators in affiliates. They are also required to follow and establish these as uniform standards in GPSC Group.

#### 3. Reporting Line and Performance Management

GPSC requires that a performance report and operational outcomes of GPSC Group management be submitted to GPSC's management and/or Company's directors under the following guidelines:

- Monitor and provide recommendations for all operations of each subsidiary, associate, and related company to ensure compliance with various contracts and applicable rules and regulations.
- Constantly follow up on the performance outcomes of each subsidiary, associate, and related company as well as providing recommendations to ensure that each performance is achieved on target and that each can manage obstacles in a timely and appropriate manner.
- Consider, monitor, and provide recommendations for each subsidiary, associate, and related company to

feature appropriate disclosure of information and internal control as well as a system to sustain business operations effectively and efficiently.

- Consider, monitor, and provide recommendations for regular review and improvement of key policies and plans of each subsidiary, associate, and related company to ensure updated and appropriate business operations.

#### 4. Multi-level Governance

To unify the management of GPSC Group and ensure clear and connected procedures, GPSC has designed a multi-level governance system by direct knowledge transfer of the GPSC Group Way of Conduct to a daughter company with the authority to conduct due diligence through GPSC executives serving as the top executive of a given affiliate. The affiliate must establish a group management system of its own to cascade the GPSC Group management approach down to each next company it holds shares in. The transfer must be made to a company with the capacity for governance and must comprise a governance code and a strategic alignment policy for a unified standard throughout GPSC Group.

#### 5. Management Committee

GPSC has appointed a GPSC Group Management Committee to help formulate systematic and standardized guidelines, operational practices, and work procedures as a model for each affiliate in GPSC Group to practice and apply to their operations and in driving the GPSC Group Management for efficiency and effectiveness.

GPSC must also define plans and implement them to ensure that each subsidiary, associate, and related company discloses performance data and financial status, including other data that must be made available to applicable regulators, applicable state organizations and outside investors, including the public, accurately, completely, and credibly. If it is necessary for the affiliate to engage in related-party transactions or potential conflicts of interest, it must monitor the affiliate's action to ensure transparent and fair transactions. GPSC must strictly comply with the criteria of related-party transactions as well as acquisition and sale of assets stated by regulators.

### 8.1.4 Monitoring of Compliance with Corporate Governance Policy and Guidelines

#### 1. Prevention of Conflicts of Interest

GPSC's directors, executives, and employees must produce disclosure reports on transactions with potential conflicts of interest of themselves or their related parties with GPSC (annual report), including new employees (first report), every time a conflict is encountered (incident report) by using the designated "GPSC Conflict of Interest Disclosure Form" and notify their supervisors to sign their names for acknowledgment and then send the "GPSC Conflict of Interest Disclosure Form" to Compliance.

Compliance will then compile the information and summarize connected transactions of potential conflicts of interest to the Management Committee for acknowledgment and management to prevent such actions by related parties, and report to the Corporate Governance Committee for acknowledgment yearly.

In 2023 GPSC compiled and analyzed the annual report, the first report, and the incident report and found no statistics on the wrongdoing concerning connected transactions.

Moreover, GPSC ensured knowledge transfer to executives and employees through the E-learning system on prevention of conflicts of interest under a course entitled "GPSC's Corporate Governance, Code of Business Conduct, Policy on Anti-fraud and Anti-corruption, and Guidelines on the No-Gift policy, Receptions or Other Benefits, and Policy on Whistleblowing and Whistleblower protection".

#### 2. Supervision of the Abuse of Inside Information

GPSC has developed a policy on the protection against abuse of inside information in compliance with laws and the corporate governance code, disseminated among GPSC's directors, executives, and employees. The policy and measures against abuse of inside information for unlawful gain are described below.

## Policy on the Protection against Abuse of Inside Information

1. GPSC's directors and executives have been informed of their duties to submit reports to SEC of change in securities holding of themselves, their spouses, and their minor children to SEC, a duty stipulated in the Securities and Exchange Act B.E. 2535 (1992) (including its amendment).
2. GPSC's directors and executives must report changes in their holding of GPSC's securities at Board meetings.
3. GPSC's directors and executives, including management officers in accounting or finance at or above the vice president level and employees involved in operations with privilege of inside information material to changes in securities prices, must suspend their trading of GPSC's securities until the public disclosure of financial statements or positions. These individuals are informed of their suspension in written form at least 30 days before the public disclosure of quarterly financial statements and 45 days of the annual financial statements; they should wait at least 24 hours after the disclosure before engaging in any trade. They are also prohibited from disclosing such material information to others.
4. GPSC's directors, executives, and employees are prohibited from exploiting inside information that may affect changes in GPSC's securities prices that has not been publicized but is accessible to them because of their offices or positions to purchase or sell, offer to purchase or sell, or invite any other party to purchase, sell or offer to purchase or sell GPSC's securities (if any or directly or indirectly) in such a way as to harm GPSC, whether such an act is done for their own or another party's benefit or to disclose such information whether they may or may not receive consideration from the party who engages in such acts.
5. GPSC's directors, executives, and employees, both current and former ones, are prohibited from disclosing inside information and classified information as well as confidentiality of GPSC's suppliers accessible to them because of their duties to an external party even if such disclosure may not harm GPSC and its suppliers.

6. GPSC's directors, executives, and employees, both current and former ones, must guard GPSC's confidentiality and/or inside information and must use inside information solely for its business operations. In addition, GPSC's directors, executives, and employees are prohibited from exploiting GPSC's confidentiality and/or inside information to benefit any other company in which they are shareholders, directors, executives, employees, or workers.
7. Disciplinary actions are enforced for any violation of the use of inside information for personal gain, ranging from warning notification, pay cut, temporary suspension without pay, to dismissal. The severity is based on the intention and the gravity of the violation.

## Protection Against Abuse of Inside Information

1. New GPSC directors and executives are informed and made aware of their duty to report changes in securities holdings of themselves, spouses, and minor children within three workdays after such changes via SEC's online system. In addition, current directors and executives are also reminded regularly via notices and emails to submit reports on changes in securities holdings (if applicable).
2. GPSC directors, executives, and applicable employees are notified in writing of GPSC-defined black-out periods before public disclosure of material information with potential impacts on securities prices.
3. GPSC directors' and executives' securities holdings are disclosed in Form 56-1 One Report and on GPSC's website. In addition, the Board tracks changes in securities holdings of directors and executives monthly through reports at Board meetings. In 2023 no director or executive was found to have conducted trading in securities during the period prohibited by GPSC.

## Directors and Executives' Shareholding in GPSC in 2023 (including Spouses and Minors)

Name – Last Name		Number of Shares		Increase/ (Decrease) during the year	Remarks
		Dec. 31, 2022	Dec. 31, 2023		
Director					
1.	Mr. Pailin Chuchottaworn	-	-	-	-
2.	Gen. Prachaphat Vatchanaratana	N/A	-	-	-
3.	Gen. Santipong Thampiya	-	-	-	-
4.	Mrs. Nicha Hiranburana Thuvatham	-	-	-	-
5.	Mr. Chalermphol Pensoot	-	-	-	-
6.	Mr. Somchai Meesen	-	-	-	-
7.	Mr. Noppadol Pinsupa	137,300	137,300	-	-
8.	M.L. Peekthong Thongyai	-	-	-	-
9.	Mr. Wuttikorn Stithit	-	-	-	-
	Spouse	10,000	10,000	-	-
10.	Mr. Kongkrapan Intarajang	-	-	-	-
11.	Mr. Bandhit Thamprajamchit	N/A	-	-	-
12.	Ms. Pannalin Mahawongtikul	9,409	9,409	-	-
13.	Mr. Worawat Pitayasiri	-	-	-	-
Executives (under SEC’s definition)					
1.	Mr. Worawat Pitayasiri	-	-	-	-
2.	Mr. Sirimet Leepagorn	-	-	-	-
3.	Mr. Manatchai Kongrakkawin	N/A	-	-	-
4.	Mr. Thitipong Jurapornsiridee	-	-	-	-
	Spouse	11,500	11,500	-	-
5.	Mrs. Sriprapha Sumruatruamphol	-	-	-	-
6.	Mr. Adrianus Josephus Van Den Broek	-	-	-	-
7.	Mr. Kulapat Permbhusri	-	-	-	-
8.	Mr. Sutthi Chuesook	N/A	-	-	-
9.	Mrs. Prinda Ma-imjai	N/A	12,819	-	-

### Remarks:

N/A means directors appointed in 2023.

- One director with indirect shareholding through his spouse was Mr. Wuttikorn Stithit
- One executive with indirect shareholding through his spouse was Mr. Thitipong Jurapornsiridee
- As of December 31, 2023, the total GPSC shares held directly and indirectly by directors and executives equaled 0.0055576 percent.



### 3. Campaign Activities to Promote CG Code, Code of Business Conduct, Anti-fraud and Anti-corruption

- Prescribed internal-control measure for actions against bribing domestic and foreign government officers as well as international organization officers under the notification of the National Anti-Corruption Commission.
- Reviewed alignment with implementation of the code of business conduct to ensure that GPSC appropriately and completely implemented the code. The assessment results revealed GPSC's completed implementation of all topics.
- Focused on personnel as important resources and foundation of the CG code. GPSC regularly provided training for and communication with personnel such as orientation of new employees, annual training through E-Learning, and activities organized for communication and awareness. In 2023 GPSC focused on the likes of management of conflicts of interest, confidentiality, anti-corruption, No-Gift Policy, treatment of business competitors, and treatment of customers and consumers.
- Hosted training sessions and communicated with stakeholders about the anti-fraud and anti-corruption policy, guidelines for accepting/giving gifts, entertainment, and other benefits, and the complaint-handling and whistleblower protection policy as detailed below:
  - Communicated with the Group: On October 17, 2023, GPSC and PTT Group organized PTT Group CG Day 2023 activities under the "Good to Great: CG Empowering for the Future" theme for PTT Group employees. Applicable government agencies and suppliers were invited to witness PTT Group's commitment to corporate governance in their businesses. The New Normal event was held through a hybrid mode (on-site and online).
- Communicated with business partners: On October 6, 2023, GPSC held a seminar during the GPSC Supplier Day 2023 activities. The topics included corporate governance, anti-corruption measures, and the policy on complaint-handling and whistleblower protection.
- Communicated with executives and employees: On September 5, 2023, GPSC organized an exhibition on the monitoring of corporate governance, business ethics, and policy on complaint-handling, and quiz games.
- GPSC required directors, executives, and employees to submit their completed annual conflict-of-interest reports online to supervisors for acknowledgment and management of personnel's conflicts of interest.
- GPSC secured three-year recertification as member of the Thai Private Sector Collective Action against Corruption (CAC) with effect from June 7, 2018, and have to date maintained that certification. It has been a CAC re-certified company since December 31, 2020. Committed to maintaining the standards of continuous anti-fraud and anti-corruption actions, it proceeded with re-certification in 2023 and underwent CG code assessment from external agencies inside and outside the country for the certification of CG code:
  - Underwent CG code assessment of listed companies in Thailand (CRG Checklist). It garnered an "excellent" CRG level by Thai Institute of Directors for the eighth year.
- Announced its No-Gift Policy during the New Year and other occasions at [www.gpscgroup.com](http://www.gpscgroup.com)
- Promoted the following practices under the CG code for directors and executives:
  - Organized orientation for new directors
  - Organized trainings for directors
  - Held meetings of the directors in the absence of management
  - Held meetings of the independent directors
  - Prepared a report on the implementation under SEC's CG Code
  - Implemented protection against abuse of inside information (Warning about reports of changes in securities holdings by directors and executives (Form 59-2) and warning about GPSC-defined Black-Out Period, where GPSC would engage in material information disclosure that might impact its securities prices, and so the information had to widely publicized first.)
  - Supervised and warned directors and executives to report conflicts of interest in line with the Board policy

- Reviewed the Board and the Sub-committee Charters. In 2023 no amendment was made.
- Assessed the Board's performance
- Stakeholders' rights (minority shareholders)
  - Organized the AGM in compliance with the CG Code
  - Provided opportunities for shareholders to propose meeting agenda and nominate directors at the AGM.
- Public awareness through information disclosure:
  - Prepared information disclosure on GPSC's CG Compliance and Internal Control in Form 56-1 One Report and Sustainability Report.
- Sought approval for data processing of personal data owners as specified by law
  - Prepared a Data Processing Agreement (DPA) to prescribe the duties and responsibility of each party for personal data processing
  - Communicated and geared up for the enforcement of the Personal Data Protection Act by raising employees' awareness through E-mail and E-learning.
- Promoted among GPSC's employees compliance procedures through training on compliance with laws and applicable regulations via E-learning and regularly communicated via channels such as E-mail, intranet, Official Line for their information and acknowledgment.

#### 4. Compliance with Laws and Corporate Regulations

To ensure that GPSC conducts business in strict compliance with laws, rules, regulations, requirements, orders, internal and external announcements, and that the business runs smoothly and properly under the law, GPSC implements its CG Policy in compliance with laws, regulations, and their processes to allow personnel to perform their tasks correctly and appropriately. In 2023 GPSC implemented the following policy and processes:

- Regular monitoring of emerging laws with impacts on business operations; supervision to ensure complete and accurate compliance with applicable laws
- Improved the Compliance Monitoring System (CMS) to ensure complete and efficient processes of compliance
- Reviewed the completeness of GPSC's permit extension and annually reviewed its compliance with laws of applicable agencies
- Reviewed compliance with the Personal Data Protection Act:
  - Reviewed applicable departments' compliance by ensuring that each department prepared the documentation and implementation as specified by law
  - Ensured that the activities of each unit were focused on current interest in line with organizational restructuring

#### 5. Guidelines for Information Disclosure on Anti-Fraud and Anti-Corruption Measures

In 2023 GPSC prevented involvement in business fraud and corruption of the Group through:

- GPSC announced Board-approved anti-fraud and anti-corruption measures through its No-Gift Policy (on accepting/giving gifts, receptions, and other benefits) and complaint-handling and whistleblower protection policy for implementation by GPSC's employees. It also raised their awareness through training to foster their understanding. For violation of these, GPSC would exercise the most severe penalty (employment dismissal) and might also take legal action if damage was done to GPSC.
- To ensure that GPSC's employees conduct business with propriety, transparency, fairness, and accountability in line with the rules, regulations, CG Policy, and Code of Business Conduct, and to provide opportunities to employees and stakeholders to have access to complaint channels, GPSC implemented the whistleblowing and protection policy by devising appropriate complaint channels and management.

## 6. Whistleblowing

GPSC provides the following complaint channels:

### Mailing Address

Global Power Synergy Plc  
555/2 Energy Complex Building B, 5th Floor, Vibhavadi-Rangsit Road,  
Chatuchak Subdistrict, Chatuchak District, Bangkok 10900

### E-mail Address:

[whistleblowing\\_complaint@gpscgroup.com](mailto:whistleblowing_complaint@gpscgroup.com)

### Website:

<http://www.gpscgroup.com/th/cg/whistle-blowing>

### In person

Compliance Division  
Phone: 0-2140-4600

From January 1 to December 31, 2023, GPSC received one complaint on fraud and corruption.





## 8.2 Performance Report of the Sub-committees

### 8.2.1 The Audit Committee Report

#### Dear shareholders,

Global Power Synergy Public Company Limited (GPSC)'s Audit Committee consists of four independent directors, all of whom possess pertinent expertise and experience in financial accounting, energy engineering, legal affairs and management. They are, therefore, qualified to review reliability of financial statements in accordance with the regulations of the Office of Securities and Exchange Commission (SEC) and the Stock Exchange of Thailand (SET). The Audit Committee comprises of Mr. Chalermphol Pensoot, the Chairman, and three audit committee members, namely Gen. Prachaphat Vatchanaratana, Mr. Somchai Meesen, and Mrs. Nicha Hiranburana Thuvathum. The Audit Committee appointed Ms. Attayar Sukotanang, Senior Vice President, Corporate Internal Audit as its secretary.

The Audit Committee performed its duties under the scope prescribed by GPSC's Board of Directors and as specified in the Audit Committee Charter and Corporate Policies, which is reviewed according to current environment and approved by the Board of Directors annually, in compliance with all the rules stipulated by SEC and SET. The Audit Committee strives to ensure good corporate governance and comprehensive reviews of financial reports, connected transactions, risk management, effective internal controls and internal audit systems. The Audit Committee also ensures that the Company remains in compliance with laws and regulations and monitors GPSC's domestic and overseas operations to achieve set goals and ensure business continuity.

In 2023, the Audit Committee held seven (7) meetings with management, Internal Audit, and external auditors. This year's performance highlights are as follows:

- 1. Review of Financial Statements:** The Audit Committee reviewed material data and information in the quarterly and annual financial statements of GPSC and its subsidiaries, which were prepared in accordance with the Thai Financial Reporting Standards (TFRS), which are in compliance with the International Financial Reporting Standards (IFRS). Important issues were reviewed with clarifications from external auditors and the Management, to ensure accuracy and reliability of financial statements and the disclosure of the notes to the financial statement were in compliance with the relevant laws and financial reporting standards. In addition, the Audit Committee also consulted with external auditors without the management, to freely discuss material information involved in the preparation of the financial statements, Key Audit Matters, the disclosure of relevant notes to the financial statement, including suspicious information indicating potential fraud according to Section 89/25 of the Securities and Exchange Act B.E. 1992, as amended by the Securities and Exchange Act (No.4) B.E. 2008.

In 2023 the external auditors made no remarks and did not find any indications of suspicious incidents, which ultimately led to the conclusion that GPSC's financial statements was conducted with reliability, transparency, compliance with the Financial Reporting Standards, and the external auditors performed their duties independently and with verifiability, for the benefit of users.
- 2. Review of Connected Transactions or Transactions of Potential Conflicts of Interest:** The Audit Committee reviewed connected transactions, particularly those posing potential conflicts of interest with GPSC under guidelines of SET and SEC's notifications, adhering to principles of reasonability, fairness, and transparency, as well as maximizing benefits for the Company and shareholders. This review revealed that GPSC operated under regular business practices, exercised fairness and sensibility, and showed no siphoning practice. In addition, its disclosure of information was carried out timely with accuracy and completeness in

compliance with GPSC's corporate governance policies as well as the SEC's and the SET's notifications.

**3. Review of Risk Management:** The Audit Committee reviewed the overall efficiency and effectiveness of GPSC's risk management, taking into consideration appropriateness of processes to handle risk from internal and external factors, to ensure that GPSC and its subsidiaries have in place appropriate risk management processes that minimize any negative impact and respond to changes effectively and promptly. Risk management practices were effectively executed under the stated policy and plans and were in line with GPSC and its subsidiaries' short-term and long-term goals and strategic plans. In 2023, the Audit Committee emphasized on business operational risk management under energy crisis, from the price increase and volatility of the main raw materials and fuels used in the production process, which may affect the Company's long-term goals as well as the powerplant's operation and maintenance mitigations to reduce the impact on business operations and sustainability, build customer confidence in the services, and deliver stable product.

**4. Review of Internal Control System:** The Audit Committee reviewed compliance with the law and relevant regulations, and managed under the Three Lines of Defense Concept, in which GPSC setup a system to audit, monitor, assess, and report regularly, according to the framework of the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The performance of GPSC and subsidiaries has been both efficient and effective, with a good internal control system in place. Moreover, external auditors also revealed that they did not find any major problem or fault.

**5. Review of Internal Audit System:** The Audit Committee oversees the independence of the Internal Audit Unit, reporting directly to the Audit Committee as specified in the Audit Committee Charter. The Audit Committee also reviewed and approved the annual internal audit plans and long-term plan covering GPSC, its subsidiaries, and their joint ventures. It also regulated the unit's

operation to comply with internal audit standards and aligned with GPSC strategies and directions. The Audit Committee strives to promote the development of improvement of audit quality, with reviews and assessments of internal audit quality of work, to enhance auditors' knowledge and abilities up to International Standards for the Professional Practice of Internal Auditing (the Standard), as well as assessing the annual performance of Corporate Internal Audit. In addition, the Audit Committee assessed the annual performance of the Corporate Internal Audit and reviewed its structural suitability, human resource development and manpower, to strengthen efficiency and effectiveness of internal audit work. The Committee also reviewed the Audit Committee Charter and the Internal Audit Charter and strived to enhance GPSC's corporate governance and internal controls by awarding the "AC Star Award" to units with outstanding governance and internal controls, as well as improving internal controls to increase efficiency. This played an important part in strengthening GPSC group's governance risk and compliance management, a strong foundation for sustainable growth.

**6. Appointment of External Auditors for 2024:** PricewaterhouseCoopers ABAS Limited (PWC) passed the selection for external auditor for 2024, taking into consideration, independence, quality of audit work, service recommendations, auditing methods, in line with SEC key audit partner operating guidelines. The Audit Committee suggested that GPSC Board of Directors nominates the following external auditor candidates to the shareholders meeting for approvals in fiscal year 2024: Ms. Amornrat Pearmpoonvatanasuk, Certified Public Accountant Registration No. 4599; or Mr. Boonrueng Lerdwiseswit, Certified Public Accountant Registration No. 6552; or Ms. Rodjanart Banyatananusard, Certified Public Accountant Registration No. 8435; or Ms. Wanvimol Preechawat, Certified Public Accountant Registration No. 9548. This nomination is to be proposed by the Board at the 2024 Annual General Meeting to the Shareholders for approval and appointment as the Company's External Auditor for the year 2024, along with the approval of audit fees.



In summary, the Audit Committee carried out its duties and responsibilities in the manner as stated in the Audit Committee Charter, employing their expertise, vigilance, prudence, and adequate independence while also providing recommendations for the equitable benefit of all stakeholders. The Audit Committee's opinion is that GPSC's financial reports are accurate and credible, consistent with generally accepted accounting standards. GPSC's operations were in full compliance with all relevant regulations and business obligations, in line with GPSC's objectives; internal audits were effective, good corporate governance, risk management and adequate internal control system were put in place, suitable for business operations.

On behalf of the Audit Committee

A handwritten signature in black ink, appearing to read 'Chalermphol Pensoot'.

**(Mr. Chalermphol Pensoot)**

Chairman of the Audit Committee

## 8.2.2 Report of the Nomination and Remuneration Committee


### Dear Shareholders,

The Board of Directors of GPSC Plc appointed a Nomination and Remuneration Committee, made up of at least three directors, at least one of whom is to be an independent director. The current committee has three directors, with Gen. Santipong Thampiya (independent director) serving as Chairman, with Mr. Noppadol Pinsupa and Mr. Wuttikorn Stithit serving as members.

This year the committee met three times, with the highlights of deliberation as shown below.

1. Review of last year's performance assessment of the President and CEO for the Board's final approval
2. Recruitment of qualified directors to replace those who resigned before term completion for the Board's appointment
3. Scrutiny and proposal of Board compensation for 2023, basing it on performance outcomes, business size compared with industry peers, and Board responsibility for the Board's endorsement before submission to the 2023 AGM for approval
4. Recruitment of qualified directors to replace those who completed their terms for the Board's endorsement before submission to the 2023 AGM for approval
5. Nomination of directors to the Board's committees, basing it on committee composition concerning suitable expertise and proficiency, for the Board's appointment
6. Recruitment of directors qualified for membership of the Audit Committee for the Board's appointment.

On behalf of the Nomination and Remuneration Committee



(Gen. Santipong Thampiya)

Chairman of the Nomination and Remuneration Committee

### 8.2.3 Report of the Corporate Governance and Sustainability Committee

#### Dear Shareholders,

Recognizing that corporate governance represents a crucial foundation for organizational sustainability and business efficiency, the Board of Directors of GPSC Plc appointed a Corporate Governance and Sustainability Committee to steer its implementation of corporate governance and the business code of conduct, sustainability management, and stewardship of society, communities, and the environment. The present committee consists of three independent directors: Mr. Somchai Meesen (Chairman), Mrs. Nicha Hiranburana Thuvatham, and Gen. Prachaphat Vatchanaratana.

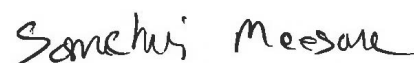
This year the committee held five meetings, with the following summary of its review and approval of the following items:

1. A report on compliance with the CG Code for 2022 and disclosure of deliberation outcomes in the 56-1 One Report
2. The performance report on CG and compliance outcomes for the first half-year 2023
3. The performance report on the stewardship of society, communities, and the environment for the first half-year 2023
4. The performance report on sustainability management for the first half-year 2023
5. The criteria for shareholders' proposal of agenda items and director nomination for the 2024 AGM
6. The assessment criteria and forms for the Board for 2023
7. Revision of the Anti-Corruption Policy
8. Performance assessment outcomes of the Board for 2023
9. Self-assessment forms concerning GPSC's anti-corruption measures for the second recertification of CAC membership
10. The performance report on CG and compliance outcomes for 2023 and a review of the plan for 2024
11. The performance report on the stewardship of society, communities, and the environment for 2023 and a review of the plan for 2024
12. The performance report on sustainability management for 2023 and a review of the plan for 2024.

Thanks to GSPC's commitment to business conduct under corporate governance, its practices concerning corporate governance and sustainability management have earned the following domestic recognition:

- “Excellent” assessment outcomes against the CGR Checklist, attested by the Thai Institute of Directors for the eighth consecutive year
- Three-year extension of membership of the Thailand's Private Sector Collective Action Coalition against Corruption (CAC) Project, from March 31, 2021 to March 31, 2024
- Membership of the Dow Jones Sustainability Indices (DJSI) under the Emerging Markets Index (Electric Utilities) for 2023 for the second consecutive year
- “AA Level” ESG Ratings for 2023, attested by SET, for outstanding companies in environmental, social and governance (ESG) aspects
- Thailand Energy Award 2023, presented by the Department of Alternative Energy Development and Efficiency, Ministry of Energy. The award recognized outstanding alternative-energy work (off-grid projects) for GPSC's solar-diesel hybrid power generation project for Tambon Mae Long Luang Health Promotion Health Center, Chiang Mai.

On behalf of the Corporate Governance and Sustainability Committee



**(Mr. Somchai Meesen)**

Chairman of the Corporate Governance and Sustainability Committee



## 8.2.4 Report of the Risk Management Committee

### Dear Shareholders,

This year the world saw economic uncertainty, compounded by geopolitical conflicts and wars—all of which underlied global energy price volatility. On the domestic front, a shift occurred in the political context, public and economic policies, and transition in lifestyles of people, which affected all sectors, notably the manufacturing and power sectors. Nonetheless, GPSC remains committed to the shareholders and all stakeholders by driving the organization toward robust growth under our business strategies and goals that are consistent with current and future economic circumstances, whereby domestic as well as overseas growth is promoted for the energy and renewables businesses. We are witnessing new models of energy business development with a focus on scaling up energy management and businesses related to greenhouse gas reduction, regarded as New S-Curve businesses that would enhance GPSC's long-term sustainability. These businesses also support global transition in energy consumption while preserving the stability of energy production and distribution to enhance business partners' and customers' business capability. All these would lead to a balance of business operations to address the sustainability of communities, society, and the environment.

This year also marked GPSC's overcoming of challenges posed by factors affecting businesses as mentioned above. That is why much attention is paid to risk assessment at our company, for we need to improve forecasts and keep surveillance of various uncertainties that could affect us. To this end, GPSC plans approaches to address events and mitigate them as well as stimulating earnest pursuit of opportunities amid assorted volatility. Our risk management conforms to international practices. The Board steers corporate risk management through the Risk Management Committee (RMC), made up of three knowledgeable and experienced directors, namely Mr. Noppadol Pinsupa, serving as Chairman, with Mr. Kongkrapan Intarajang, Gen. Santipong Thampiya, and Mr. Worawat Pittayasiri serving as members.

The Committee executed its tasks to the best of its ability in integrating risk management and steering management's operational efficiency to ensure that GPSC's risk management supports corporate performance and is in line with the prevailing business directions together with potential risk issues, both short-term and long-term. This past year, the Risk Management Committee held nine meetings to scrutinize issues of significance, summarized as follows:

1. Reviewed the risk management policy together with the scope of corporate risk management in keeping with the prevailing business environment.
2. Scrutinized and developed short-term and long-term corporate risk management and steered management's operation to ensure efficiency, thus leading to sustainable goals achievement.
3. Monitored and assessed various risk factors, including economic and energy/fuel price fluctuation, the policy on electricity charges, and the transition of the artificial intelligence (AI) technology as well as international politics and affiliates' investment project situations resulting from these risk factors, all of which represented emerging risks. Further, advocated new management models to enable GPSC to manage impacts promptly.
4. Commented and provided recommendations on assorted risk issues to support investment project decisions to ensure efficiency under concrete mitigation plans for optimal benefit.
5. Oversaw and supported management's risk assessment to ensure its efficiency in line with prevailing circumstances.

The Risk Management Committee values the steering and support of the tasks of the Risk Management and Internal Control Committee (RMCC) to ensure that the risks with potential impact on GPSC are promptly dealt with by all sectors.

On behalf of the Risk Management Committee, I therefore pledge to the shareholders that, in our risk management, GPSC is committed to responsible performance and to supporting corporate risk management to our full capacity to achieve business goals and mission, thus leading to sustainable growth and optimal benefit for all investors and stakeholders.

On behalf of the Risk Management Committee

A handwritten signature in black ink, appearing to read 'Noppadol Pinsupa', with a long horizontal stroke extending to the right.

**(Mr. Noppadol Pinsupa)**

Chairman of the Risk Management Committee

# 9 | Internal Control and Connected Transactions

## 9.1 Internal Control

Under the framework of the COSO-ICF of the Committee of Sponsoring Organizations of the Treadway Commission (COSO), GPSC's internal-control system covers all three aspects, namely efficiency and effectiveness of the operations, reliability of reporting, and legal, regulatory, and procedural compliance.

Our control self-assessment (CSA) is mandatorily conducted annually, during the third quarter. The essence is to ensure sufficiency of qualitative assessment of system efficiency and system applications as well as descriptive assessment under the guidelines stated in the announcement of the Securities and Exchange Commission (SEC) of Thailand. CSA results are reported to the Executive Committee, the Audit Committee, and the Board of Directors and published in GPSC's annual registration statement and annual report in line with the guidelines and format of the PTT Group Way of Conduct.

The resolution approved by the Audit Committee on November 6, 2023, at its Meeting No. 4/2023, indicated that our 2023 internal-control system was sufficiently efficient and suitable to the operating businesses and for achieving goals. The Board, at its Meeting No. 13/2023 of November 21, 2023, acknowledged the internal-control system report and comments made by the Audit Committee.

Below is our overview of our internal-control system under the scope of COSO-ICF for 2023.

### 1. Control Environment

We've provided a work environment sufficiently and appropriately for business operations, with suitable charters, policies, and an organizational structure. A corporate culture has been developed to fully comply with business ethics and good governance, including the culture of internal control, role modeling of members of the Board and executive teams, and good management in line with internal-control best practices.

- **Ethical Conduct and Righteousness**

The Board and executives have defined guidelines and conducted themselves righteously and upheld a business code of conduct as seen in their definition of charters, corporate values, policies, and a code of conduct based on righteousness and business ethics. All executives and employees are to study our manual on corporate governance and code of conduct, together with compliance procedures, made available through our organized system of training courses. They must report their conflicts of interest annually. GPSC communicates its performance outcomes and data on good governance and the code of conduct on its website to promote acknowledgment by external stakeholders (business partners, joint-venture companies, and company representatives) so as to conduct their businesses with ethics. Finally, GPSC has defined integrity and ethics as part of its corporate culture (ACT SPIRIT).

- **Independence and Roles and Responsibility of the Board**

The Board, subcommittees, and the president & CEO have clear written roles, responsibility, and authority. The Board is independent of the roles and duties of management. Directors are responsible for supervising business operations to achieve the corporate business targets, regularly monitoring overall progress conducted by management to ensure alignment with corporate strategies and objectives as well as corporate governing policies. The Audit Committee supervises internal audits and offers comments as well as opinions on financial reports and assessment of sufficiency of GPSC's existing internal-control system.

- **Reporting Line Structure, Authority, and Proper Duties**

GPSC's organizational structure, line of command, job titles and positions, and manpower are designed under the Three Lines Model audit principle for comprehensive

checks and balances. The structure defines roles and responsibility as well as suitably delegated authority. All employees acknowledge their roles, authority, duties, and responsibility. The structure is regularly reviewed to align with strategies and plans so that GPSC Group's management may be efficient and uniformly performed.

- **Human Resource Management for Corporate Success**

GPSC's personnel management policy defines the direction for human resource (HR) management that aligns with its strategies and goals. Supporting joint success and sustainable progress among GPSC and the workforce, the policy entails the definition of HR management strategies, key succession planning, personnel selection, and grooming of high-potential executives for business continuity. The policy also focuses on GPSC's stride toward a learning organization, with promotion of knowledge-sharing among organizations and establishment of self-learning by developing a knowledge management portal e-learning platform (SparkX), which aligns with PTT Group's learning management guidelines.

## 2. Risk Management

Risk management represents an essential tool supporting business objective fulfillment. To pursue successful corporate risk management, GPSC manages risks under the scope of COSO-ERM Framework 2017 and ISO 31000:2009, as detailed below.

- **Risk Identification, Assessment, and Analysis Concerning Fulfillment of Corporate Objectives**

Our overall risk assessment process incorporates strategic risks impacting business objectives under the context of complicated and dynamic business conduct, leading to the formulation of corporate risk management plans, which in turn leads to various other work.

- **Determination of Conditions for Corrupt Practices**

Since corruption risk assessment forms part of corporate risk management, GPSC reviews the nature of work exposed to possible corruption and corrupt practices. GPSC has integrated the risk management process with the risk-based audit against corrupt practices under the

supervision of Corporate Internal Audit. This is in line with the corporate intention and compliance under the joint participation with the Private Sector Collective Action against Corruption (CAC).

- **Change Identification and Assessment Affecting Internal-Control System**

At GPSC, we systematically integrate all levels of risk management, starting from risk factor assessment, analysis, review, to developing corporate risk issues. This applies to aspects aligning with strategic business plans (internal factors) as well as risk of change arising from volatile business environment and emerging risks (external factors). These factors are reviewed along with issues, obstacles, and significant functional risks which need to be elevated to departmental risk management under the corporate risk assessment process. Also in place are the review and approval for adding significant corporate risk items during the year to ensure that the organization commands processes to address such risks in a prompt, sensible, and efficient way.

## 3. Control Activities

All operation activities are controlled, including manual controls and automated controls, all of which are integrated and managed efficiently under acceptable levels of risk or proper risk treatments.

- **Internal-Control Measures for Risk Appetites**

GPSC designs and sets proper measures for controlling work in business processes (embedded controls), including the definition of roles and guidelines for applicable employees. It commands communication, training, and monitoring of the results of each process to ensure that the process and internal control are suitable and efficient.

- **Development of General Control Activities with Technology Systems**

We've relentlessly applied technology to its business operations. This year we inaugurated the ERP S4/HANA system for enterprise resource planning (ERP), which spans operation processes and business processes for the entire corporation, regarded as exponential development of enterprise-wide business control.

- **Policy-Driven Internal Control**

We've defined key corporate policies and procedures by translating control activities through clear policymaking for issues where successful results are expected, along with practical procedures. Key corporate policies that are translated into corporate-wide practices are the policies on internal control, risk management, compliance, anti-fraud and anti-corruption practices, and guidelines for the giving and acceptance of gifts, entertainment, and other benefits. GPSC requires that all executives and employees are to comply with the defined policies and procedures.

#### 4. Information Technology and Communication

The information technology and data communication systems are designed for safety, transparency, and efficiency to optimize communication efficiency with all internal and external agencies and stakeholders.

- **IT Data Quality Control**

GPSC has defined and set a business system for information management as well as setting departmental responsibility for information screening (in and outside GPSC) before analyses and business decision-making. Data are to be duly managed and classified, and guidelines are to be set for filing key documents and control documents, to ensure that key business information and data align with data governance as well as the Personal Data Protection Act of 2019 (PDPA) as well as applicable laws.

- **Internal Communication**

To optimize the use of internal communication through various business systems and channels designed and provided, we have put in place a security system to ensure efficiency, reliability, and safety of key internal-control communications.

- **External Communication**

GPSC values the disclosure of information to all third-party agencies and stakeholders so that the disseminated information may be accurate, complete, transparent, and timely, embracing financial and non-financial data. To this end, we've defined processes, channels, and personnel at the

right levels as direct authorities for communicating key information and data to stakeholders and third-party agencies.

In addition, we've created multiple communication channels for company data including news, activity updates, and annual reports with all interested parties through electronic mailing and our website. Interested parties can access these channels, search for additional company data for various purposes, and inform GPSC of malpractices or corrupt practices through the safe and confidential whistleblower channel provided.

#### 5. Monitoring System and Activities

All executives must monitor and oversee first-line units under their respective command to ensure that assorted processes command efficient internal-control systems suiting the control environment.

- **Internal-Control System Monitoring and Evaluation**

Monitoring and assessment of the internal-control system form an integral part of good governance. Legal and Corporate Compliance are responsible for compiling and monitoring applicable laws, defining compliance procedures, overseeing and tracking to ensure all employees' understanding and strict compliance with all applicable laws and regulations.

Corporate Internal Control is responsible for organizing annual control self-assessment. All first-line executives are to conduct the assessment, whose findings form reports are submitted to the Management Committee and the Audit Committee for review and for their opinions for the Board's acknowledgment.

Key monitoring and evaluation results in 2023:

1. Reports of everyone's potential conflicts of interest, both included in the annual report and whenever such conflicts took place during 2023. The report was satisfactorily made and rated 100% against the target.
2. The key workflow review and evaluation were completed for in-depth procurement processes, including process workflows and key job manuals against the table of delegation of authority, including rules concerning procurement, financial-accounting-budgeting operating



processes, and the performance of Operations and Maintenance.

3. Annual monitoring of internal control through control self-assessment at the process level for all processes by department managers upward.

- **Timely and Suitable Internal-Control Assessment and Communication**

Corporate Internal Audit, an independent unit directly reporting to the Audit Committee, reviews the adequacy of the internal-control system to ensure adequacy, suitability, and regularity under the Third Line Role. It is responsible for auditing and independently making

suggestions, sharing data with the operators (First Line) and risk owners to continuously improve processes as well as the efficiency of operations and management. These roles can be performed at wrap-up meetings, exit meetings, or meetings focusing only on audit results to business unit leaders, and audit reporting. All suspicious transactions and activities potentially causing severe damage to GPSC's and its business performance, including conflicts of interest, corrupt practices, irregularities, and critical shortcomings, must be immediately analyzed and commented to the Audit Committee and top management team for immediate corrective actions.



## 9.2 Connected Transactions

### 9.2.1.1 PTT Plc (PTT)

PTT holds 47.27% of GPSC's shares. There are five members of GPSC's Board of Directors who concurrently hold directorship or executive positions at PTT, namely Mr. Noppadol Pinsupa, M.L. Peekthong Thongyai, Mr. Wuttikorn Stithit, Ms. Pannalin Mahawongtikul, and Mr. Worawat Pitayasiri.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from sale of power, steam, and industrial water</b>
Sales of goods and services	501.39	GPSC Group engaged in individual sales agreements for these products with GPSC and PTT, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC.
Other income	0.75	
Purchase of goods and services	50,183.86	
Interest expenses	2.01	
Other expenses	69.39	
<b>Financial Statements</b>		<b>Other income from pipe-rack rental</b>
Trade receivables - related businesses	35.44	GPSC Group leased out its pipe racks at a price and under terms and conditions considered normal business practice. GPSC Group received advance payment and booked it as income received in advance for the long-term right to use the asset. The income was gradually booked throughout the contract period.
Other receivables - related businesses	2.18	
Trade payables - related businesses	5,263.21	
Other payable - related businesses	30.67	
		<b>Expenses on purchase of natural gas</b>
		GPSC and GPSC Group purchased natural gas as a raw material for power generation with prices and terms considered normal business practice.
		<b>Expenses on PTT secondment</b>
		PTT seconded its employees to GPSC in support of GPSC's business with prices and terms considered normal business practice
		<b>Expenses on pipe-rack rental</b>
		GPSC requested rental of pipe racks at a price and under terms and conditions considered normal business practice. GPSC made a six -month advance payment which was booked as prepaid expenses.
		<b>Expenses on gas pipeline system inspection</b>
		GPSC hired a contractor to run a standard safety test of the pipeline system to ensure its operability with prices comparable with those of other sellers.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
		<p><b>Expenses on use of PTT's Service Center</b> PTT set up a Service Center within its head office and the Energy Complex (EnCo), including a medical care center, fitness center, air booking center, and training center. It charged the fees as charged to PTT Group with prices and terms considered normal business practice.</p> <p><b>Expenses on technical advisers</b> GPSC requested personnel support on technology research and development (R&amp;D) with prices and terms considered normal business practice.</p> <p><b>Expenses on lease of land</b> GPSC leased a plot of land from PTT at EECi site, Wangchan Valley, for its solar farm power plant, with prices and terms set under compatible criteria to those charged to other lessees. GPSC also engaged in an agreement with PTT to obtain rights of superficies for its operations with prices and terms set under compatible criteria to those charged to other lessees,</p> <p><b>Expenses on water usage assessment</b> GPSC hired PTT to assess its water usage at market prices, considered normal business practice.</p> <p><b>Consultant fees for power plant operation inspection</b> GPSC hired PTT as its consultant at market prices, considered normal business practice.</p> <p><b>Expenses on Energy Management Technology R&amp;D</b> GPSC requested personnel support from PTT for its technology R&amp;D for Energy Management System project at a price and contractual terms considered normal business practice.</p>

### 9.2.1.2 PTT Global Chemical Plc (GC)

GC holds 10.00% of GPSC's shares. There are two members of the Board who concurrently hold directorship or executive positions at GC, namely Mr. Noppadol Pinsupa and Mr. Kongkrapan Intarajang.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from sale of power, steam, and industrial water</b>
Sales of goods and services	14,801.64	GPSC Group and GC engaged in individual sales agreements for these products, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC.
Purchase of goods and services	53.05	
Other income	9.80	
Interest expenses	0.54	
Other expenses	0.19	
<b>Financial Statements</b>		<b>Income from engineering design, procurement and construction (EPC) service</b>
Trade receivables - related businesses	2,431.25	GPSC engaged in an agreement with GC to provide EPC services, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC, considered normal business practice.
Other receivables - related businesses	16.57	
Trade payables - related businesses	13.67	
Other payable - related businesses	9.22	
		<b>Income from maintenance services and management</b>
		GPSC engaged in an agreement with GC to provide maintenance services and management of Energy Storage System (ESS), with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC, considered normal business practice.
		<b>Other income from pipe-rack rental</b>
		GPSC Group leased out its pipe racks at a price and under terms and conditions considered normal business practice. GPSC Group received advance payment and booked it as income received in advance for the long-term right to use the asset. The income was gradually booked throughout the contract period.
		<b>Expenses from pipe-rack rental</b>
		GPSC Group leased out pipe racks at a price and under terms and conditions considered normal business practice. Payment was made in advance and was booked as income received in advance for the long-term right to use the asset; however, the income was gradually booked throughout the contract period.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
		<p><b>Expenses on purchase of excess condensate water</b> Under the stream sale agreement, GC must return condensate water at the volume set in the contract. However, the volume of condensate water that GPSC Group requested exceeds that specified in the contract. GPSC then engaged in a sale agreement with GC for the excess volume at a price and under terms and conditions considered normal business practice.</p> <p><b>Expenses on tail gas purchase</b> GPSC purchased tail gas for power generation at a price and under terms considered normal business practice.</p> <p><b>Expenses on Total Organic Carbon measurement</b> GPSC Group hired a contractor to run a standard test at a price comparable with those of other sellers,</p> <p><b>Expenses on purchase of furniture and fixtures</b> GPSC bought furniture and fixtures from GC at prices and under terms considered normal business practice.</p> <p><b>Expenses on request for land use</b> GPSC entered an agreement with GC to request land use to install high-voltage power lines at the rental rates and under terms considered normal business practice.</p>



### 9.2.1.3 Thailoil Plc (TOP)

TOP holds 10.00% of GPSC's shares. Two members of the Board concurrently holds directorship or an executive position at TOP, namely Mr. Bandhit Thamprajamchit and Miss Pannalin Mahawongtikul

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from sale of industrial water</b>
Sales of goods and services	5.08	GPSC and TOP engaged in a sales agreement of the product with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC.
Purchase of goods and services	2,505.43	
Interest expenses	1.21	
Other expenses	1.72	
<b>Financial Statements</b>		<b>Expenses on purchase of diesel</b>
Trade receivables - related businesses	0.36	GPSC uses diesel as reserve fuel at the Sriracha power plant in case of natural gas delivery interruption, with prices and terms considered normal business practice.
Other receivables - related businesses	0.40	
Trade payables - related businesses	50.03	<b>Expenses on land rental</b>
		GPSC's power plant lies on state property over which TOP earned possession and usage rights. TOP subleased such land to GPSC with prices and terms set under compatible criteria to those charged to other lessees.
		<b>Expenses on raw-water pipe rental</b>
		GPSC rented TOP's raw-water pipes at the power plant area, linked to Eastern Water Resources Development and Management Plc (EW)'s raw-water pipes, to buy water from EW with prices and terms considered normal business practice.
		<b>Expenses on office space rental, water and electricity bills</b>
		As GPSC's Sriracha power plant was on TOP's compound, GPSC rented office space on the compound from TOP with rate, prices and terms considered normal business practice.
		<b>Expenses on construction</b>
		GPSC Group and TOP engaged in a sales agreement of the property to be used for the Energy Recovery Unit (ERU), with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC.
		<b>Expenses on services and procurement of equipment inspection and maintenance</b>
		GPSC hired TOP to provide services and procurement of equipment inspection and maintenance, with service fees considered normal business practice.

### 9.2.1.4 IRPC Plc (IRPC)

GPSC and IRPC have a common major shareholder in PTT, which holds 45.05% of IRPC's paid-up registered capital.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from sale of power and steam</b>
Sales of goods and services	3,378.93	GPSC Group and IRPC entered individual sales agreements for products, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC.
Purchase of goods and services	153.33	
Interest expenses	0.23	
Other expenses	6.76	
<b>Financial Statements</b>		<b>Income from IRPC secondment</b>
Trade receivables - related businesses	618.94	GPSC seconded its employees to IRPC in support of IRPC's business, with prices and terms considered normal business practice.
Trade payables - related businesses	3.61	
Other payable - related businesses	1.27	
		<b>Income received in advance from sale of steam under Minimum Take-or-Pay terms</b>
		Since the annual actual value of product purchase proved lower than the minimum value specified in the contract, GPSC requested advance payment (Minimum Take-or-Pay: MTOP) from IRPC. If the purchase volume exceeds the minimum volume specified in the contract within the agreed period, IRPC can seek refund of such advance payment commensurate with the excess volume consumed. GPSC will book the remaining MTOP as the revenue for the year if IRPC is unable to consume steam over the minimum volume.

### 9.2.1.5 PTT Treasury Center Co., Ltd. (PTT TCC)

GPSC and PTT TCC have a common major shareholder in PTT, which holds 100.00% of PTT TCC's paid-up registered capital.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Long-term loans</b>
Interest expenses	423.43	GPSC received financial assistance from PTT TCC totaling THB 8,000 million at an interest rate of 2.63%, a market rate comparable to the interest rate of short-term loans issued by commercial banks with comparable payment periods and terms.
<b>Financial Statements</b>		
Other payable - related businesses	4.64	

### 9.2.1.6 Business Services Alliance Co., Ltd. (BSA)

GPSC holds 25.00% preferred shares of BSA's paid-up registered capital. Also, both companies have a common major shareholder in PTT, which owns BSA's common shares accounting for 25.00% of its paid-up registered capital, and GC, which holds 25.00% preferred shares of its paid-up registered capital.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Expenses on staff-outsourcing service</b>
Purchase of goods and services	64.86	GPSC Group hired BSA to provide outsourcing services of personnel to suit GPSC's objectives with prices and terms considered normal business practice.
Other expenses	38.05	
<b>Financial Statements</b>		
Trade payables - related businesses	28.51	
Other payable - related businesses	8.34	

### 9.2.1.7 PTT Phenol Co., Ltd. (PPCL)

GPSC and PPCL have a common major shareholder in GC, which wholly owns PPCL.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from sale of power, steam, industrial water, and nitrogen</b>
Sales of goods and services	387.80	GPSC and PPCL entered individual sales agreements for these products, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC, considered normal business practice.

### 9.2.1.8 GC Maintenance and Engineering Co., Ltd. (GCME)

GPSC and GCME have a common major shareholder in GC, which wholly owns GCME.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Expenses on machinery maintenance and repair</b>
Purchase of goods and services	37.01	GPSC entered a power plant maintenance service agreement with GCME, an expert in maintenance service, with agreed prices and terms considered normal business practice.
Other expenses	1.39	
<b>Financial Statements</b>		
Trade payables - related businesses	7.62	
Other payable - related businesses	0.42	

### 9.2.1.9 NPC Safety and Environmental Service Co., Ltd. (NPC S&E)

GPSC and NPC S&E have a common major shareholder in GC, which wholly owns NPC S&E.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Expenses on operating safety training and</b>
Purchase of goods and services	15.37	purchase of PPE GPSC Group engaged in an
Other expenses	14.19	operating safety training service agreement with NPC
<b>Financial Statements</b>		S&E, an expert in safety with its own training center
Trade payables - related businesses	0.10	and a supplier of standard PPE, with agreed prices
Other payable - related businesses	5.56	and terms considered normal business practice.

### 9.2.1.10 AGC Vinythai Plc (AVT)

GPSC and AVT have a common major shareholder in GC, which holds 32.72% of VNT's paid-up registered capital.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from sale of power and steam</b>
Sales of goods and services	5,797.80	GPSC Group and AVT entered individual sales
Other income	6.26	agreements for these products, with prices and terms
Purchase of goods and services	9.47	set under compatible criteria to those charged to
<b>Financial Statements</b>		other customers, either related or unrelated to GPSC.
Trade receivables - related businesses	410.02	<b>Other income from pipe-rack rental</b>
Trade payables - related businesses	0.26	GPSC Group leased out its pipe-racks at a price and
		under terms and conditions considered normal
		business practice. Payment was made in advance
		and was booked as income received in advance for
		the long-term right to use the asset; however, the
		income was gradually booked throughout the contract
		period.

### 9.2.1.11 HMC Polymers Co., Ltd. (HMC)

GPSC and HMC have a common major shareholder in GC, which holds 41.44% of HMC's paid-up registered capital.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from sale of power, steam and industrial water</b>
Sales of goods and services	1,206.93	GPSC and HMC entered individual sales agreements for these products, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC, considered normal business practice.
Other income	0.32	
<b>Financial Statements</b>		<b>Other income from pipe-rack rental</b>
Trade receivables - related businesses	1.57	GPSC Group leased out pipe-racks at a price and under terms and conditions considered normal business practice. Payment was made in advance and was booked as income received in advance for the long-term right to use the asset; however, the income was gradually booked throughout the contract period.

### 9.2.1.12 PTT Tank Terminal Co., Ltd. (PTT Tank)

GPSC and PTT Tank have a common major shareholder in PTT, which wholly owns PTT Tank.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from sale of nitrogen</b>
Sales of goods and services	15.94	GPSC and PTT Tank entered a nitrogen sales agreement, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC, considered normal business practice.
Other income	1.51	
<b>Financial Statements</b>		<b>Income from floating solar system installation</b>
Trade receivables - related businesses	1.91	PTT Tank hired GPSC Group to install its pilot project, Solar Floating System, at agreed prices and terms considered normal business practice.
		<b>Income from pipe-rack rental</b>
		GPSC leased out pipe-racks in Map Ta Phut, with rental rates and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC, considered normal business practice.



### 9.2.1.13 PTT Asahi Chemical Co., Ltd. (PTTAC)

GPSC and PTTAC have a common major shareholder in GC, which holds 50.00% of PTTAC's paid-up registered capital.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from sale of power, steam, industrial water, and nitrogen</b>
Sales of goods and services	447.46	GPSC and PTTAC entered individual sales agreements for these products, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC, considered normal business practice.
Other income	5.39	
Purchase of goods and services	329.07	
<b>Financial Statements</b>		<b>Income from pipe-rack rental</b>
Trade receivables - related businesses	55.18	GPSC Group leased out its pipe-racks in Map Ta Phut, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC, considered normal business practice.
Other receivables - related businesses	133.44	
Trade payables - related businesses	50.77	
		<b>Income received in advance from sale of steam under Minimum Take-or-Pay terms</b>
		Since the annual actual value of product purchase proved lower than the minimum value specified in the contract, GPSC requested advance payment (Minimum Take-or-Pay: MTOP) from PTTAC. If the purchase volume exceeds the minimum volume specified in the contract within the agreed period, PTTAC can seek a refund of such advance payment commensurate with the excess volume consumed. GPSC will book the remaining MTOP as the revenue for the year if PTTAC is unable to consume steam over the minimum volume.
		<b>Expenses on the purchase of steam</b>
		Due to excess steam in PTTAC's processes, GPSC purchases such steam at prices and under terms considered normal business practice.

### 9.2.1.14 GC Logistics Solutions Co., Ltd. (GCL)

GPSC and GCL have a common major shareholder in GC, which owns 50.00% of GC's paid-up registered capital.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from sale of power and steam</b>
Sales of goods and services	91.19	GPSC and GCL entered individual sales agreements for these products, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC, considered normal business practice.
<b>Financial Statements</b>		<b>Income from operation and maintenance service</b>
Trade receivables - related businesses	15.46	GPSC entered an agreement with GCL to provide operation and maintenance service for solar rooftop PV and energy storage system (ESS) with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC, considered normal business practice.

### 9.2.1.15 Energy Complex Co., Ltd. (EnCo)

GPSC and EnCo have a common major shareholder in PTT, which owns 50.00% of EnCo's paid-up registered capital.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from engineering design, procurement and construction (EPC) service</b>
Sales of goods and services	0.80	GPSC Group engaged in an agreement with EnCo to provide EPC services with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC, considered normal business practice.
Purchase of goods and services	5.81	
Interest expenses	0.83	
Other expenses	21.76	
<b>Financial Statements</b>		<b>Expenses on office space rental and other related services, including parking fees, electricity bills, and equipment repair</b>
Trade receivables - related businesses	0.18	GPSC rented EnCo's office space since most of its business partners are headquartered at EnCo, making it convenient for coordination. Prices and terms agreed are considered normal business practice.
Other payable - related businesses	11.48	

### 9.2.1.16 PTT Digital Solution Co., Ltd. (PTT Digital)

GPSC and PTT Digital have common major shareholders in GC, PTT, and TOP, holding 40.00%, 20.00%, and 20.00% of PTT Digital's paid-up registered capital.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from fiber optic rental</b>
Purchase of goods and services	0.01	Since GPSC had surplus fiber optic capacities, it engaged in a memorandum of agreement for fiber optic use with PTT Digital, with rental rates as specified in the MOA, considered normal business practice.
Other expenses	82.69	
<b>Financial Statements</b>		<b>Expenses on ICT</b>
Other receivables - related businesses	0.47	GPSC and GPSC Group hired PTT Digital for their specialization in ICT services for server networks, the internet, emails, training and information center, installation of ICT support system for meetings, together with SAP system maintenance with service fees considered normal business practice.
Other payable - related businesses	41.43	

### 9.2.1.17 Global Green Chemicals Plc (GGC)

GPSC and GGC have a common major shareholder in GC, which holds 72.29% of GGC's paid-up registered capital, and have a common director in Mr. Kongkrapan Intarajang.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from sale of power, steam and industrial water</b>
Sales of goods and services	639.66	GPSC and GGC entered individual sales agreements for these products, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC, considered normal business practice.
<b>Financial Statements</b>		
Trade receivables - related businesses	99.90	

### 9.2.1.18 Thai Ethoxylate Co., Ltd. (TEX)

GPSC and TEX have a common major shareholder in GC, which owns 50.00% of TEX's paid-up capital through GGC.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from sale of power, steam and industrial water</b>
Sales of goods and services	18.75	GPSC and TEX entered individual sales agreements for these products, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC, considered normal business practice.  <b>Income received in advance from sale of power under Minimum Take-or-Pay terms</b> Since the annual actual value of product purchase proved lower than the minimum value specified in the contract, GPSC requested advance payment (Minimum Take-or-Pay: MTOP) from TEX. If the purchase volume exceeds the minimum volume specified in the contract within the agreed period, TEX can seek refund of such advance payment commensurate with the excess volume consumed. GPSC will book the remaining MTOP as the revenue for the year if TEX is unable to consume power over the minimum volume.
<b>Financial Statements</b>		
Trade receivables - related businesses	2.76	
Other payable - related businesses	2.66	

### 9.2.1.19 Advanced Biochemical (Thailand) Co., Ltd. (ABT)

GPSC and ABT have a common major shareholder in GC, which owns 32.72% of ABT's paid-up registered capital.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from sale of power and steam</b>
Sales of goods and services	187.58	GPSC and ABT entered individual sales agreements for these products, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC.
Other income	0.51	
		<b>Income from pipe-rack rental</b>
		GPSC leased out its pipe-racks at a price and under terms and conditions considered normal business practice. Payment was made in advance and was booked as income received in advance for the long-term right to use the asset; however, the income was gradually booked throughout the contract period.

### 9.2.1.20 Vencorex (Thailand) Co., Ltd. (VCX)

GPSC and VCX have a common major shareholder in GC, which indirectly owns 100.00% of VCX's paid-up registered capital.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from sale of power, steam, and industrial water</b>
Sales of goods and services	44.93	GPSC and VCX entered individual sales agreements for these products, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC, considered normal business practice.  <b>Income received in advance from sale of power under Minimum Take-or-Pay terms</b> Since the annual actual value of product purchase proved lower than the minimum value specified in the contract, GPSC requested advance payment (Minimum Take-or-Pay: MTOP) from VCX. If the purchase volume exceeds the minimum volume specified in the contract within the agreed period, VCX can seek refund of such advance payment commensurate with the excess volume consumed. GPSC will book the remaining MTOP as the revenue for the year if VCX is unable to consume power over the minimum volume.
<b>Financial Statements</b>		
Trade receivables - related businesses	6.38	
Other payable - related businesses	18.10	

### 9.2.1.21 Sak Chaisidhi Co., Ltd. (SAKC)

GPSC and SAKC have a common major shareholder in TOP, which holds 80.52% of SAKC's paid-up registered capital through TOP SOLVENT.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from pipe-rack rental</b>
Other income	1.34	GPSC entered a pipe rack rental agreement with SAKC, with rental rates and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC, considered normal business practice.



### 9.2.1.22 TOP SPP Co., Ltd. (TOP SPP)

GPSC and TOP SPP have a common major shareholder in TOP, which holds 99.99% of TOP SPP's paid-up registered capital.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Expenses on reserve power supply</b>
Purchase of goods and services	1.28	Backup power for GPSC's Sriracha power plant in case of power generation interruption, with agreed prices and terms considered normal business practice.
<b>Financial Statements</b>		
Trade payables - related businesses	0.85	

### 9.2.1.23 PTT Exploration and Production Plc (PTTEP)

GPSC and PTTEP have a common major shareholder in PTT, which holds 63.79% of PTTEP's paid-up registered capital, and have a common director in Mr.Wuttikorn Stithit

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from engineering design, procurement and construction (EPC) service</b>
Sales of goods and services	1.76	GPSC Group entered an agreement with PTTEP to provide EPC services, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC, considered normal business practice.
Purchase of goods and services	1.36	
Other expenses	7.75	
<b>Financial Statements</b>		<b>Income and expenses on business project development</b>
Trade receivables - related businesses	0.98	PTTEP entered an agreement with GPSC to develop business projects, with prices and terms considered normal business practice.
Other payable - related businesses	5.48	
		<b>Expenses on office space rental, water and electricity bills, and central utilities</b>
		GPSC rented additional office space of PTTEP in Enco to house its head office to expand its Bangkok office. The rental followed the rates set under an agreement with PTTEP, considered normal business practice.

### 9.2.1.24 PTT Oil and Retail Business Plc (OR)

GPSC and OR have a common major shareholder in PTT, which holds 75.00% of OR's paid-up registered capital.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from sale of power</b>
Sales of goods and services	242.39	GPSC Group and OR entered individual sales agreements for these products, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC, considered normal business practice.
Purchase of goods and services	329.55	
Other expenses	0.06	
<b>Financial Statements</b>		<b>Income from rooftop solar installation</b>
Trade receivables - related businesses	1.28	GPSC Group engaged in an agreement with OR for the installation of rooftop solar for OR's service stations, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC, considered normal business practice.
Other receivables - related businesses	1.72	
Trade payables - related businesses	3.86	<b>Expenses on lubricants</b> GPSC purchased lubricants for its operation at market prices comparable with other sellers, considered normal business practice.
Other payable - related businesses	0.02	
		<b>Expenses on ammonia anhydrous</b> GPSC and GPSC Group purchased ammonia anhydrous for production purposes, with prices comparable with other sellers, considered normal business practice.
		<b>Expenses on fuels</b> GPSC purchased diesel for production purposes, with prices comparable with other sellers, considered normal business practice.

### 9.2.1.25 PTT Retail Management Co., Ltd. (PTTRM)

GPSC and PTTRM have a common major shareholder in PTT, which holds 75.00% of PTTRM's paid-up registered capital through OR.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Expenses on purchase of goods</b>
Other expenses	0.02	GPSC Group purchased general products, with prices and terms considered normal business practice.

### 9.2.1.26 GC Estate Co., Ltd. (GCEC)

GPSC and GCEC have a common major shareholder in GC, which wholly owns GCEC.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Expenses on industrial water</b>
Purchase of goods and services	33.61	GPSC bought industrial water, with prices and terms considered normal business practice.
Interest expenses	2.91	
Other expenses	3.06	<b>Expenses on the right and land use fee for laying pipes for receiving and draining effluents</b>
<b>Financial Statements</b>		The right and land use fees for laying pipes for receiving and draining effluents in support of the Central Utility Plant 4 (CUP-4) were at prices and on terms considered normal business practice.
Trade payables - related businesses	4.21	<b>Expenses on facilities maintenance</b>
		GPSC paid for facilities maintenance in the Asia Industrial Estate, site of its Central Utility Plant 4. Prices and terms followed an agreement, considered normal business practice.

### 9.2.1.27 NPC S&E Security Guard Co., Ltd. (NPCSG)

GPSC and NPCSG have a common major shareholder in GC, which wholly owns NPCSG.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Expenses on security service</b>
Purchase of goods and services	14.92	GPSC and GPSC Group paid NPCSG for security service at prices and under contractual terms considered normal business practice.
Other expenses	34.14	
<b>Financial Statements</b>		
Other payable - related businesses	11.03	

### 9.2.1.28 GC-M PTA Co., Ltd. (GCMPTA)

GPSC and GCMPTA have a common major shareholder, namely GC, which holds 74.00% of GCMPTA's paid-up registered capital.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from sale of power and steam</b>
Sales of goods and services	865.58	GPSC and GCMPTA entered individual sales agreements for these products, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC.
Other income	3.24	
<b>Financial Statements</b>		
Trade receivables - related businesses	53.65	
Other receivables - related businesses	3.47	

### 9.2.1.29 GC Polyols Co., Ltd. (GCP)

GPSC and GCP have a common major shareholder in GC, which holds 82.10% of GCP's paid-up registered capital.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from sale of power, steam, industrial water, and nitrogen</b>
Sales of goods and services	127.05	GPSC and GCP entered individual sales agreements for these products, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC.
Other income	1.55	
<b>Financial Statements</b>		<b>Other income from pipe-rack rental</b>
Trade receivables - related businesses	24.82	GPSC Group leased out pipe-racks at a price and under terms and conditions considered normal business practice. Payment was made in advance and was booked as income received in advance for the long-term right to use the asset; however, the income was gradually booked throughout the contract period.
Other payable - related businesses	56.02	
		<b>Income received in advance from sale of power under Minimum Take-or-Pay terms</b>
		Since the annual actual value of product purchase proved lower than the minimum value specified in the contract, GPSC requested advance payment (Minimum Take-or-Pay: MTOP) from GCP. If the purchase volume exceeds the minimum volume specified in the contract within the agreed period, GCP can seek refund of such advance payment commensurate with the excess volume consumed. GPSC will book the remaining MTOP as the revenue for the year if GCP is unable to consume power over the minimum volume.

### 9.2.1.30 GC Oxirane Co., Ltd. (GCO)

GPSC and GCO have a common major shareholder in GC, which wholly owns GCO.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		
Sales of goods and services	136.67	<b>Income from sale of power, steam, industrial water, and nitrogen</b> GPSC and GCO entered individual sales agreements for these products, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC.
Other income	0.67	
		<b>Other income from pipe-rack rental</b> GPSC Group leased out pipe-racks at a price and under terms and conditions considered normal business practice. Payment was made in advance and was booked as income received in advance for the long-term right to use the asset; however, the income was gradually booked throughout the contract period.

### 9.2.1.31 Thai PET Resin Co., Ltd. (TPRC)

GPSC and TPRC have a common major shareholder in GC, which holds 74.00% of TPRC's paid-up registered capital.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		
Sales of goods and services	120.56	<b>Income from sale of power</b> GPSC and TPRC entered individual sales agreements for these products, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC.
<b>Financial Statements</b>		
Trade receivables - related businesses	9.13	

### 9.2.1.32 PTT MCC Biochem Co., Ltd. (PTTMCC)

GPSC and PTTMCC have a common major shareholder in GC, which holds 50.00% of PTTMCC's paid-up registered capital.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		
Sales of goods and services	52.55	<b>Income from sale of power</b> GPSC and PTTMCC entered power purchase agreement, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC.
<b>Financial Statements</b>		
Trade receivables - related businesses	3.50	



### 9.2.1.33 Business Professional Solutions Co., Ltd. (BPS)

GPSC and BPS have a common major shareholder in PTT, which wholly owns BPS through BSA.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Expenses on the staff outsourcing</b>
Other expenses	5.99	GPSC Group hired BPS to provide outsourcing services of personnel to suit GPSC's objectives, with prices and terms considered normal business practice.
<b>Financial Statements</b>		
Other payable - related businesses	1.50	

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

GPSC and GRP have a common major shareholder in PTT, which holds 50.00% of GRP's paid-up registered capital.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from GRP secondment</b>
Other income	2.68	GPSC seconded its employees to GRP in support of GRP's business, with prices and terms considered normal business practice.
Purchase of goods and services	0.92	
Interest income	15.88	
<b>Financial Statements</b>		<b>Income from Shared Services</b>
Other receivables - related businesses	8.17	GPSC provided shared services to GRP in support of GRP's business, with prices and terms considered normal business practice.

### 9.2.1.35 Global Renewable Power Operating Co., Ltd. (GRPO)

GPSC and GRPO have a common major shareholder in PTT, which holds 50.00% of GRPO's paid-up registered capital.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Expense on solar farm maintenance</b>
Sales of goods and services	0.66	GRPO entered an agreement with GPSC Group to receive operation and maintenance services for the solar rooftop PV system, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC, considered normal business practice.
Purchase of goods and services	5.75	
Other expenses	0.03	
<b>Financial Statements</b>		
Trade receivables - related businesses	0.26	
Trade payables - related businesses	2.89	

### 9.2.1.36 P.P. Solar Co., Ltd. (PPS)

GPSC and PPS have a common major shareholder in PTT, which holds 50.00% of PPS's paid-up registered capital through GRP.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from engineering design, procurement and construction (EPC) service</b>
Sales of goods and services	0.12	GPSC Group entered an agreement with PPS to provide EPC services, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC, considered normal business practice.
<b>Financial Statements</b>		
Trade receivables - related businesses	0.20	

### 9.2.1.37 Kuraray GC Advanced Materials Co., Ltd. (KGC)

GPSC and KGC have a common major shareholder in PTT, which holds 33.40% of KGC's paid-up registered capital through GC.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from sale of power</b>
Sales of goods and services	301.04	GPSC and KGC entered power purchase agreement, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC.
Other income	0.21	
<b>Financial Statements</b>		
Trade receivables - related businesses	27.32	
Other payable - related businesses	23.20	

### 9.2.1.38 ENVICCO Limited (ENVICCO)

GPSC and ENVICCO have a major shareholder in PTT, which holds 70.00% of ENVICCO's paid-up registered capital through GC.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from sale of power and steam</b>
Sales of goods and services	72.06	GPSC and ENVICCO entered power and steam purchase agreements, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC.
<b>Financial Statements</b>		
Trade receivables - related businesses	6.96	
Other payable - related businesses	28.47	

### 9.2.1.39 IRPC Technology Co., Ltd. (IRPC Technology)

GPSC and IRPC Technology have a common major shareholder in PTT, which wholly owns IRPC Technology's paid-up registered capital through IRPC.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income from sale of power</b>
Sales of goods and services	1.90	GPSC Group and IRPC Technology engaged in power purchase agreements, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC.
<b>Financial Statements</b>		
Trade receivables – related businesses	0.12	

### 9.2.1.40 EVME PLUS Co., Ltd. (EVME)

GPSC and EVME have a common major shareholder in PTT, which wholly owns EVME through Arun Plus.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Expenses on EV rentals</b>
Interest expenses	0.06	GPSC rented EVs from EVME, with prices and terms set under compatible criteria to those charged to other customers, either related or unrelated to GPSC.
<b>Financial Statements</b>		
Other payable - related businesses	0.17	

### 9.2.1.41 Nuovo Plus Co., Ltd. (Nuovo Plus)

GPSC and Nuovo Plus have a common major shareholder in PTT, which holds 51.00% of Nuovo Plus's paid-up registered capital through Arun Plus.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b>		<b>Income (Shared Services)</b>
Sales of products and services	8.42	GPSC provided Shared Services to Nuovo Plus to support its operations, with prices and terms considered normal business practice.
Other income	32.96	
<b>Financial Statements</b>		
Trade receivables - related businesses	5.09	
Other receivables - related businesses	9.45	
Other payable - related businesses	0.02	

#### 9.2.1.42 Sarn Palung Social Enterprise Co., Ltd. (SPSE)

GPSC and SPSE have a common major shareholder in PTT, which holds 20.00% of SPSE's paid-up registered capital.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b> Other expenses	0.11	<b>Other expenses in supporting social enterprise</b> GPSC supported PTT Group's social enterprise, joining in the resolution of problems facing communities, society, and the environment while advocating local labor hiring in line with PTT Group's approach.

#### 9.2.1.43 PTT LNG Co., Ltd. (PTTLNG)

GPSC and PTTLNG have a common major shareholder, namely PTT, which wholly owns PTTLNG.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b> Other income Other expenses	9.92 0.20	<b>Other income from pipe-rack rental</b> GPSC Group leased out pipe-racks at a price and under terms and conditions considered normal business practice. Payment was made in advance and was booked as income received in advance for the long-term right to use the asset; however, the income was gradually booked throughout the contract period.  <b>Expenses on power plant construction inspection</b> GPSC hired PTTLNG as consultant at market prices considered normal business practice.
<b>Financial Statements</b> Other payable - related businesses	0.20	

#### 9.2.1.44 MEKHA V Co., Ltd. (MEKHA V)

GPSC and MEKHA V have a common major shareholder in PTT, which wholly owns MEKHA V.

Transaction	Connected transaction value for the year ended December 31, 2023	Justification and sensibility
	(THB million)	
<b>Statements of Income</b> Other expenses	1.74	<b>Expenses for ICT</b> GPSC hired MEKHA V to provide ICT services with service fees considered normal business practice.
<b>Financial Statements</b> Other receivables - related businesses	0.11	
Other payable - related businesses	0.26	

### 9.2.2 Approval Measures and Procedures for Connected Transactions

For connected transactions involving GPSC and/or its subsidiaries with potential parties of conflict, vested interests, or potential future conflicts of interest, the Audit Committee will provide its views on the justification of transaction engagement and the price sensibility of such transactions. The committee's aim is to ensure that the terms involved follow the normal course of business, that third-party price comparison or market price comparison is made, that prices or terms of such transactions at the same level exist for third parties, or that such transaction engagement can apparently contain sensible or fair prices or terms, or all of these. If the Audit Committee cannot scrutinize potential connected transactions, GPSC may commission an independent expert or its own external auditor to comment on such transactions in support of decisions by the Board, the Audit Committee, or the shareholders, as seen fit. The essential guidelines for such scrutiny are:

1. **Product sales prices or service fees:** These must be normal-business transactions or those in support of normal businesses. Prices and commercial terms must at arm's length for all customers, both related and unrelated to GPSC.
2. **Product purchase prices or service fees:** These prices and fees must be normal business transactions or those in support of normal businesses. Prices and commercial terms must be set under compatible criteria to those charged by the business partners in question to other customers. Finally, engagement in such transactions must not compromise GPSC's interests.
3. **Asset transactions:** These could periodically arise as needed and as seen suitable, including acquisition of businesses for expansion under GPSC's investment plans and expansion plans. In engaging in such transactions, management or independent experts, or both (as seen fit), will assess and comment on the sensibility of prices and commercial terms involved.

As for the approval of connected transactions, those potential parties of conflict or vested interests have no voting rights on transaction approval. This move ensures that such engagement does not transfer or siphon interests between GPSC and its shareholders. Rather, the transactions must be in all shareholders' best interests. GPSC will disclose connected transactions in the notes to the audited financial statements, countersigned by the external auditor in the Annual Information Form (Form 56-1 One Report).

GPSC complies with the laws, regulations, and procedures of SEC, the Capital Market Supervisory Board, and SET on connected transactions, related-party transactions, and acquisition or disposal of assets under applicable rules for listed companies.

#### Independent Directors' Views

Independent directors concur with the Board of Director's views.

### 9.2.3 Policy on Connected Transactions

1. GPSC's directors and management prepare reports on their vested interests or those of their related parties and notify the company for use as reference for acting under applicable requirements for connected transactions.
2. Avoid engagement in connected transactions with potential conflicts of interest.
3. If a connected transaction proves unavoidable, GPSC must follow the procedures and comply with applicable laws, which include those criteria set by SEC and SET.
4. Set arm's-length prices and terms for connected transactions that are fair, sensible, and in the best interests of GPSC and all shareholders. If such prices are unavailable, GPSC must compare prices or service fees with third-party sources under the same or similar terms.
5. Those with vested interests in connected transactions must not approve or vote on them.
6. In scrutinizing connected transactions, GPSC may commission an independent assessor to evaluate and compare prices for significant ones to ensure that such connected transactions are sensible and in the best interests of GPSC and all shareholders.



#### 9.2.4 Trends for Connected Transactions with Potential Parties of Conflict

For future connected transactions, GPSC must comply with all laws on securities and exchanges, regulations, notifications, directives, or requirements of the Capital Market Supervisory Board, SEC, and SET. Engagement in such transactions must not produce benefit transfers or siphoning of interests between GPSC or its shareholders, or both, but must be in the best interests of GPSC and all shareholders.

For likely routine transactions, GPSC must follow the criteria and approaches of general commercial practices, with price references and terms that are suitable and fair,

sensible, and auditable. Such engagement must follow principles on agreements with general commercial terms approved by the Board. To this end, management must prepare a summary of connected transactions for reporting to the Audit Committee each year.

Disclosure of GPSC's connected transactions must comply with all laws and regulations set by SEC and SET.

GPSC's connected transactions in the last three years are available for shareholders and/or investors in the Annual Reports or 56-1 One Reports on GPSC's website: <https://www.gpscgroup.com/en/investor-relations/downloads/one-reports>



## Attachment 1 | Details about Directors, Executives, Chief Financial Officer, Chief Accountant, and Company Secretary

### Mr. Pailin Chuchottaworn

#### Chairman of the Board / Independent Director (Non-Executive Director)

- **Date Appointed :** April 2, 2021 (2<sup>nd</sup> Term)  
September 1, 2019 (1<sup>st</sup> Term)
- **Age :** 67
- **Education :**
  - Doctor of Engineering in Chemical Engineering from Tokyo Institute of Technology Japan (Japanese government scholarship), 1985
  - Master of Engineering in Chemical Engineering from Tokyo Institute of Technology Japan (Japanese government scholarship), 1982
  - Bachelor of Engineering in Chemical Engineering with 1<sup>st</sup> Class Honor, Chulalongkorn University, 1979
- **Training Record with Thai Institute of Directors (IOD)**
  - Director Certification Program (DCP 51/2004)
  - Director Accreditation Program (DAP 24/2004)
  - Finance for Non-Finance Directors (FND 14/2004)
  - Anti-corruption for Executive Program (ACEP 4/2012)
- **Other Training Record**
  - Certificate in Top Executives in the Energy Education Program (Class of 1<sup>st</sup>), Thailand Energy Academy (TEA)
  - Corporate Governance Program for Directors and Executives of State Enterprises and Public Organizations (Class of 7<sup>th</sup>), King Prajadhipok's Institute
  - Diploma, The Joint State-Private Sector Course, National Defence College (Class of 22<sup>nd</sup>), National Defence College
  - Top Executive Program (Class of 8<sup>th</sup>), Capital Market Academy (CMA)
  - Top Executive Program in Commerce and Trade (TEPCoT) (Class of 1<sup>st</sup>), Commerce Academy
  - PTT-GE Executive Leadership Program 2008, GE Crotonville, U.S.A.
  - NIDA-Wharton Executive Leadership Program 2007, Wharton University of Pennsylvania, U.S.A.
  - Industrial Liaison Program (ILP) 2005, Massachusetts Institute of Technology, U.S.A.
- **Current Position in Other Organizations**
  - Listed Company-The Stock Exchange of Thailand**  
1 Organization
    - Independent Director, Chairman of the Technology Committee and Member of the Executive SCB X Public Company Limited
  - Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)**  
16 Organizations :
    - Expert presiding over the committee responsible for selecting highly competent and experienced personnel for government service, Office of the Civil Service Commission
    - Expert commissioners of the office of the National Economic and Social Development Council
    - Chairman of Mahidol Wittayanusorn School
    - Director of SCB 10X Co., Ltd
    - President of the Council of VISTEC
    - Chairman of Governing Board Kamnoetvidya Science Academy (KVIS)
    - Expert Member, Executive Board, Office of National Higher Education Science Research and Innovation Policy Council
    - Director of the Economic Situation Management Committee From the epidemiological result of the Coronavirus Disease 2019 (COVID-19)
    - Chairman, Committee on Economic Steering

• Advisory Board, Devawongse Varopakarn Institute of Foreign Affairs (DVIFA)	2017 - Jul 15, 2019	: Deputy Minister of Transport
• Member of Office of the National Economic and Social Development Council	Mar 11, 2019 - Jul 15, 2019	: Advisor to the Prime Minister
• Chairman of Visup Company Limited	2015 - Nov 17, 2017	: Director of Thai Institute of Directors
• Chairman of Visai Ai Company Limited		
• Member of Public Sector Audit Evaluation Committee, Office of the Public Sector Development Commission	2015 - Nov 17, 2017	: Chairman of VISTEC Council, Vidyasirimedhi Institute
• Chairman of SCB Datax Co., Ltd.	2015 - Nov 17, 2017	: Chairman of the Board of Governors, Kamnoetvidya Science Academy
• Chairman of SCB Tech X Co., Ltd.		

### ► Working Experience (5-Year Past Experience)

Nov 17, 2020 – Oct 30, 2023	: Director of National Electric Vehicle Policy Committee Ministry of Energy	2016 - Nov 17, 2017	: Expert commissioners, Public Organization Development and Promotion Committee
May 1, 2021 – Apr 10, 2023	: Independent Director (Non-Executive) / Chairman of the Risk Management Committee Thailoil Public Company Limited	2016 - Nov 17, 2017	: Expert commissioners, The Securities and Exchange Commission
		2016 - Nov 17, 2017	: Expert commissioners, National Research Council of Thailand
Oct 12, 2020 – Sep 11, 2023	: Board Member, The Board of Investment of Thailand (BOI)	2016 - Jul 31, 2017	: Director, Bangkok Bank Public Company Limited
Sep 19, 2019 – May 31, 2022	: Independent Director / Member of the Executive Committee / Member of the Technology Committee / The Siam Commercial Bank Public Company Limited	2016 - 2017	: Director of the Faculty of Economics, Thammasat University
		2017 - Nov 17, 2017	: Director, Power of innovation and power of learning
		2017 - Nov 17, 2017	: Director of the University Council, Kasetsart University
2020 - Apr 30, 2021	: Independent Director / Chairman of the Enterprise Risk Management Committee, PTT Public Company Limited	2017 - Nov 17, 2017	: Subcommittee on Personnel Development, Research and Innovation National, Research and Innovation Policy Council
2020 - Apr 14, 2021	: Board Member, Oman Oil Company SAOC		



2017 - Nov 17, 2017	: Independent Committee for Education Reform	<b>➤ Shareholding in GPSC (including spouse and minor)</b> : None
2017 - Nov 17, 2017	: Expert Member, Board of Directors, Ministry of Digital Economy and Society	<b>➤ Qualified According to Related Laws and Does Not Have Prohibited Qualifications</b> : Qualified
2017 - Nov 17, 2017	: Expert Member, Committee on Education Management Development Collaboration with High-Potential Foreign Higher Education Institutions	<b>➤ Family Relation with other Directors, Executives, Major Shareholders of GPSC and its Subsidiaries</b> : None
2017 - Nov 17, 2017	: Director, Committee National Quality Award, Office Institute for Productivity	
2017 - Nov 17, 2017	: Advisor, Chulalongkorn University Council	
2017	: Board of Commissioners, Digital Economy Promotion Agency	
2015 - 2017	: Member of the Committee for Special Economic Zone Development Bureau of Industrial Potential of the Nation Office of Industrial Economics Ministry of Industry	
2015 - 2017	: Advisor, Sasin Graduate Institute of Business Administration of Chulalongkorn University	
2012 - Jul 31, 2017	: Member, Board of Trustees, Mahidol University	

## Gen. Prachaphat Vatchanaratana

**Independent Director / Member of the Corporate Governance and Sustainability Committee / Member of the Audit Committee (Non-Executive Director)**

➤ **Date Appointed :** March 31, 2023 (1<sup>st</sup> Term)

➤ **Age :** 61

➤ **Education :**

- Honorary Doctorate Degree of Laws, Ramkhamhaeng University
- Master of Arts (Political Science), Justice Administration Program, Kasetsart University
- Master of Laws, Ramkhamhaeng University
- Bachelor of Laws, Ramkhamhaeng University

➤ **Training Record with Thai Institute of Directors (IOD)**

- Subsidiary Governance Program (SGP 6/2023)

➤ **Other Training Record**

- Elementary Program (Batch 15), Judge Advocate Staff Academy, Judge Advocate General's Department
- Chief of Air Operations Program (Batch 42), Air Command and Staff College
- Judge Advocate Program (Batch 8), Judge Advocate Staff Academy, Judge Advocate General's Department
- Chief of Joint Staff Program (Batch 48), Joint War College, National Defence Studies Institute
- The National Defence Course (Batch 59), National Defence College
- The Rule of Law for Democracy Training Program (Batch 6) College of Constitutional Court, Constitutional Court
- The Program for Senior Executives on Justice Administration (Batch 23), National Justice Academy, Judicial Training Institute
- Top Executives in the Energy Education Program (Batch 15), Thailand Energy Academy
- The Attorney General Training Program (Batch 12), Office of the Attorney General

➤ **Current Position in Other Organizations**

Listed Company-The Stock Exchange of Thailand

: None

Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand

: None

➤ **Working Experience (5-Year Past Experience)**

Oct 1, 2019 – Sep 30, 2022 : Judge advocate

general, The Judge

Advocate General's

Department

Oct 1, 2018 – Sep 30, 2019 : Chef, military judicial

office, The Judge

Advocate General's

Department

➤ **Shareholding in GPSC (including spouse and minor)**

: None

➤ **Qualified According to Related Laws and Does Not Have Prohibited Qualifications**

: Qualified

➤ **Family Relation with other Directors, Executives, Major Shareholders of GPSC and its Subsidiaries**

: None



## Gen. Santipong Thampiya

### Independent Director / Chairman of the Nomination and Remuneration Committee / Member of the Risk Management Committee (Non-Executive Director)

➤ **Date Appointed :** April 1, 2022 (1<sup>st</sup> Term)

➤ **Age :** 61

➤ **Education :**

- Master of Public Administration, Burapha University
- Bachelor of Science, Chulachomklao Royal Military Academy

➤ **Training Record with Thai Institute of Directors (IOD)**

- Director Accreditation Program (DAP 144/2018)
- Board Nomination Compensation Program (BNCP 14/2022)

➤ **Other Training Record**

- Capital Market Leader Program, Capital Market Academy
- Command and General Staff College (CGSC), class 74
- The National Defense College, class 59
- Negotiation course, Oxford University
- The Rule of Law for Democracy, Class 8
- The Executive Program in Energy Literacy for a Sustainable Future, class 18

➤ **Current Position in Other Organizations**

Listed Company-The Stock Exchange of Thailand

: None

Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand

: None

➤ **Working Experience (5-Year Past Experience)**

Present : Retired soldier, Royal Thai Army  
 2021 - 2022 : Chief of Staff, Royal Thai Army/  
 Secretary General, Internal Security  
 Operations Command (ISOC)  
 2020 - 2021 : Deputy Chief of Staff, Royal Thai  
 Army  
 2019 : Director of Civil Affairs, Royal Thai  
 Army  
 2016 - 2019 : 1<sup>st</sup> Army Area Deputy Commander

➤ **Shareholding in GPSC (including spouse and minor)**

: None

➤ **Qualified According to Related Laws and Does Not Have Prohibited Qualifications**

: Qualified

➤ **Family Relation with other Directors, Executives, Major Shareholders of GPSC and its Subsidiaries**

: None

## Mrs. Nicha Hiranburana Thuvatham

### Independent Director / Member of the Corporate Governance and Sustainability Committee / Member of the Audit Committee (Non-Executive Director)

➤ **Date Appointed :** April 2, 2021 (2<sup>nd</sup> Term)  
April 3, 2018 (1<sup>st</sup> Term)

➤ **Age :** 55

➤ **Education :**

- Master's Degree, International Studies, Ohio University, U.S.A. (Foreign Student Scholarship)
- Bachelor of Political Science (Second Class Honors), Chulalongkorn University

➤ **Training Record with Thai Institute of Directors (IOD)**

- Director Accreditation Program (DAP 164/2019)

➤ **Other Training Record**

- Senior Management Course - Visionary and Ethical Leadership, Office of the Civil Service Commission
- Advanced Certificate Course in Promotion of Peaceful Society, King Prajadhipok's Institute
- Human Resources Management for Public Sector, Office of the Civil Service Commission
- Public Sector Management Certificate
- The National Defence Course (Batch 64), National Defence College
- Executive Program, Political and Electoral Development Institute (Class 9/2018)

➤ **Current Position in Other Organizations**

Listed Company-The Stock Exchange of Thailand

: None

**Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)**

1 Organization : Deputy Secretary-General to the Prime Minister for Administrative Affairs, Secretariat of the Prime Minister Office of the Prime Minister

➤ **Working Experience (5-Year Past Experience)**

March 7, 2016 : Deputy Secretary-General to the Prime Minister for Administrative Affairs, Secretariat of the Prime Minister Office of the Prime Minister  
: Deputy Director, Prime Minister Delivery Unit  
April 1, 2015 : Assistant Secretary-General to the Prime Minister  
2010 - 2014 : Advisor to the Prime Minister on Social, Secretariat of the Prime Minister

➤ **Shareholding in GPSC (including spouse and minor)**

: None

➤ **Qualified According to Related Laws and Does Not Have Prohibited Qualifications**

: Qualified

➤ **Family Relation with other Directors, Executives, Major Shareholders of GPSC and its Subsidiaries**

: None

## Mr. Chalermphol Pensoot

### Independent Director / Chairman of the Audit Committee (Non-Executive Director)

➤ **Date Appointed :** April 1, 2022 (1<sup>st</sup> Term)

➤ **Age :** 60

➤ **Education :**

- Master of Business Administration Program (Marketing), Sripatum University
- Bachelor of Laws, Dhurakij Pundit University

➤ **Training Record with Thai Institute of Directors (IOD)**

- Director Accreditation Program (DAP 196/2022)
- Financial Reporting Cases: A Monitoring Guide for Board (RFP 7/2022)

➤ **Other Training Record**

- Diploma, National Defence College, The National Defence Course Class 56
- 81<sup>st</sup> The Civil Service Executive Development Program: Visionary and Moral Leadership
- The Training Program " Role of Law for Democracy " Class 9, The College of the Constitutional Court

➤ **Current Position in Other Organizations Listed Company-The Stock Exchange of Thailand**

: None

**Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)**

5 Organizations: Member of The National Economic and Social Development Council  
 : Member of EEC Policy committee  
 : Member of Executive Board, King Prajadhipok's Institute Organization  
 : Member of GPF Board of Director  
 : Judicial Administration Commission

➤ **Working Experience (5-Year Past Experience)**

Present : Director, Budget Bureau  
 2020 : Deputy Director, Budget Bureau  
 2018 : Senior Advisor, Budget Bureau  
 2017 : Director, Economic Sector Budget Preparation 2 Division  
 2016 : Director, Social Sector Budget Preparation 3 Division  
 2015 : Director, Area and Foreign Administration for Integrated Budget Preparation  
 : Division, and Director, Budget Preparation Area 2 Division

➤ **Shareholding in GPSC (including spouse and minor)**

: None

➤ **Qualified According to Related Laws and Does Not Have Prohibited Qualifications**

: Qualified

➤ **Family Relation with other Directors, Executives, Major Shareholders of GPSC and its Subsidiaries**

: None

## Mr. Somchai Meesen

### Independent Director / Chairman of the Corporate Governance and Sustainability Committee / Member of the Audit Committee (Non-Executive Director)

➤ **Date Appointed :** March 31, 2023 (2<sup>nd</sup> Term)  
June 4, 2020 (1<sup>st</sup> Term)

➤ **Age :** 55

➤ **Education :**

- Master of Political Science (Politics), Thammasat University
- Bachelor of Arts (History), Chiang Mai University

➤ **Training Record with Thai Institute of Directors (IOD)**

- Director Accreditation Program (DAP 161/2019)
- Financial Statements for Directors (FSD 45/2022)
- Financial Reporting Cases: A Monitoring Guide for Board (RFP 6/2022)
- Advance Audit Committee Program (AACP 44/2022)

➤ **Other Training**

- The Executive Program in Energy Literacy for a Sustainable Future, TEA 16

➤ **Current Position in Other Organizations**

**Listed Company-The Stock Exchange of Thailand**

2 Organizations: Director and Executive Director /  
Nomination and Remuneration  
Committee / Vice Chairman of the  
Executive Committee Nation Group  
(Thailand) Public Company Limited  
: Board of Directors Thai Parcels  
Public Company Limited

**Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)**

5 Organizations: Director Thansettakij Multimedia Co.,Ltd  
: Director Post Today Co.,Ltd.  
: Director Spring News Co.,Ltd.  
: Director Nation TV Co.,Ltd.  
: Director Nation Digital Content Co.Ltd.

➤ **Working Experience (5-Year Past Experience)**

19 Oct 2022 – Present : Board of Directors Thai  
Parcels Public Company  
Limited  
September 29, 2022 – Present : Director Post Today  
Co.,Ltd.  
August 30, 2022 – Present: Director Spring News  
Co.,Ltd.  
July 1, 2022 – Present : Director Nation TV  
Co.,Ltd.  
June 15, 2022 – Present : Director Nation Digital  
Content Co.Ltd.

➤ **Shareholding in GPSC (including spouse and minor)**

: None

➤ **Qualified According to Related Laws and Does Not Have Prohibited Qualifications**

: Qualified

➤ **Family Relation with other Directors, Executives, Major Shareholders of GPSC and its Subsidiaries**

: None

## Mr. Noppadol Pinsupa

### Director / Chairman of the Risk Management Committee / Member of the Nomination and Remuneration Committee / (Non-Executive Director)

➤ **Date Appointed :** April 1, 2022 (2<sup>nd</sup> Term)  
November 1, 2021 (1<sup>st</sup> Term)

➤ **Age :** 59

➤ **Education :**

- Master of Engineering (Electrical Engineering), Chulalongkorn University
- Bachelor of Engineering (Electrical Engineering), Chulalongkorn University

➤ **Training Record with Thai Institute of Directors (IOD)**

- Director Certification Program (DCP 146/2011)
- Financial Statements for Directors Program (FSD 12/2011)
- Briefing on International Anti-Corruption International Cases and Practices (14 October 2015)

➤ **Other Training Record**

- The Executive Program in Energy Literacy for a Sustainable Future, Class 14/2019, Thailand Energy Academy (TEA)
- Diploma, National Defence College, the National Defence Course Class 60, National Defence College (NDC)
- TIJ Executive Program on the Rule of Law and Development (RoLD Program), 2017, Thailand Institute of Justice (TIJ)
- Capital Market Leader Program (Class 22/2016), Capital Market Academy
- G-20Y Summit 2015, France
- Mitsui-Harvard Business School Global Management Academy 2015 Japan – U.S.A.
- Program for Senior Executive on Justice Administration Batch, Class 19/2014, Judicial Training Institute

- Leadership Development Program III, PTT Leadership and Learning Institute
- Breakthrough Program for Senior Executives International Leading Business School (IMD) Lausanne, Switzerland
- Assessor Training Program, Thailand Quality Award (TQA)

➤ **Current Position in Other Organizations**

**Listed Company-The Stock Exchange of Thailand**

2 Organizations: Chief Operating Officer Downstream Petroleum Business Group,  
PTT Public Company Limited  
: Director and Director to the Risk Management Committee, PTT Global Chemical Public Company Limited

**Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)**

7 Organizations: Chairman of the Board PTT TANK Terminal Company Limited  
: Expert Committee of Vidyasirimedhi Institute Council, Vidyasirimedhi Institute of Science and Technology (VISTEC)  
: Board Member of National Energy Technology Center (ENTEC)  
: Director, Chulalongkorn University Engineering Alumni, Chulalongkorn University  
: Vice Chairman, The Federation of Thai Industries  
: Chairman of the Institute of Industrial Energy  
: Board Member of The Joint Standing Committee on Commerce, Industry and Banking



## ► Working Experience (5-Year Past Experience)

1 Oct 2022 – Present : Chief Operating Officer  
Downstream Petroleum  
Business Group,  
PTT Public Company  
Limited

7 Apr 2021 – 1 Oct 2021 : Director to the Corporate  
Governance Committee,  
PTT Oil and Retail Business  
Public Company

1 Oct 2021 – 11 Nov 2021: Director to the Nomination  
& Remuneration Committee,  
PTT Global Chemical  
Public Company Limited

2 Jul 2021 – 1 Dec 2022: Director, Arun Plus Company  
Limited

1 Oct 2021 – 30 Sep 2022: Chief New Business and  
Infrastructure Officer,  
PTT Public Company  
Limited

1 Dec 2020 – 30 Sep 2021: Senior Executive Vice  
President, Innovation  
and Digital, PTT Public  
Company Limited

1 Dec 2020 – 19 Jan 2021: Director and Director of  
the Corporate Governance  
Committee, IRPC Public  
Company Limited

20 Jan 2021– 30 Sep 2021: Director to the Nomination  
& Remuneration Committee,  
IRPC Public Company  
Limited

3 Jul 2020 – 30 Nov 2020: Senior Executive Vice  
President, PTT Public  
Company Limited,  
working on a second  
ment as President and  
Chief Executive Officer,  
IRPC Public Company  
Limited

1 Feb 2019 – 3 Jul 2020 : Senior Executive Vice  
President, PTT Public  
Company Limited,  
working on a secondment  
as President, IRPC Public  
Company Limited

Feb 2019 – Aug 2019 : Chairman, PTT Energy  
Solutions Company  
Limited

Oct 2017 – Jan 2019 : Chairman, PTT Global  
LNG Company Limited

2017 : Chairman, PTT LNG  
Company Limited

Oct 2015 – Jan 2019 : Senior Executive Vice  
President, Gas Business  
Unit, PTT Public  
Company Limited

Oct 2015 – Jan 2019 : Director, and Member of  
the Risk Management  
Committee, Thai Oil  
Public Company Limited

2014 – 2018 : Chairman, PTT Natural  
Gas Distribution Company  
Limited

2015 – 2016 : President and Chief  
Executive Officer ,  
Global Power Synergy  
Public Company Limited

## ► Shareholding in GPSC (including spouse and minor)

Self : 137,300 shares (0.00048693%)

## ► Qualified According to Related Laws and Does Not Have Prohibited Qualifications

: Qualified

## ► Family Relation with other Directors, Executives, Major Shareholders of GPSC and its Subsidiaries

: None

## M.L. Peekthong Thongyai

### Director (Non-Executive Director)

➤ **Date Appointed :** March 31, 2023 (2<sup>nd</sup> Term)  
December 1, 2022 (1<sup>st</sup> Term)

➤ **Age :** 56

➤ **Education :**

- Master of Business Administration (Finance),  
SASIN Graduate Institute of Business Administration  
of Chulalongkorn University
- Bachelor of Science (Petroleum Engineering)  
The University of Texas at Austin, USA

➤ **Training Record with Thai Institute of Directors (IOD)**

- Director Certification Program (DCP 15/2002)

➤ **Other Training Record**

- The Executive Program in Energy Literacy for a  
Sustainable Future (Class of 18<sup>th</sup>),  
Thailand Energy Academy (TEA)
- National Defense Course (NDC) Class 64,  
Thailand National Defence College
- APAC Energy Transition Leadership Program  
(A-ETLP/2022), GE Crotonville, USA
- Leadership Development Program III/2019,  
PTT Leadership and Learning Institute
- Leadership Development Program II/2014,  
PTT Leadership and Learning Institute

➤ **Current Positions**

**Listed Company-The Stock Exchange of Thailand**

1 Organization : Senior Executive Vice President,  
Gas Business Unit, PTT Public  
Company Limited

**Other Organizations / Companies (Not Listed in  
the Stock Exchange of Thailand)**

2 Organizations : Chairman of Director, PTT Natural  
Gas Distribution Company Limited  
: Chairman of Director, PTT Global  
LNG Company Limited

➤ **Working Experience (5-Year Past Experience)**

1 Oct 2021 – 30 Sep 2022 : Senior Executive  
Vice President,  
Downstream  
Business Group  
Alignment, PTT  
Public Company  
Limited

1 Oct 2021 – 31 Oct 2022 : Director/ Director to  
the Risk Management  
Committee, PTT  
Global Chemical  
Public Company  
Limited

17 Sep 2021- 30 Nov 2022 : Director, GPC  
International Terminal  
Company Limited

1 Oct 2019 – 30 Sep 2021 : Director, Gulf MTP  
LNG Terminal  
Company Limited

1 Nov 2016 – 31 Dec 2022 : Director, PTT Tank  
Terminal Company  
Limited

1 Nov 2016 – 30 Sep 2021 : Executive Vice  
President, Downstream  
Business Group  
Alignment, PTT  
Public Company  
Limited, working on  
a secondment as  
Acting Managing  
Director, PTT Tank  
Terminal Company  
Limited

28 Jan 2016- 26 Apr 2019 : Director, PTT Energy  
Resources Company  
Limited

1 Aug 2015 – 31 Oct 2016 : Executive Vice President, Policy and Economics, PTT Public Company Limited, working as Manager at Thailand Energy Academy

➤ **Shareholding in GPSC (including spouse and minor)**

: None

➤ **Qualified According to Related Laws and Does Not Have Prohibited Qualifications**

: Qualified

➤ **Family Relation with other Directors, Executives, Major Shareholders of GPSC and its subsidiaries**

: None

## Mr. Wuttikorn Stithit

### Director / Member of the Nomination and Remuneration Committee (Non-Executive Director)

➤ **Date Appointed :** April 1, 2022 (2<sup>nd</sup> Term)  
April 1, 2019 (1<sup>st</sup> Term)

• Energy Literacy for a Sustainable Future (TEA Class 16)

➤ **Age :** 59

➤ **Education :**

- Master Degree Master of Business Administration (Finance and Banking), Kasetsart University
- Master Degree M.S.(Science), Ohio University, U.S.A.
- Bachelor Degree Electrical Engineering, King Mongkut's Institute of Technology Ladkrabang

➤ **Training Record with Thai Institute of Directors (IOD)**

- Director Certification Program (DCP 158/2012)

➤ **Other Training Record**

- Leadership Development Program 3 (LDP3), PLLI
- Leadership Succession Program (LSP)
- Senior Executive Education Program, SIBA 2017
- Power of the Kingdom Class 4/2015 (Bhumipalung Phandin), Chula Unisearch, Chulalongkorn University
- Leadership Development Program 2 (LDP2), PLLI
- Senior Executive Program, SASIN 2011
- National Defence Collage of Thailand

➤ **Current Position in Other Organizations**

**Listed Company-The Stock Exchange of Thailand**

2 Organizations : Chief Operating Officer, Upstream Petroleum and Gas Business Group, PTT Public Company Limited  
: Director, PTT Exploration and Production Company Limited

**Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)**

1 Organization : Chairman, PTT LNG Company Limited

➤ **Working Experience (5-Year Past Experience)**

1 Oct 2022 – Present : Chief Operating Officer, Upstream Petroleum and Gas Business Group, PTT Public Company Limited  
1 Feb 2018 – 30 Sep 2022 : Senior Executive Vice President, Gas Business Unit, PTT Public Company Limited

1 Nov 2015 – 31 Jan 2018 : Executive Vice President,  
Natural Gas Supply &  
Trading, PTT Public  
Company Limited

1 Nov 2015 – 31 Oct 2015 : Executive Vice  
President, Natural  
Gas Distribution,  
PTT Public Company  
Limited

➤ **Shareholding in GPSC (including spouse and minor)**

Self : None  
Spouse : 10,000 shares (0.00003546%)  
Total : 10,000 shares (0.00003546%)

➤ **Qualified According to Related Laws and Does Not Have Prohibited Qualifications**

: Qualified

➤ **Family Relation with other Directors, Executives, Major Shareholders of GPSC and its Subsidiaries**

Mrs. Sasitorn Stithit, Mr. Wuttikorn Stithit's spouse is serving as PTT's Vice President, Corporate Governance and Compliance

## Mr. Kongkrapan Intarajang

### Director / Member of the Risk Management Committee (Non-Executive Director)

➤ **Date Appointed :** April 1, 2022 (3<sup>rd</sup> Term)  
April 1, 2019 (2<sup>nd</sup> Term)  
August 15, 2017 (1<sup>st</sup> Term)

➤ **Age :** 56

➤ **Education :**

- Doctor of Philosophy (Ph.D.) in Chemical Engineering, University of Houston, U.S.A.
- Bachelor of Engineering (Chemical Engineering) (Second-class Honors), Chulalongkorn University

➤ **Training Record with Thai Institute of Directors (IOD)**

- Role of the Chairman Program (RCP 21/2009)
- Director Certification Program (DCP 119/2009)

➤ **Other Training Record**

- Executive Development Training Program, The Royal Thai Police

- Capital Market Leader Program (Class 30), Capital Market Academy
- Leadership Development Program (LDP 3) Class 4, PTT Leadership and Learning Institute
- The Executive Program in Energy Literacy for a Sustainable Future, Class 14, Thailand Energy Academy (TEA)
- Diploma, National Defence College, The National Defence Course Class 60, National Defence College of Thailand (NDC)
- Breakthrough Program for Senior Executives, IMD Business School

➤ **Current Position in Other Organizations**

**Listed Company-The Stock Exchange of Thailand**

4 Organizations: Director and Secretary to the Board of Directors / Director to the Risk Management Committee and Chief Executive Officer & President, PTT Global Chemical Public Company Limited

- : Senior Executive Vice President reporting to Chief Operating Officer, Downstream Petroleum Business Group, PTT Public Company Limited
- : Chairman, Global Green Chemicals Public Company Limited
- : Director / Member of the Risk Management Committee (Non-Executive Director), Global Power Synergy Public Company Limited

- : Member of Vidyasirimedhi Institute Council (VISTEC)
- : Member of Trustee, The Petroleum Institute of Thailand (PTIT)
- : Council of Trustee, Thailand Business Council of Sustainable Development (TBCSD)
- : Executive Director, Thailand Energy Academy
- : Director, Kamnoetvidya Science Academy (KVIS)
- : Co-Chairman, France – Thailand Business Forum

#### Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)

- 16 Organizations: Committee, Chulalongkorn University Alumni Association under the Royal Patronage of His Majesty the King
- : Board Member, National Energy Technology Center, National Science and Technology Development Agency (NSTDA)
  - : Advisor to the Board of Directors, Institute of Small and Medium Enterprises Industry (SMI) Federation of Thai Industries
  - : Director and Member of The Nomination Committee and Remunerating Committee, Thai Institute of Directors Association (IOD)
  - : Chairperson of Advisory Committee in relation to its investment in Allnex, PTTGC International (Netherlands) B.V.
  - : Chairman, PTTGC International (Netherlands) B.V.
  - : Chairman, PTTGC International Private Limited
  - : Director, Association of Capital Market Academy Alumni
  - : Director, The Federation of Thai Industries
  - : Vice President (Supporting), Thailand Swimming Association

#### ► Working Experience (5-Year Past Experience)

- 1 Oct 2020 - 31 Mar 2022 : Advisor of the Member Relations, The Federation of Thai Industries
- 1 Sep 2020 - 15 Feb 2022 : Chairman, GC International Corporation
- 1 Jul 2015 - 15 Feb 2022 : Chairman, PTTGC America LLC
- 1 Jul 2015 - 15 Feb 2022 : Chairman, PTTGC America Corporation
- 24 Aug 2020 - 25 Mar 2021 : Committee Member, Sustainable Energy Foundation
- 6 Nov 2019 - 20 Oct 2020 : Director, Global Green Chemicals Public Company Limited
- Nov 2019 - Sep 2020 : Director, Power of Innovation Foundation
- Oct 2019 - Sep 2020 : Director, Power of Learning Foundation
- 31 Oct 2019 - 31 Aug 2020 : Director, GC International Corporation
- 9 Sep 2008 - 31 Aug 2020 : Director, PTTGC International Private Limited
- May 2017 - Jan 2020 : Director, Thai Tank Terminal Limited
- Apr 2017 - 30 Sep 2019 : Chief Operating Officer – Upstream Petrochemical



	Business, PTT Global Chemical Public Company Limited	Sep 2014 - Dec 2018	: Director, NatureWorks LLC
Jul 2015 - Sep 2019	: Director and President & CEO, PTTGC America Corporation	Sep 2014 - Dec 2018	: Director / Vice President, GC International Corporation (Formerly, PTTGC International (USA) Inc.)
Apr 2015 - Sep 2019	: Director, PTTGC Innovation America Corporation		
Feb 2015 - Sep 2019	: Director, PTTGC International (Netherlands) B.V.	➤ <b>Shareholding in GPSC (including spouse and minor)</b>	: None
Jan 2015 - Sep 2019	: Director, Vencorex Holding	➤ <b>Qualified According to Related Laws and Does Not Have Prohibited Qualifications</b>	: Qualified
Nov 2008 - Sep 2019	: Director, Emery Oleochemicals (M) Sdn. Bhd.	➤ <b>Family Relation with other Directors, Executives, Major Shareholders of GPSC and its Subsidiaries</b>	: None
Nov 2008 - Sep 2019	: Director, Emery Specialty Chemicals Sdn. Bhd.		

## Miss Pannalin Mahawongtikul

### Director (Non-Executive Director)

- **Date Appointed :** March 31, 2023 (2<sup>nd</sup> Term)  
December 1, 2022 (1<sup>st</sup> Term)
- **Age :** 59
- **Education :**
  - Master of Business Administration (M.B.A.), Thammasat University, Thailand
  - Bachelor of Science in Accounting (B.B.A.), Thammasat University, Thailand
- **Training Record with Thai Institute of Directors (IOD)**
  - Corporate Governance: Regulation and Disclosure (CG PTTEP/2017) (PTTEP In-house Course)
  - Director Certification Program (DCP 279/2019)
  - Strategic Board Master Class (SBM9/2020)
  - Risk Management Program for Corporate Leaders (RCL 28/2022)
- **Other Training Record**
  - Executive Development Program (EDP) (Class of 2<sup>nd</sup>), Thai Listed Companies Association
  - PTT-HBS Leadership Development Program II, Harvard Business School, U.S.A.
  - NIDA-Wharton Executive Leadership Program (ELP), The Wharton School, University of Pennsylvania, U.S.A.
  - Leadership Development Program (LDP) III, PTT Leadership and Learning Institute (PLLI)
  - CMA-Greater Mekong Subregion (CMA-GMS), (Class of 1<sup>st</sup>), Capital Market Academy
  - Leadership Succession Program (LSP), (Class of 6<sup>th</sup>), Institute of Research and Development for Public Enterprises
  - Executive Program for Senior Management (EX-PSM), (Class of 3<sup>rd</sup>), Fiscal Policy Research Institute Foundation
  - Capital Market Academy Leader Program, (Class of 24<sup>th</sup>), Capital Market Academy (CMA)

- The TIJ Executive Program on the Rule of Law and Development (ROLD) 2020, The Resilient Leader, Thailand Institute of Justice
- The Executive Program in Energy Literacy for a Sustainable Future, (Class of 15<sup>th</sup>), Thailand Energy Academy (TEA)
- TLCA CFO Professional Development Program (TLCA CFO CPD) 2023

## ➤ Current Positions

### Listed Company-The Stock Exchange of Thailand

3 Organizations: Chief Financial Officer, PTT Public Company Limited  
 : Director and Chairman of the Risk Management Committee, Thai Oil Public Company Limited  
 : Director, Global Power Synergy Public Company Limited

### Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)

7 Organizations: Executive Director, Thailand Energy Academy  
 : Club President, Thai Investor Relations Club  
 : Member of Vidyasirimedhi Institute of Science and Technology Council For short: Member of VISTEC Council  
 : Member of VISTEC Executive Committee  
 : Chairman of VISTEC Finance and Budget Sub-Committee  
 : Director / Member of the Audit Committee, Thai Listed Companies Association (TLCA)  
 : Director / Lotus Pharmaceutical Co. Ltd. (Listed Company in Taiwan)

## ➤ Working Experience (5-Year Past Experience)

Oct 1, 2018 - Present : Chief Financial Officer, PTT Public Company Limited  
 Jan 1, 2016 – Sep 30, 2018 : Executive Vice President, PTT Plc secondment to PTT Exploration and Production Plc as Senior Executive Vice President, Finance and Accounting Group  
 Feb 1, 2015 – Dec 31, 2015 : Executive Vice President, Financial and Accounting Group, PTT Public Company Limited  
 Aug 1, 2014- Jan 31, 2015 : (Act.) Executive Vice President, Financial and Accounting Group, PTT Public Company Limited

## ➤ Shareholding in GPSC (including spouse and minor)

Self : 9,409 shares (0.00033368%)

## ➤ Qualified According to Related Laws and Does Not Have Prohibited Qualifications

: Qualified

## ➤ Family Relation with other Directors, Executives, Major Shareholders of GPSC and its subsidiaries

: None

# Mr. Bandhit Thamprajamchit

## Director (Non-Executive Director)

➤ **Date Appointed :** February 1, 2023 (1<sup>st</sup> Term)

➤ **Age :** 53

➤ **Education :**

- Master of Business Administration (Executive), Sasin Graduate Institute of Business Administration of Chulalongkorn University
- M.Sc. in Advanced Chemical Engineering (Distinction), Imperial College, University of London, United Kingdom
- Bachelor of Engineering (Chemical Engineering) (First Class Honours, Gold Medal), Chulalongkorn University

➤ **Training Record with Thai Institute of Directors (IOD)**

- Director Certification Program (DCP 187/2014)
- Ethical Leadership Program (ELP 27/2022)
- Role of the Chairman Program (RCP 52/2022)

➤ **Other Training Record**

- National Defence Course, Class 63, The National Defence College of Thailand
- The Executive Program in Energy Literacy for a Sustainable Future, Class 14, Thailand Energy Academy
- Capital Market Academy Leader Program, Class 27, Capital Market Academy
- Leadership Development Program III (LDP III), Class 4, PTT Leadership and Learning Institute (PLLI)
- Leadership Development Program II (LDP II with INSEAD) Thailand & Singapore, PTT Leadership and Learning Institute (PLLI)
- The Young Executive Program in Energy Literacy for a Sustainable Future, Class 2, Thailand Energy Academy
- Executive Development Program (EDP), Thai Listed Companies Association

- Executive Development Program, Fiscal Policy Research Institute Foundation, Thailand
- NIDA-WHARTON Executive Development Program, Thailand & U.S.A.
- STS Expert Session 2023:
  - “Global Trends in Energy”, Boston Consulting Group (BCG)
  - “Global & Thailand Economic Outlook”, Bangkok Bank Plc

➤ **Current Position in Other Organizations**

**Listed Company-The Stock Exchange of Thailand**

2 Organizations: Senior Executive Vice President, PTT Plc  
: Director (Executive) / Member of the Risk Management Committee / Chief Executive Officer and President / Secretary to the Board of Directors, Thai Oil Plc

**Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)**

16 Organizations: Director & Chairman, Board of Thai Paraxylene Company Limited  
: Director & Chairman, Board of LABIX Company Limited  
: Director & Chairman, Board of TOPNEXT International Company Limited  
: Director, Board of Sapthip Company Limited  
: Chairman, Petroleum Refining Industry Club, The Federation of Thai Industries  
: Vice Chairman, Petrochemical Cluster, The Federation of Thai Industries  
: Committee, Industrial Promotion and Support Department, The Federation of Thai Industries

: Committee, The Institute of Industrial Energy, The Federation of Thai Industries	Jan – Mar 2023	: Acting Managing Director, LABIX Co., Ltd.
: Subcommittee on Fuel and Greenhouse Gases Impact Assessment from EV Measures, The National EV Policy Committee, Ministry of Energy	Jan 2021 – Dec 2022	: Senior Executive Vice President-Hydrocarbon and Acting Executive Vice President – Manufacturing, Thai Oil Plc
: Director, The Federation of Thai Industries	Feb 2020 – Dec 2020	: Senior Executive Vice President-Petroleum & Petrochemical Thai Oil Plc
: Council of Trustees, Petroleum Institute of Thailand	Oct 2018 – Jan 2020	: Senior Executive Vice President- Petroleum & Petrochemical and Acting Executive Vice President- Operation Excellence, Thai Oil Plc
: Director of Thai Listed Companies Association		
: Committee, Chulalongkorn University Alumni Association, under the Royal Patronage of His Majesty the King		
: Vice President, Thailand Swimming Association		
: Executive Director, Thailand Energy Academy		
: Council Member of Thailand Business Council for Sustainable Development		

#### ► Working Experience (5-Year Past Experience)

Jan 2023 – Present	: Chief Executive Officer and the President, Thai Oil Plc
Jan – Sep 2023	: Acting Senior Executive Vice President – Hydrocarbon and Acting Executive Vice President – Manufacturing, Thai Oil Plc

#### ► Shareholding in GPSC (including spouse and minor)

: None

#### ► Qualified According to Related Laws and Does Not Have Prohibited Qualifications

: Qualified

#### ► Family Relation with other Directors, Executives, Major Shareholders of GPSC and its Subsidiaries

: None

## Mr. Worawat Pitayasiri

### Director / Secretary to the Board / Member of the Risk Management Committee / President and Chief Executive Officer (Executive Director)

➤ **Date Appointed** : April 2, 2021, (2<sup>nd</sup> Term)  
December 1, 2020 (1<sup>st</sup> Term)

➤ **Age** : 57

➤ **Education** :

- Master of Business Administration, Thammasart University
- Bachelor of Engineering (Chemical Engineering), Chulalongkorn University

➤ **Training Record with Thai Institute of Directors (IOD)**

- Director Certification Program (DCP 158/2012)

➤ **Other Training Record**

- National Defense Course (NDC) Class 64, Thailand National Defence College
- Advanced Certificate Course Politics and Governance in Democratic Systems for High Level Executives (Class 22nd), King Prajadhipok's Institute
- NIDA-Wharton Executive Leadership Program, Class of 2009, The Wharton School of the University of Pennsylvania, USA
- Asia Petrochemical Industry Conference (APIC), Class 2/2017, Japan Petrochemicals Industry Association
- Senior Executive Program (SEP), Class 26/2012, Sasin Graduate Institute of Business Administration, Chulalongkorn University
- PTT Group VP Leadership Development Program

➤ **Current Positions**

**Listed Company-The Stock Exchange of Thailand**

- 1 Organization : Senior Executive Vice President,  
PTT Public Company Limited

**Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)**

- 18 Organizations: Director, Xayaburi Power Company Limited
- : Director, Ratchaburi Power Company Limited
  - : Director, Glow Energy Public Company Limited
  - : Director, Glow Co., Ltd.
  - : Director, Glow SPP 2 Co., Ltd.
  - : Director, Glow SPP 3 Co., Ltd.
  - : Director, Glow IPP 2 Holding Co., Ltd.
  - : Director, Glow SPP 11 Co., Ltd.
  - : Director, Glow IPP Co., Ltd.
  - : Director, Global Renewable Power Company Limited
  - : Director, Nuovo Plus Company Limited
  - : Director / Executive Director, Board of The Federation of Thai Industries (FTI) (Term 2022-2024)
  - : Vice President, Committee of the Institute of Industrial Energy (Term 2022 – 2024)
  - : Executive Director, Thailand Energy Academy
  - : Committee, Chulalongkorn University Alumni Association, under the Royal Patronage of His Majesty the King
  - : Chairman of the Innovation and Initiative Committee, Chulalongkorn University Alumni Association
  - : Council Board, Thailand Carbon Neutral Network
  - : Advisor, IEEE Power & Energy Society



### ➤ Working Experience (5-Year Past Experience)

July 2015 - March 2016 : President, PTT  
MCC Biochem  
Company Limited

March 2016 - September 2016 : Executive Vice  
President,  
Downstream  
Business Group  
Collaboration,  
PTT Public  
Company Limited

October 2016 - September 2018 : Executive Vice  
President,  
Downstream  
Business Group  
Planning,  
PTT Public  
Company Limited

September 2018 - November 2020 : Senior Executive  
Vice President,  
Innovation and  
Digital, PTT

### ➤ Shareholding in GPSC (including spouse and minor)

: None

### ➤ Qualified According to Related Laws and Does Not Have Prohibited Qualifications

: Qualified

### ➤ Family Relation with other Directors, Executives, Major Shareholders of GPSC and its Subsidiaries

: None

## Details about Management Executives

### Mr. Sirimet Leepagorn

#### Chief Operating Officer

➤ **Date Appointed :** November 1, 2021

➤ **Age :** 57

#### ➤ **Education :**

- Master of Business Administration, Burapha University
- Bachelor of Science (Chemistry), Chiang Mai University

#### ➤ **Training Record with Thai Institute of Directors (IOD)**

- Director Certification Program (DCP 205/2015)
- Strategic Board Master Class (SBM 6/2019)
- Boardroom for Business Breakthrough, Director Refreshment Program (DRP1/2021)

- Leading Your Business through Uncertainties, Director Refreshment Program (DRP2/2021)
- Lessons Learnt from Financial Cases: How Board should React, Director Refreshment Program (DRP3/2021)
- Role of the Chairman Program 50 (RCP50/2022)

#### ➤ **Other Training Record**

- GE Leadership Development Program, New York, USA, 2012
- PTT Leadership Development Program (LDP II), Harvard Business School, 2014
- Senior Executive Program, Sasin Executive Education , 2018
- Advanced Management Program 3 (AMP3) Business & People Management Module 2019
- EXCLUSIVE MEDIA TRAINING 2019
- Authentic You, Authentic Leader 2019

- Leadership Development Program 3 (LDP 3), 2019
- Coaching for Leaders 2019
- Brain 4, The Federation of Thai Industries 2020
- SMU-TMA Opportunity for the New Entrepreneur, SMU Academy Singapore Management University, 2023

## ➤ Current Position in Other Organizations

### Listed Company-The Stock Exchange of Thailand

1 Organization : Executive Vice President, PTT Public Company Limited

### Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)

16 Organizations: Director, IRPC Clean Power Company Limited

- : Chairman, GHECO-One Company Limited
- : Chairman, Glow IPP 3 Company Limited
- : Chairman, Houay Ho Thai Company Limited
- : Chairman, Houay Ho Power Company Limited
- : Director, Glow Energy Public Company Limited
- : Director, Glow Company Limited
- : Director, Glow SPP 2 Company Limited
- : Director, Glow SPP 3 Company Limited
- : Director, Glow SPP 11 Company Limited
- : Director, Glow IPP Company Limited
- : Director, Glow IPP 2 Holding Company Limited
- : Director, Global Renewable Power Company Limited
- : Director, Combined Heat and Power Producing Company Limited
- : Director, Nava Nakorn Electricity Generating Company Limited
- : Director, GPSC Holding (Thailand) Company Limited

## ➤ Working Experience (5-Years Past Experience)

Dec 2018 – Mar 2023 : Chairman, IRPC Clean Power Company Limited

Sep 2021 – Apr 2022 : Director, Global Renewable Synergy Taiwan Company Limited

Jun 2021 – Apr 2022 : Director, Global Renewable Synergy Company Limited

Feb 2020 – Mar 2022 : Director, Xayaburi Power Company Limited

May 2019 – Mar 2021 : Director, Energy Recovery Unit Company Limited

Dec 2018 – Apr 2022 : Chairman, Global Renewable Power Operating Company Limited

Dec 2018 – Apr 2022 : Chairman, N.P.S. Stargroup Company Limited

Dec 2018 – Apr 2022 : Chairman, World X Change Asia Company Limited

Dec 2018 – Apr 2022 : Chairman, P.P. Solar Company Limited

Dec 2018 – Mar 2022 : Chairman, Nam Lik 1 Power Company Limited

Apr 2020 – Oct 2021 : Executive Vice President Corporate Strategy and Subsidiary Management, Global Power Synergy Public Company Limited

Oct 2018– Mar 2020 : Executive Vice President, Asset Management, Global Power Synergy Public Company Limited

Jan 2018–Sep 2018 : Executive Vice President, Strategic Transformation and Result Deliver, IRPC Public Company Limited

Jan 2016–Dec 2017 : EVEREST Project Director, IRPC Public Company Limited

Sep 2014–Sep 2018 : Director, IRPC Clean Power Company Limited

Jan 2014–Jun 2018 : Acting President, IRPC Clean Power Company Limited

Oct 2014 - Oct 2015 : Executive Vice President,  
Corporate Business  
Planning, IRPC Public  
Company Limited

Jul 2013 - Sep 2014 : Acting Executive Vice  
President, Corporate  
Business Planning,  
IRPC Public Company  
Limited

Feb 2012-Sep 2018 : Director, IRPC Oil  
Company Limited

➤ **Shareholding in GPSC (including spouse and minor)**

: None

➤ **Family Relation with Directors, other Executives, Major Shareholders of GPSC and its Subsidiaries**

: None

## Mr. Thitipong Jurapornsiridee

### Chief Financial Officer

➤ **Date Appointed :** January 1, 2021

➤ **Age :** 54

➤ **Education :**

- Master of Business Administration,  
Thammasat University
- Master of Economics (English Program)  
Thammasat University
- Bachelor of Engineering (Electrical Engineering),  
Chulalongkorn University

➤ **Training Record with Thai Institute of Directors (IOD)**

- Director Certification Program (DCP 267/2018)

➤ **Current Position in Other Organizations**

**Listed Company-The Stock Exchange of Thailand**

1 Organization : Executive Vice President,  
PTT Public Company Limited

**Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)**

16 Organizations: Director, Ratchaburi Power  
Company Limited  
: Director, IRPC Clean Power  
Company Limited

: Chairman, Nam Lik 1 Power  
Company Limited  
: Director, GHECO-ONE Company  
Limited  
: Director, Glow IPP 3 Co., Ltd.  
: Chairman, GPSC Treasury Center  
(GPSCTC)  
: Chairman, Energy Recovery Unit  
Company Limited  
: Director, Global Renewable  
Synergy Company Limited  
: Chairman, Combined Heat and  
Power Producing Company Limited  
: Director, Global Renewable  
Synergy Taiwan Company Limited  
: Director, Nuovo Plus Company  
Limited  
: Director, Houay Ho Thai Company  
Limited  
: Director, Houay Ho Power  
Company Limited  
: Director, GPSC Holding (Thailand)  
Company Limited  
: Director, Avaada Energy Private  
Limite  
: Director, 24M Technologies, Inc.

➤ **Working Experience (5-Year Past Experience)**

- Oct 2020 – Dec 2020 : Acting Executive Vice President, Finance and Accounting, PTT Global Chemical Public Company Limited
- Jun 2019 – Sep 2020 : Senior Vice President, Corporate Finance and Strategy, PTT Global Chemical Public Company Limited
- Oct 2011 – Jun 2019 : Vice President – Corporate Finance & Investor Relations, PTT Global Chemical Public Company Limited
- Jan 2011 – Sep 2019 : Director, PTTGC Innovation America Corporation

➤ **Shareholding in GPSC (including spouse and minor)**

- Self : None
- Spouse : 11,500 shares
- Total : 11,500 shares

➤ **Family Relation with other Directors, Executives, Major Shareholders of GPSC and its Subsidiaries**

- : None

## Mr. Kulapat Permbhusri

### Executive Vice President Corporate Strategy and Subsidiary Management

➤ **Date Appointed :** May 1, 2022

➤ **Age :** 60

➤ **Education :**

- Master of Science in Electrical Engineering, Tufts University, U.S.A
- Bachelor of Science in Electrical Engineering, Boston University, U.S.A
- Bachelor of Science in Physics, Boston College, U.S.A

➤ **Training Record with Thai Institute of Directors (IOD)**

- Director Accreditation Program (DAP)
- Successful Formulation and Execution of Strategy (SFE)
- Director Certification Program (DCP)

➤ **Other Training Record**

- PTT Leadership Development Program (LDP 2)

➤ **Current Position in Other Organizations**

**Listed Company-The Stock Exchange of Thailand**

- : None

**Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)**

- 15 Organizations: Director, Nava Nakorn Electricity Generating Company Limited
- : Director, Nam Lik 1 Power Company Limited
- : Chairman of the Board, GPSC Holding (Thailand) Company Limited
- : Director, Chonburi Clean Energy Company Limited
- : Director, Eastern Seaboard Clean Energy Company Limited
- : Director, Global Renewable Synergy Company Limited
- : Director, Gheco – One Company Limited
- : Director, Bangpa-in Cogeneration Company Limited

: Director, Combined Heat and Power Producing Company Limited		Strategy and Subsidiary Management / Global
: Director, Glow IPP 3 Company Limited		Power Synergy Public Company Limited
: Director, Xayaburi Power Company Limited	2017- 2021	: Senior Vice President Subsidiary and Investment Management / Global
: Director, Houay Ho Power Company Limited		Power Synergy Public Company Limited
: Director, Global Renewable Synergy Taiwan Co., Ltd.	2009 - 2017	: Senior Vice President, Investment Banking Department / The Siam
: Chairman of the Board, IRPC Clean Power Company Limited		Commercial Bank Public Company Limited
: Director, Global Renewable Power Company Limited		

### ➤ Working Experience (5-Year Past Experience)

May 2022 - Present	: Executive Vice President Corporate Strategy and Subsidiary Management / Global Power Synergy Public Company Limited
November 2021- May 2022	: Acting Executive Vice President Corporate

### ➤ Shareholding in GPSC (including spouse and minor)

: None

### ➤ Family Relation with other Directors, Executives, Major Shareholders of GPSC and its Subsidiaries

: None

## Mrs. Sirobon Boontaworn

### Senior Vice President of President and Chief Executive Officer

➤ **Date Appointed :** September 1, 2023

➤ **Age :** 52

#### ➤ **Education :**

- Master of Science in Financial Accounting, Chulalongkorn University
- Bachelor of Science in Accounting, Chiangmai University

#### ➤ **Training Record with Thai Institute of Directors (IOD)**

- Director Certified Program (DCP 262/2018)

#### ➤ **Other Training Record**

- PTT Leadership Development Program (LDPII)

- PTT Advance Management Program #2 (AMP)
- CFO Certification Program #23, Thailand Federation of Accounting Professions
- TLCA Executive Development Program (EDP) #20, Thai Listed Companies Association
- TLCA CFO Professional Development Program, Thai Listed Companies Association

#### ➤ **Current Position in Other Organizations Listed Company-The Stock Exchange of Thailand**

: None

#### **Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)**

10 Organizations: Director, GPSC Treasury Center Co., Ltd.



: Chairman, Helios 1 Company Limited Limited	2020 – 31 Aug 2023	: Senior Vice President - Corporate Finance and Investor Relations, Global Power Synergy Public Company Limited
: Chairman, Helios 2 Company Limited Limited		
: Chairman, Helios 3 Company Limited Limited	2019 – 2020	: Chief Financial Officer and Executive Vice President, Glow Energy Public Company Limited
: Chairman, Helios 4 Company Limited Limited		
: Chairman, Helios 5 Company Limited Limited	2019	: Vice President - Corporate Accounting and Tax, Global Power Synergy Public Company Limited
: Director, Avaada Energy Private Limited		
: Director, CI Changfang Limited		
: Director, CI Xidao Limited		
: Director, Glow Energy Myanmar Co., Ltd.		

#### ➤ Working Experience (5-Year Past Experience)

Sep 2023 – Present : Senior Vice President of President and Chief Executive Officer, Global Power Synergy Public Company Limited

#### ➤ Shareholding in GPSC (including spouse and minor)

: None

#### ➤ Family Relation with Directors, other Executives, Major Shareholders of GPSC and its Subsidiaries

: None

## Mr. Manatchai Kongrakkawin

### Acting Executive Vice President - Business Development

➤ **Date Appointed :** September 16, 2023

➤ **Age :** 44

#### ➤ Education :

- Master of Engineering in Mechanical Engineering Chulalongkorn University
- Bachelor of Engineering in Mechanical Engineering Chulalongkorn University

#### ➤ Training Record

- The Young Executive Program in Energy Literacy for a Sustainable Future Batch 7(2019) Thailand Energy Academy
- Executive Energy Program by the Institute of Industrial Energy Batch 7 (2021)

#### ➤ Current Position in Other Organizations

Listed Company-The Stock Exchange of Thailand

: None

#### Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)

4 Organizations

20 Sep 2023 – Present : Board of Director, NUOVO PLUS Company Limited

27 Sep 2023 – Present : Board of Director, Combined Heat and Power Producing Company Limited

9 Sep 2023 – Present : Board of Director, Global Renewable Synergy Company Limited

4 Oct 2023 – Present : Chairman, Global  
Renewable Synergy  
Company Limited Taiwan

2020 – 2022

: Senior Vice President  
Corporate Strategy  
and Risk Management  
Global Power Synergy  
Public Company  
Limited

### ➤ Working Experience (5-Year Past Experience)

16 September 2023 – Present : Acting Executive Vice  
President - Business  
Development Global  
Power Synergy Public  
Company Limited

2018 – 2020

: Corporate Strategy  
Division Manager,  
Global Power  
Synergy Public  
Company Limited

Mar 2023 – 15 September 2023 : Senior Vice President  
of President and  
Chief Executive  
Officer Global Power  
Synergy Public  
Company Limited

2022 – 2023

: Senior Vice President  
Customer Relations  
and Contract  
Management Global  
Power Synergy Public  
Company Limited

### ➤ Shareholding in GPSC (including spouse and minor)

: None

### ➤ Family Relation with Directors, other Executives, Major Shareholders of GPSC and its Subsidiaries

: None

## Mrs. Sriprapha Sumruatruamphol

### Executive Vice President - Commercial

➤ **Date Appointed :** November 1, 2021

➤ **Age :** 60

#### ➤ **Education :**

- Master of Business Administration, Syracuse University, New York, USA
- Bachelor Degree in Science (Chemical Engineering), Michigan Technological University, Michigan, USA

#### ➤ **Training Record**

- Top Executives in the Energy Education Program (Batch 10), Thailand Energy Academy

#### ➤ **Current Position in Other Organizations**

**Listed Company-The Stock Exchange of Thailand**

: None

#### **Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)**

4 Organizations: Director of Combined Heat and Power Producing Co., Ltd.  
: Director of Gheco-One Co., Ltd.  
: Director of Chonburi Clean Energy Co., Ltd.  
: Director of Eastern Seaboard Clean Energy Co., Ltd.

#### ➤ **Working Experience (5-Year Past Experience)**

1 Apr 2023- 31 Dec 2023 : Executive Vice  
President – Commercial,  
Global Power Synergy  
Public Company Limited

1 Nov 2021 – 14 Feb 2023 :	Executive Vice President Commercial and Supply Chain Management Global Power Synergy Public Company Limited	Feb 2012-Sep 2013 :	Chairman of Power Generation Club – The Federation of Thai Industries
1 Apr 2020 – 31 Oct 2021 :	Executive Vice President – Commercial, Global Power Synergy Public Company Limited	Oct 2002-Sep 2013 :	Director of Eastern Fluid Transport Co., Ltd.
1 Jan 2016- 31 Mar 2020 :	Chief Commercial Officer and Executive Vice President-Human Resources, Glow Energy Public Co., Ltd., and Glow Group	2001 – 2015 :	Chief Commercial Officer and Executive Vice President Glow Energy Public Co., Ltd. and Glow Group
Feb 2012-Sep 2013 :	Chairman of Association of Private Power Producers	<p>➤ <b>Shareholding in GPSC (including spouse and minor)</b> : None</p> <p>➤ <b>Family Relation with Directors, other Executives, Major Shareholders of GPSC and its Subsidiaries</b> : None</p>	

## Mr. Narongchai Visutrachai

### Senior Vice President of President and Chief Executive Officer

➤ **Date Appointed :** March 1, 2023

➤ **Age :** 57

➤ **Education :**

- Master Degree in Science (Economics), University of North Texas, USA
- Master Degree in Business Administration, Kasetsart University
- Bachelor Degree in Political Science (Public Administration), Chulalongkorn University

➤ **Training Record**

- Executive Energy Program#5 (EEP) Year 2019
- Executive Development Program (EDP) Year 2016
- Energy Transition & Climate Change management (ETC) batch#1 Year 2022
- Advanced Master of Management Program, (AMM) batch#9 Year 2022
- TPA Code Year 2023

➤ **Current Position in Other Organizations**

Listed Company-The Stock Exchange of Thailand

: None

**Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)**

6 Organizations Director Eastern Fluid Transport Co., Ltd. (EFT)

: Director Community Partnership Association (CPA)

: Vice Chairman - The Association of Private Power Producers (APPP)

: Vice Chairman – Power Producer industry Club, The Federation of Thai Industries

: Vice Chairman – Renewable industry Club, The Federation of Thai Industries

: Director and Secretary – The Institute of Industrial Energy

➤ **Working Experience (5-Year Past Experience)**

2020 - 2023 : Senior Vice President – Government Relations & Public Affairs, GPSC Group

2016 - 2020 : Senior Vice President - Government & Public Affairs Glow Energy Public Co., Ltd. / Glow Group

➤ **Shareholding in GPSC (including spouse and minor)**

Self : 9,000 shares

➤ **Family Relation with Directors, other Executives, Major Shareholders of GPSC and its Subsidiaries**

: None

## Mr. Sutthi Chuesook

### Executive Vice President – Operational Excellence

➤ **Date Appointed :** January 1, 2023

➤ **Age :** 56

➤ **Education :**

- Master's degree Faculty of Business Administration, Ramkhamhaeng University
- Bachelor's degree Department of Electrical Engineering, King Mongkut's University of Technology North Bangkok

➤ **Working Experience (5-Year Past Experience)**

2023 : Executive Vice President  
– Operational Excellence Global Power Synergy Public Company Limited

2020 - 2022 : Senior Vice President Plant O&M, Rayong Area Global Power Synergy Public Company Limited

2017 - 2020 : SVP – Rayong Facilities Management, Glow Company Limited

➤ **Current Position in Other Organizations**

Listed Company-The Stock Exchange of Thailand  
: None

Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)

: None

➤ **Shareholding in GPSC (including spouse and minor)**

: None

➤ **Family Relation with Directors, other Executives, Major Shareholders of GPSC and its Subsidiaries**

: None

## Mr. Adrianus Josephus Van Den Broek

### Executive Vice President - Operations and Maintenance

➤ **Date Appointed :** November 1, 2021

**Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)**

➤ **Age:** 51

1 Organization : Director, GHECO-One Company Limited

➤ **Education :**

- Master of Science in Management, General Management PDP2, University Nyenrode, the Netherlands
- Bachelor of Electronics Engineering-Technical Computer Science, College Rijswijk

➤ **Working Experience (5-Year Past Experience)**

2020 – Oct 2021 : Executive Vice President  
- Operation Center of Excellence

2016 – 2020 : Chief Operating Officer and Executive Vice President, Glow Energy Public Co., Ltd. Glow Group and Houay Ho Power Co., Ltd.

➤ **Training Record with Thai Institute of Directors (IOD)**

- Director Certification Program (DCP 338/2023)

➤ **Training Record**

- General Management Program Cycle 8, CEDEP

➤ **Shareholding in GPSC (including spouse and minor)**

: None

➤ **Current Position in Other Organizations Listed Company-The Stock Exchange of Thailand**

: None

➤ **Family Relation with Directors, other Executives, Major Shareholders of GPSC and its Subsidiaries**

: None

## Mrs. Prinda Ma-imjai

### Acting Executive Vice President Corporate Services

➤ **Date Appointed :** October 1, 2023

➤ **Current Position in Other Organizations**

**Listed Company-The Stock Exchange of Thailand**

: None

➤ **Age :** 50

➤ **Education :**

- Master of Business Administration (Management of Technology) Asian Institute of Technology (AIT)
- Bachelor of Engineering (Computer Engineering), Kasetsart University

**Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)**

: None

➤ **Training Record**

- Advanced Master of Management Program, AMM
- Chief Exponential Officer Program 3 (CXO3)
- Leadership Development Program 2 (LDP 2)

➤ **Working Experience (5-Year Past Experience)**

Oct 2023 – Present : Acting Executive Vice President Corporate Services Global Power Synergy Public Company Limited



Oct 2016 – Sep 2023 : Vice President – PTT Public Limited Company

Apr 2021 – Sep 2023 : Senior Vice President, Organization Effectiveness, Global Power Synergy Public Company Limited

Oct 2020 – Mar 2021 : Vice President, Business Group Human Resources Management, PTT Public Company Limited

Oct 2019 – Sep 2020 : Vice President, Human Resources Strategy & Policy, PTT Public Company Limited

Oct 2016 – Sep 2019 : Vice President, Strategy & Enterprise Services, PTT Digital Solutions Company Limited

➤ **Shareholding in GPSC (including spouse and minor)**

Self : 12,819 shares

➤ **Family Relation with Directors, other Executives, Major Shareholders of GPSC and its Subsidiaries**

: None

## Profile of the designated person directly responsible for accounting

### Mr. Krittapong Tangsitthisilpa

#### Senior Vice President Finance & Accounting Shared Service Center

➤ **Date Appointed :** January 1, 2022

➤ **Age :** 46

➤ **Education :**

- Master of Accountancy, Chulalongkorn University
- Bachelor of Accountancy, Kasetsart University
- Bachelor of Law, Sukhothai Thammathirat University

➤ **Training Record**

- CFO Academy Program in Advanced Level, Faculty of Commerce and Accountancy Chulalongkorn University
- Tax Law Certificate Program, Central Tax Court
- Leadership Development Program: Michigan Ross Executive Education and SEAC

➤ **Current Position in Other Organizations**

**Listed Company-The Stock Exchange of Thailand**

: Vice President Attached to Chief Financial Officer, PTT Public Company Limited

**Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)**

: None

➤ **Working Experience (5-Year Past Experience)**

Jan 2022 – Present : Senior Vice President Finance & Accounting Shared Service Center, Global Power Synergy Public Company Limited

Feb 2017 – Dec 2021: Tax Accounting Division Manager, PTT Public Company Limited

Jan 2016 – Jan 2017 : Costing Management Gas Business Division Manager, PTT Public Company Limited

➤ **Shareholding in GPSC (including spouse and minor)**

: None

➤ **Family Relations with Directors, other Executives, Major Shareholders of GPSC and its Subsidiaries**

: None

## Profile of the Company Secretary and chief of Compliance

### Mr. Noranat Simarat

#### Senior Vice President Company Secretary and Corporate Governance

- **Date Appointed :** November 1, 2023 Governance Global Power Synergy Public Company Limited
- **Age :** 45 May 1, 2023 – Oct 31, 2023 : Acting Senior Vice President Company Secretary and Corporate Governance Global Power Synergy Public Company Limited
- **Education :**
  - Master of Laws, Indiana University, U.S.A.
  - Bachelor of Laws, Thammasat University
- **Training Record with Thai Institute of Directors (IOD)**
  - : None 2022 - 2023 : Vice President Global Power Synergy Public Company Limited
  - 2020 - 2022 : Business Law and Litigation Division Manager Global Power Synergy Public Company Limited
- **Other Training Record**
  - The Young Executive Program in Energy Literacy for a Sustainable Future (YTEA Class 9), Thailand Energy Academy 2018 - 2020 : Division Manager Office of Corporate Legal Global Power Synergy Public Company Limited
- **Current Position in Other Organizations**

Listed Company-The Stock Exchange of Thailand

: None

Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)

: None
- **Working Experience (5-Year Past Experience)**

Nov 1, 2023 - Present: Senior Vice President Company Secretary and Corporate
- **Shareholding in GPSC (including spouse and minor)**

Self : 37,138 shares
- **Family Relation with Directors, other Executives, Major Shareholders of GPSC and its Subsidiaries**

: None

#### Roles of the Chief of Compliance

Since 2018, GPSC has set up a unit under the Board's vision to strictly perform compliance tasks, namely the Compliance Division under the Company Secretary and Corporate Governance Department. Compliance steered corporate compliance with laws and corporate regulations. As GPSC's Second Line of Defense, she defines policies, rules, and standards for compliance and steers compliance of matters under her responsibility, counsels, educates, and communicates defined policies, laws, and regulations.

## Attachment 2 | Details of Director in the Subsidiary Companies, as of December 31, 2023

❖ Chairman    ✓ Director    ○ Director/Executive of GPSC    ■ holding company

Company		Name-Surname																												
		GLOW Public Co.,Ltd.	GCO Co.,Ltd.	GLOW SPP2 Co.,Ltd.	GLOW SPP3 Co.,Ltd.	GLOW SPP11 Co.,Ltd.	GLOW IPP Co.,Ltd.	GLOW IPP2 Holding Co.,Ltd.	HHTC Houay Ho Thai Co.,Ltd.	HHPC Houay Ho Power Co.,Ltd.	GHECO One Co.,Ltd.	GLOW IPP3 Co.,Ltd.	GE Myanmar Glow Energy	CHPP Combined Heat and Power Producing Co.,Ltd.	NSC Natee Synergy Co.,Ltd.	IRPC Clean Power Co.,Ltd.	ERU Energy Recovery Unit Co.,Ltd.	GHSC Holding (Thailand) Co.,Ltd.	GPSC Treasury Center Co.,Ltd.	GRSC Global Renewable Synergy Co.,Ltd.	GRSC Global Renewable Synergy Company Limited Taiwan	Boreeplus Company Limited	Eurusplus Company Limited	WindPower Development Company Limited	Helios 1 Company Limited	Helios 2 Company Limited	Helios 3 Company Limited	Helios 4 Company Limited	Helios 5 Company Limited	GRP Global Renewable Power Co.,Ltd.
1. Mr. Veerasak Kositpaisal		❖	❖	❖	❖	❖	❖	❖																						
2. Mr. Jukr Boon-Long		✓	✓	✓	✓	✓	✓	✓	❖																					
3. Mrs. Patareeya Benjapolchai		✓	✓	✓	✓	✓	✓	✓	✓																					
4. Police General Aek Angsananon		✓	✓	✓	✓	✓	✓	✓	✓																					
5. Mrs. Boobpha Amornkiatkajorn		✓	✓	✓	✓	✓	✓	✓	✓																					
6. Assoc. Prof. Dr. Chayun Tantivasadakarn		✓	✓	✓	✓	✓	✓	✓	✓																					
7. Mr. Worawat Pitayasiri	○	✓	✓	✓	✓	✓	✓	✓	❖																					✓
8. Mr. Sirimet Leepagorn	○	✓	✓	✓	✓	✓	✓	✓	❖																					✓
9. Mr. Thitipong Jurapornsiridee	○								✓																					
10. Mr. Kulapat Permbsuri	○								✓																					
11. Mrs. Sriprapha Sumruatruamphol	○																													
12. Mr. Manatchai Kongrakkawin	○																													
13. Mrs. Sirobon Boontaworn	○																													
14. Mr. Somsak Lertcharoensersuk	○																													
15. Mr. Adrianus Josephus Van Den Broek	○																													
16. Mr. Jaruwat Singsoomdee	○																													
17. Ms. Duido Suksamran	○																													
18. Ms. Sukittee Chaiyarak	○																													
19. Mr. Nutthapong Puangmanee	○																													
20. Ms. Peangpanor Boonklum																														
21. Mrs. Rosaya Teinwan																														

[illegible]

## Attachment 3 | Details about the Chief of Internal Audit

### Ms. Attayar Sukotanang

#### Senior Vice President, Corporate Internal Audit

➤ **Date Appointed :** 1 April 2020

➤ **Age :** 50

➤ **Education :**

- Master of Science in Information Systems, The George Washington University, U.S.A.
- Bachelor of Arts in Business Administration, Eastern Washington University, U.S.A.

➤ **Training Record**

- PTT Leadership Development Program I

➤ **Professional Certification**

- Certified Information Systems Auditor (CISA), U.S.A.

➤ **Current Position in Other Organizations**

**Listed Company-The Stock Exchange of Thailand**  
1 Organization : Vice President, PTT Public Company Limited

**Other Organizations / Companies (Not Listed in the Stock Exchange of Thailand)**

: None

➤ **Working Experience (5-Year Past Experience)**

2020 - Present	: Senior Vice President, Corporate Internal Audit, Global Power Synergy Public Company Limited
2017 - 2020	: Vice President, Corporate Internal Audit, Global Power Synergy Public Company Limited
2013 - 2017	: Team Leader, Upstream and Gas Business Group Alignment Department, PTT Public Company Limited

➤ **Shareholding in GPSC (including spouse and minor)**

: None

➤ **Family Relation with Directors, other Executives, Major Shareholders of GPSC and its Subsidiaries**

: None



## Attachment 4 | Details of Operating Asset

Details of Assets used in Business Operations and Property Evaluation are shown in 56-1 One Report in Business Operation and Performance on Assets used in Business Operations.

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## Attachment 5 | Full version of the Corporate Governance Policy and Guidelines

Good Corporate Governance Policy and Guidelines and Code of Conduct (Full version) Revealing on Company's website

<https://www.gpscgroup.com/storage/download/cg/good-corporate-governance-policy/gpsc-corporate-governance-manual-and-code-of-conduct-2020-en.pdf>

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## Attachment 6 | Report of the Audit Committee

The company has disclosed report of Audit Committee in 56-1 One Report : Report the Performance of Good Corporate Governance in 8.2.1 Report of the Audit Committee

# Financial Statement



# Independent Auditor's Report

## To the Shareholders of Global Power Synergy Public Company Limited

### My opinion

In my opinion, the consolidated financial statements and the separate financial statements present fairly, in all material respects, the consolidated financial position of Global Power Synergy Public Company Limited (the Company) and its subsidiaries (the Group) and the separate financial position of the Company as at 31 December 2023, and its consolidated and separate financial performance and its consolidated and separate cash flows for the year then ended in accordance with Thai Financial Reporting Standards (TFRS).

### What I have audited

The consolidated financial statements and the separate financial statements comprise:

- the consolidated and separate statements of financial position as at 31 December 2023;
- the consolidated and separate statements of income for the year then ended;
- the consolidated and separate statements of comprehensive income for the year then ended;
- the consolidated and separate statements of changes in equity for the year then ended;
- the consolidated and separate statements of cash flows for the year then end; and
- the notes to the consolidated and separate financial statements, which include significant accounting policies and other explanatory information.

### Basis for opinion

I conducted my audit in accordance with Thai Standards on Auditing (TSAs). My responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the consolidated and separate financial statements section of my report. I am independent of the Group and the Company in accordance with the Code of Ethics for Professional Accountants including Independence Standards issued by the Federation of Accounting Professions (TFAC Code) that are relevant to my audit of the consolidated and separate financial statements, and I have fulfilled my other ethical responsibilities in accordance with the TFAC Code. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

### Key audit matters

Key audit matters are those matters that, in my professional judgement, were of most significance in my audit of the consolidated and separate financial statements of the current period. These matters were addressed in the context of my audit of the consolidated and separate financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters.

**Key audit matter****How my audit addressed the key audit matter****Acquisition of investments in associates**

Refer to Note 19.2 Investments in associates, the Group acquired an investment in associates which develop wind power project in Taiwan with a total purchase consideration of Baht 15,007 million. Management determined that the acquisition of investment in associates which the Group has significant influence on investee by applying the definition in TAS 28 "Investments in Associates and Joint Venture", also has to determine fair value of the net identifiable assets acquired and review purchase price allocation (PPA) in accordance with the concepts in TFRS 3 "Business combination". The fair value of net identifiable assets is presented as part of investment cost.

Management engaged the external valuer to appraise the fair value of net identifiable assets acquired. The fair value of net identifiable assets acquired was Baht 11,806 million, mainly comprised the rights to power purchase agreements totally Baht 10,642 million. The valuation of net assets acquired was performed as part of the purchase price allocation.

I focused on the identification of the fair value of the rights to power purchase agreements arising from the acquisition of investment because the external valuer applied the discounted cash flows that the model involves significant estimation and judgment made by the management to assess the future cash flows and discounted rate applied for the future cash flows.

I carried out the following procedures in order to obtain evidence of the management's assessment of acquisition of investment and determination of fair value of net identifiable assets acquired:

- read the share purchase agreement to understand the key terms and conditions and confirmed our understanding of the transaction with the management.
- reviewed management's assessment that the acquisitions of investment should be accounted for as the investment in associates and in line with the accounting for the business combination.
- assessed the appropriateness of the identifiable assets acquired and the liabilities assumed at the acquisition date and also evaluated management's procedures for determining the fair values of the net identifiable assets acquired.
- evaluated the competency, qualifications, experience and objectivity of management's experts.
- tested the calculation of fair values of the rights to power purchase agreements and challenged management's significant assumptions applied in the estimation of future cash flows, for example the electricity tariffs and capacity of the power plant by comparing those assumptions to the underlying agreements and external sources.
- assessed the discount rate, taking into account independently obtained data from available public information of companies in the industry, to check whether the discount rate used by management was within an acceptable range.

As a result of the procedures performed, I determined that the acquisition of investment in associates investing in renewable power plants in Taiwan is investment in associates in accordance with the definition set out in TAS 28. The assumptions applied in identifying the fair values of the rights to power purchase agreements were reasonable and in line with the accounting for the business combination.

Key audit matter	How my audit addressed the key audit matter
<p><b>Impairment assessment of goodwill</b></p> <p>Refer to Note 24 Goodwill, as at 31 December 2023, the Group had goodwill of Baht 36,090 million, which represents 12.8% of the total consolidated assets. Goodwill arose from the acquisition of shareholding of Glow Energy Public Company Limited (Glow) which engages in generating and supplying electricity, steam and water for industrial use. The Group did not recognise an impairment loss in the 2023 consolidated financial statements.</p> <p>Management tests the impairment of goodwill annually. The impairment test is performed at level of cash generating unit (CGU) and calculates its recoverable amount by applying the value-in-use model. This model involves significant judgements made by the management in respect to the future operating results of business, projected cash flows and the discount rate to be applied to the projected cash flows. Key assumptions applied in the value-in-use model are electricity tariffs, capacity of the power plants, growth rate, operating expenditures, capital structure and discount rate applied to the projected cash flows.</p> <p>I focused on the valuation of goodwill arising from the acquisition of shareholding of Glow due to its significant value and the fact that the determination of value-in-use depends on a number of assumptions. Those assumptions involve management's significant judgements in assessing the feasibility of future business plans.</p>	<p>I carried out the following procedures to assess the impairment testing of goodwill arising from the acquisition of shareholding of Glow which prepared by the management.</p> <ul style="list-style-type: none"> <li>assessed the appropriateness of management's identification of the CGUs.</li> <li>held discussions with management to understand the basis for the assumptions applied and evaluated whether the goodwill impairment testing process and assumptions had been applied consistently across the Group.</li> <li>challenged management's significant assumptions used in the goodwill impairment testing, especially the electricity tariffs, capacity of the power plants, growth rate, operating expenditures, capital structure and discount rate. My procedures included comparing those assumptions to the underlying agreements, external sources, foreign exchange rate forecasts and the approved business plan.</li> <li>assessed reasonableness of the business plan by comparing the 2023 plan with actual results.</li> <li>assessed the discount rate, taking into account independently obtained data from available public information of companies in the industry, to check whether the discount rate used by management was within an acceptable range.</li> <li>tested the sensitivity analysis of key assumptions in order to assess which factors are sensitive to assumptions and the potential impacts of the range of possible outcomes.</li> </ul> <p>As a result of the procedures performed, the key assumptions used by the management are within the reasonable range and consistent with supporting evidence.</p>



## Other information

The directors are responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated and separate financial statements and my auditor's report thereon.

My opinion on the consolidated and separate financial statements does not cover the other information and I do not express any form of assurance conclusion thereon.

In connection with my audit of the consolidated and separate financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated and separate financial statements or my knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact. I have nothing to report in this regard.

## Responsibilities of the directors for the consolidated and separate financial statements

Directors are responsible for the preparation and fair presentation of the consolidated and separate financial statements in accordance with TFRS, and for such internal control as the directors determine is necessary to enable the preparation of consolidated and separate financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated and separate financial statements, the directors are responsible for assessing the Group's and the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intends to liquidate the Group and the Company or to cease operations, or has no realistic alternative but to do so.

The audit committee assists the directors in discharging their responsibilities for overseeing the Group's and the Company's financial reporting process.

## Auditor's responsibilities for the audit of the consolidated and separate financial statements

My objectives are to obtain reasonable assurance about whether the consolidated and separate financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with TSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated and separate financial statements.

As part of an audit in accordance with TSAs, I exercise professional judgement and maintain professional scepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the consolidated and separate financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's and the Company's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's and the Company's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the consolidated and separate financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Group and the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated and separate financial statements, including the disclosures, and whether the consolidated and separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with audit committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide the audit committee with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.

From the matters communicated with the audit committee, I determine those matters that were of most significance in the audit of the consolidated and separate financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

PricewaterhouseCoopers ABAS Ltd.



**Wanvimol Preechawat**

Certified Public Accountant (Thailand) No. 9548

Bangkok

9 February 2024

# Global Power Synergy Public Company Limited

## Statement of Financial Position

As at 31 December 2023

	Notes	Consolidated financial statements		Separate financial statements	
		2023	2022	2023	2022
		Baht	Baht	Baht	Baht
<b>Assets</b>					
<b>Current assets</b>					
Cash and cash equivalents	11	13,196,662,137	14,235,987,519	2,777,392,726	12,041,922,817
Deposits at financial institutions used as collateral	12	937,314	202,564,907	-	-
Financial assets measured at amortised cost	13	474,549,140	561,100,725	-	-
Trade receivables, net	14,40	10,885,957,790	19,966,854,672	3,293,237,472	6,916,899,722
Current portion of finance lease receivable, net	15	1,879,515,065	1,640,801,789	1,489,890,714	1,144,021,798
Other receivables	16,40	2,593,005,313	2,818,701,226	610,348,970	392,344,712
Dividends receivable	19,40	84,000,009	105,700,008	84,000,009	105,700,008
Short-term loan to a related party	40	-	-	-	1,000,000,000
Current portion of long-term loans to related parties	40	91,744,400	91,744,400	525,184,400	139,504,400
Fuel, spare parts and supplies, net	17	11,430,850,962	10,801,483,794	894,762,218	771,220,275
Derivative assets	7	12,187,213	14,621,368	-	-
Assets held-for-sale, net	18	174,000,000	-	-	-
Other current assets		999,653,579	1,269,166,167	473,130,820	558,615,369
<b>Total current assets</b>		<b>41,823,062,922</b>	<b>51,708,726,575</b>	<b>10,147,947,329</b>	<b>23,070,229,101</b>
<b>Non-current assets</b>					
Finance lease receivable, net	15	2,140,345,979	3,816,983,719	589,459,371	1,879,293,246
Investments in associates	19	47,844,555,661	41,446,053,052	4,104,641,269	3,847,391,269
Investments in joint ventures	19	2,967,265,719	2,925,665,326	2,829,729,090	2,829,729,090
Investments in subsidiaries	19	-	-	179,613,564,890	171,687,735,643
Financial assets measured at fair value through other comprehensive income	8,20	4,754,319,975	5,303,210,627	4,702,319,975	5,251,210,627
Long-term loans to and interest receivables from related parties, net	40	6,221,886,725	4,460,136,703	2,927,237,920	3,341,240,079
Property, plant and equipment, net	21	92,798,579,285	93,760,643,657	14,431,462,594	15,597,047,412
Assets not used in operation, net		-	97,453,779	-	-
Intangible assets, net	23	38,078,501,456	39,775,900,765	886,442,635	567,370,005
Right-of-use assets, net	22	2,179,379,438	2,219,765,004	399,686,724	362,012,204
Goodwill	24	36,089,835,841	36,089,835,841	-	-
Deferred tax assets, net	32	3,324,870,779	3,319,427,975	-	-
Derivative assets	7	-	9,798,910	-	-
Other non-current assets, net	40	3,480,500,990	3,876,491,469	121,117,725	120,726,739
<b>Total non-current assets</b>		<b>239,880,041,848</b>	<b>237,101,366,827</b>	<b>210,605,662,193</b>	<b>205,483,756,314</b>
<b>Total assets</b>		<b>281,703,104,770</b>	<b>288,810,093,402</b>	<b>220,753,609,522</b>	<b>228,553,985,415</b>

The notes to the consolidated and separate financial statements are on integral part of these financial statements.

# Global Power Synergy Public Company Limited

## Statement of Financial Position

As at 31 December 2023

	Notes	Consolidated		Separate	
		financial statements		financial statements	
		2023	2022	2023	2022
		Baht	Baht	Baht	Baht
<b>Liabilities and equity</b>					
<b>Current liabilities</b>					
Trade payables	25,40	7,059,797,158	10,887,361,980	1,527,444,995	4,939,010,784
Other payables	26,40	2,282,213,556	2,383,052,992	1,047,995,343	1,386,569,391
Payables for assets under construction		440,878,158	1,598,008,094	66,263,305	204,549,277
Short-term loans from financial institutions	27	110,772,214	3,370,567,309	-	-
Current portion of lease liabilities, net		142,254,390	148,530,661	76,538,768	73,544,930
Current portion of long-term loans from financial institutions, net	29	4,361,764,371	11,457,464,750	738,645,724	3,738,148,193
Current portion of long-term loan from related parties, net	40	16,100,000,000	-	17,526,932,831	1,203,429,500
Current portion of debentures, net	30	6,498,475,853	-	6,498,475,853	-
Derivative liabilities	7	34,435,516	101,862,824	-	-
Other current liabilities	28	1,636,860,480	2,246,591,417	211,714,701	635,772,765
<b>Total current liabilities</b>		<b>38,667,451,696</b>	<b>32,193,440,027</b>	<b>27,694,011,520</b>	<b>12,181,024,840</b>
<b>Non-current liabilities</b>					
Lease liabilities, net		2,250,110,779	2,241,353,961	378,758,844	336,430,358
Derivative liabilities	7	172,462,664	218,648,881	-	-
Long-term loans from financial institutions, net	29	50,780,841,536	46,507,007,824	6,445,199,296	7,182,200,764
Long-term loans from related parties, net	40	-	16,100,000,000	7,809,833,010	25,334,282,309
Debentures, net	30	47,954,701,994	51,449,918,614	47,954,701,994	51,449,918,614
Provisions for employee benefits		651,097,236	869,883,052	400,281,709	588,348,872
Deferred tax liabilities, net	32	8,168,194,142	8,976,360,099	275,954,042	490,666,635
Retentions		24,640,018	3,346,456	5,891,467	1,694,466
Other non-current liabilities	31,40	15,508,782,388	15,149,915,810	610,043,309	646,823,946
<b>Total non-current liabilities</b>		<b>125,510,830,757</b>	<b>141,516,434,697</b>	<b>63,880,663,671</b>	<b>86,030,365,964</b>
<b>Total liabilities</b>		<b>164,178,282,453</b>	<b>173,709,874,724</b>	<b>91,574,675,191</b>	<b>98,211,390,804</b>

The notes to the consolidated and separate financial statements are on integral part of these financial statements.

# Global Power Synergy Public Company Limited

## Statement of Financial Position

As at 31 December 2023

	Note	Consolidated		Separate	
		financial statements		financial statements	
		2023	2022	2023	2022
		Baht	Baht	Baht	Baht
<b>Liabilities and equity</b> (continued)					
<b>Equity</b>					
Share capital					
Authorised share capital					
2,819,729,371 ordinary shares at par value					
of Baht 10 per share					
		28,197,293,710	28,197,293,710	28,197,293,710	28,197,293,710
Issued and paid-up share capital					
2,819,729,367 ordinary shares paid-up at					
Baht 10 per share					
		28,197,293,670	28,197,293,670	28,197,293,670	28,197,293,670
Premium on ordinary shares					
		70,175,900,837	70,175,900,837	70,175,900,837	70,175,900,837
Deficit from the change in the ownership interests					
in subsidiaries					
		(14,991,990,030)	(14,991,990,030)	-	-
Other surpluses (deficits)					
		(1,118,213,914)	(1,118,213,914)	78,467,400	78,467,400
Retained earnings					
Appropriated					
- Legal reserve					
33		2,307,914,941	2,268,360,049	2,307,914,941	2,268,360,049
Unappropriated					
		22,699,002,617	20,529,290,819	27,413,670,408	28,177,773,058
Other components of equity					
		(1,074,871,722)	(330,685,711)	1,005,687,075	1,444,799,597
<b>Equity attributable to owners of the parent</b>					
		106,195,036,399	104,729,955,720	129,178,934,331	130,342,594,611
Non-controlling interests					
		11,329,785,918	10,370,262,958	-	-
<b>Total equity</b>					
		117,524,822,317	115,100,218,678	129,178,934,331	130,342,594,611
<b>Total liabilities and equity</b>					
		281,703,104,770	288,810,093,402	220,753,609,522	228,553,985,415

The notes to the consolidated and separate financial statements are on integral part of these financial statements.



# Global Power Synergy Public Company Limited

## Statement of Income

For the year ended 31 December 2023

		Consolidated financial statements		Separate financial statements	
		2023 Baht	2022 Baht	2023 Baht	2022 Baht
Revenue from sales and services		89,859,902,799	123,083,241,908	25,443,407,539	42,840,776,941
Revenue from finance lease		443,370,438	601,854,767	313,138,217	390,029,767
Cost of sales and services		(80,257,941,757)	(120,324,086,933)	(23,335,489,733)	(41,111,323,166)
<b>Gross profit</b>		10,045,331,480	3,361,009,742	2,421,056,023	2,119,483,542
Dividend income	19,20	228,303,625	192,001,875	1,891,998,863	3,650,925,457
Other income	34	1,765,768,936	2,538,957,609	595,853,149	1,630,118,945
Currency exchange loss, net		(404,346,070)	(46,758,925)	(642,942,448)	(117,291,651)
Administrative expenses		(2,708,890,236)	(2,309,825,758)	(1,379,062,192)	(1,375,584,926)
Gains (losses) from measurement of financial instruments, net		678,949,475	105,720,368	604,746,214	(62,584,750)
Finance costs	36	(5,297,198,452)	(4,298,888,912)	(2,732,800,744)	(2,237,829,019)
Share of profit from investments in associates and joint ventures, net	19	1,007,768,044	1,538,960,962	-	-
<b>Profit before income tax</b>		5,315,686,802	1,081,176,961	758,848,865	3,607,237,598
Income tax	37	(506,592,426)	376,184,802	32,248,975	(5,091,999)
<b>Profit for the year</b>		4,809,094,376	1,457,361,763	791,097,840	3,602,145,599
<b>Profit attributable to</b>					
Owners of the parent		3,694,215,573	891,449,844	791,097,840	3,602,145,599
Non-controlling interests		1,114,878,803	565,911,919	-	-
		4,809,094,376	1,457,361,763	791,097,840	3,602,145,599
<b>Earnings per share</b>					
Basic earnings per share	38	1.31	0.32	0.28	1.28

The notes to the consolidated and separate financial statements are on integral part of these financial statements.

# Global Power Synergy Public Company Limited

## Statement of Comprehensive income

For the year ended 31 December 2023

	Note	Consolidated financial statements		Separate financial statements	
		2023 Baht	2022 Baht	2023 Baht	2022 Baht
<b>Profit for the year</b>		4,809,094,376	1,457,361,763	791,097,840	3,602,145,599
<b>Other comprehensive income (expense) :</b>					
Items that will be reclassified subsequently to profit or loss					
Cash flow hedges		13,852,419	562,388,890	-	-
Costs of hedging		22,003,546	(28,324,696)	-	-
Share of other comprehensive expense from investments in associates and joint venture	19	(382,566,124)	(1,928,289,685)	-	-
Exchange difference on translation of financial statements		2,344,215	533,633,324	-	-
Income tax on items that will be reclassified subsequently to profit or loss		(10,471,694)	(35,386,184)	-	-
Total items that will be reclassified subsequently to profit or loss, net of tax		(354,837,638)	(895,978,351)	-	-
Items that will not be reclassified subsequently to profit or loss					
Remeasurement of employee benefits obligation		261,501,850	-	220,240,021	-
Gain (loss) from remeasurement of equity investments at fair value through other comprehensive income		(548,890,652)	58,970,963	(548,890,652)	69,823,735
Share of other comprehensive income (expense) from investments in associates and joint ventures		39,869,173	(43,135,756)	-	-
Income tax on items that will not be reclassified subsequently to profit or loss		55,165,012	(11,804,776)	65,730,126	(13,964,747)
Total Items that will not be reclassified subsequently to profit or loss, net of tax		(192,354,617)	4,030,431	(262,920,505)	55,858,988
<b>Other comprehensive income (expense) for the year, net of tax</b>		(547,192,255)	(891,947,920)	(262,920,505)	55,858,988
<b>Total comprehensive income for the year</b>		4,261,902,121	565,413,843	528,177,335	3,658,004,587
<b>Total comprehensive income attributable to</b>					
Owners of the parent		3,156,918,294	(240,348,374)	528,177,335	3,658,004,587
Non-controlling interests		1,104,983,827	805,762,217	-	-
		4,261,902,121	565,413,843	528,177,335	3,658,004,587

The notes to the consolidated and separate financial statements are on integral part of these financial statements.

# Global Power Synergy Public Company Limited

## Statement of Changes in Equity

For the year ended 31 December 2023

		Attributable to owners of the parent										Consolidated financial statements									
		Retained earnings				Other components of equity															
		Deficit from the change in the ownership interests in subsidiaries		Appropriated - Legal reserve		Exchange difference on translation of financial statements		Changes in fair value of equity investments		Cash flow hedge reserves		Costs of hedging investments in associates and joint ventures		Share of other comprehensive income (expense)		Total equity attributable to owners of the parent		Non-controlling interests		Total equity	
Notes		Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht	Baht
	Opening balance as at 1 January 2022	28,197,293,670	70,175,900,837	(15,002,535,663)	(1,118,213,914)	2,088,252,769	23,091,536,750	99,315,637	1,517,473,273	(398,817,973)	10,309,900	(326,235,328)	902,045,509	108,334,279,958	9,413,290,858	117,747,540,816					
	Changes in equity for the year																				
33	Legal reserved	-	-	-	-	180,107,280	(180,107,280)	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Dividend	-	-	-	-	-	(3,383,675,240)	-	-	-	-	-	-	(3,383,675,240)	(140,217,617)	(3,523,892,857)					
	Disposal of a subsidiary	-	-	10,545,633	-	-	110,086,745	(21,410,180)	(79,522,822)	-	-	-	(100,933,002)	19,699,376	-	19,699,376					
	Establishment of subsidiaries and change in the ownership interests in subsidiaries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Total comprehensive income (expense) for the year	-	-	-	-	-	-	-	-	-	-	-	-	-	291,457,500	291,457,500					
	Profit for the year	-	-	-	-	-	891,449,844	-	-	-	-	-	-	-	565,911,919	1,457,361,763					
	Other comprehensive income (expense) for the year	-	-	-	-	-	-	513,911,084	47,165,187	301,171,187	(22,821,235)	(1,971,425,441)	(1,131,798,218)	239,850,298	(891,947,920)						
	Closing balance as at 31 December 2022	28,197,293,670	70,175,900,837	(14,991,990,030)	(1,118,213,914)	2,268,360,049	20,529,290,819	591,816,541	1,485,116,638	(97,646,786)	(12,311,335)	(2,297,660,769)	(330,685,711)	104,729,955,720	10,370,262,958	115,100,218,678					
	Opening balance as at 1 January 2023	28,197,293,670	70,175,900,837	(14,991,990,030)	(1,118,213,914)	2,268,360,049	20,529,290,819	591,816,541	1,485,116,638	(97,646,786)	(12,311,335)	(2,297,660,769)	(330,685,711)	104,729,955,720	10,370,262,958	115,100,218,678					
	Changes in equity for the year																				
33	Legal reserved	-	-	-	-	39,554,892	(39,554,892)	-	-	-	-	-	-	-	-	-	-	-	-	-	
39	Dividend	-	-	-	-	-	(1,691,837,615)	-	-	-	-	-	-	(1,691,837,615)	(177,310,867)	(1,869,148,482)					
19	Establishment of a subsidiary	-	-	-	-	-	-	-	-	-	-	-	-	-	31,850,000	31,850,000					
	Total comprehensive income (expense) for the year	-	-	-	-	-	3,694,215,573	-	-	-	-	-	-	-	1,114,878,803	4,809,094,376					
	Profit for the year	-	-	-	-	-	206,868,732	4,126,709	(439,112,522)	15,724,450	17,772,303	(342,696,951)	(744,186,011)	(537,297,279)	(9,894,976)	(547,192,255)					
	Other comprehensive income (expense) for the year	-	-	-	-	-	-	-	-	-	-	-	-	-	1,114,878,803	4,809,094,376					
	Closing balance as at 31 December 2023	28,197,293,670	70,175,900,837	(14,991,990,030)	(1,118,213,914)	2,307,914,941	22,699,002,617	595,943,250	1,046,004,116	(81,922,336)	5,460,968	(2,640,357,720)	(1,074,871,722)	106,195,036,399	11,329,785,918	117,524,822,317					

The notes to the consolidated and separate financial statements are an integral part of these financial statements.

**Global Power Synergy Public Company Limited**  
**Statement of Changes in Equity**  
For the year ended 31 December 2023

The notes to the consolidated and separate financial statements are on integral part of these financial statements.

# Global Power Synergy Public Company Limited

## Statement of Cash Flows

For the year ended 31 December 2023

	Notes	Consolidated financial statements		Separate financial statements	
		2023	2022	2023	2022
		Baht	Baht	Baht	Baht
<b>Cash flows from operating activities</b>					
Profit before income tax for the year		5,315,686,802	1,081,176,961	758,848,865	3,607,237,598
Adjustments to reconcile profit before					
income tax to net cash from operating activities					
- (Reversal of) expected credit losses from trade receivables		(664,444)	244,020	-	-
- Depreciation and amortisation	35	9,308,955,544	9,112,556,968	1,718,050,061	1,588,487,304
- Interest income		(614,643,574)	(251,046,747)	(196,650,761)	(159,710,426)
- Dividend income	19,20	(228,303,625)	(192,001,875)	(1,891,998,863)	(3,650,925,457)
- Loss on impairment of assets		326,638,153	338,000,000	-	-
- Loss on disposal and write-off of plant and equipment, net		128,877,942	10,050,539	2,614,860	697,785
- Finance costs		5,208,017,344	4,260,893,660	2,732,800,744	2,237,829,019
- Reversal of deferred financing fees		-	-	-	8,772,590
- Recognition of advance received for long-term right to grant of assets		(44,025,310)	(43,458,346)	-	-
- Provisions for decommissioning cost of the power plants		-	(23,771,369)	-	-
- Unrealised exchange losses (gains)		(35,566,400)	279,339,760	31,221,262	118,395,424
- Loss from write-off spare parts and supplies		109,000	1,265,603	109,000	1,265,603
- Loss from obsolescence of spare parts and supplies		-	6,290,758	-	-
- Gain on sale of assets and liabilities held-for-sale		-	(789,686,178)	-	(769,139,585)
- Gain on sales of investments in subsidiaries and a battery business		-	(388,329,740)	-	(515,871,069)
- Loss from dissolution of a subsidiary		2,339,736	-	2,339,736	-
- Share of profit from investments in associates and joint ventures, net	19	(1,007,768,044)	(1,538,960,962)	-	-
- Unrealised gain from measurement of financial instruments		(64,781,831)	(3,677,505)	-	-
- Provisions for employee benefits		74,494,916	72,416,670	51,547,908	53,602,468
- Realised loss on exchange rate from dividend income		-	-	-	1,269,120
Cash flows before changes in working capital		18,369,366,209	11,931,302,217	3,208,882,812	2,521,910,374
Changes in working capital					
- Trade receivables		9,087,083,279	(6,667,591,897)	3,623,662,250	(1,815,528,730)
- Other receivables		215,141,042	(947,098,134)	(239,829,209)	19,130,354
- Finance lease receivable		1,410,430,097	1,219,662,971	928,089,116	687,418,418
- Fuel, spare parts and supplies		(629,476,168)	(4,955,103,231)	(123,650,943)	(136,090,134)
- Other current assets		315,942,287	(100,691,277)	118,687,777	(134,841,328)
- Other non-current assets		(30,236,632)	(1,403,293,351)	4,977,070	1,655,318
- Trade payables		(3,822,094,548)	4,480,189,245	(3,411,565,789)	2,782,388,342
- Other payables		(212,011,487)	124,133,001	(211,717,783)	43,263,154
- Other current liabilities		(715,178,566)	640,539,155	(257,544,914)	236,404,938
- Retirement benefit paid		(22,584,000)	(26,452,105)	(19,375,050)	(23,714,339)
- Other non-current liabilities		153,759,970	460,181,370	(34,513,375)	200,854,913
Cash generated from operating activities		24,120,141,483	4,755,777,964	3,586,101,962	4,382,851,280
- Cash received from withholding tax refund		76,690,537	-	-	-
- Tax paid		(1,036,505,683)	(1,401,747,037)	(316,449,870)	(295,152,417)
Net cash generated from operating activities		23,160,326,337	3,354,030,927	3,269,652,092	4,087,698,863

The notes to the consolidated and separate financial statements are on integral part of these financial statements.



# Global Power Synergy Public Company Limited

## Statement of Cash Flows

For the year ended 31 December 2023

	Notes	Consolidated financial statements		Separate financial statements	
		2023	2022	2023	2022
		Baht	Baht	Baht	Baht
<b>Cash flows from investing activities</b>					
Interest received		282,935,812	136,771,999	167,894,025	135,707,752
Dividends received		794,576,370	911,134,590	1,913,698,862	3,634,956,336
Cash received (paid) for deposits at financial institutions used as collateral		203,980,841	(5,948,126)	-	-
Cash received for financial assets measured at amortised cost		86,551,585	3,036,756,617	-	-
Cash paid for investments in joint ventures		-	(15,000,000)	-	(15,000,000)
Cash paid for investments in associates	19	(6,319,383,184)	(17,823,895,680)	(257,250,000)	(1,975,925,000)
Cash paid for investments in subsidiaries	19	-	-	(8,091,785,167)	(11,096,974,800)
Cash received from sales of assets and liabilities held-for-sale		-	1,407,144,481	-	1,272,884,642
Cash received from the sale of investments in subsidiaries and a battery business		-	2,506,896,619	-	2,653,080,637
Cash paid for short-term loans to related parties		-	(602,628,660)	-	(1,602,628,660)
Cash received from short-term loans to related parties	40	-	1,570,425,059	1,000,000,000	1,570,425,059
Cash paid for long-term loans to related parties	40	(1,914,851,055)	(503,403,120)	(421,500,000)	(198,490,552)
Cash received from long-term loans to related parties	40	436,336,011	796,842,495	484,096,011	794,602,495
Cash received from disposal of plant and equipment		4,763,568	8,023,655	3,041,409	142,468
Cash paid for purchase of plant and equipment		(7,056,430,947)	(5,164,258,062)	(339,698,414)	(963,242,312)
Cash paid for purchase of intangible assets		(568,477,525)	(267,189,746)	(564,984,306)	(255,238,771)
Net cash used in investing activities		(14,049,998,524)	(14,008,327,879)	(6,106,487,580)	(6,045,700,706)

The notes to the consolidated and separate financial statements are on integral part of these financial statements.

# Global Power Synergy Public Company Limited

## Statement of Cash Flows

For the year ended 31 December 2023

	Notes	Consolidated financial statements		Separate financial statements	
		2023	2022	2023	2022
		Baht	Baht	Baht	Baht
<b>Cash flows from financing activities</b>					
Cash paid for liabilities under lease agreements		(179,817,483)	(186,166,960)	(60,745,314)	(65,993,723)
Cash paid for financing fees to financial institutions and a related party		(191,203,079)	(103,874,928)	(47,775,287)	(18,319,268)
Cash received (paid) from short-term loans from financial institutions		(3,259,795,095)	3,370,567,309	-	-
Cash received from long-term loans from financial institutions	29	15,450,654,563	8,270,608,651	-	-
Cash paid for repayments of long-term loans from financial institutions	29	(18,010,527,645)	(7,124,042,332)	(3,740,000,000)	(670,000,000)
Cash received from long-term loans from a related party		-	8,100,000,000	-	8,100,000,000
Cash paid for repayments long-term loans from related parties	40	-	-	(1,203,429,500)	(1,203,429,500)
Cash paid for long-term loans to former shareholders from the acquisition of investment in associates		-	(585,661,186)	-	-
Cash received from issuance of debentures	30	3,000,000,000	12,000,000,000	3,000,000,000	12,000,000,000
Cash paid for repayments of debentures		-	(5,000,000,000)	-	(2,000,000,000)
Cash received from non-controlling interests from capital increase in subsidiaries		31,850,000	291,457,500	-	-
Dividend paid	39	(1,691,837,615)	(3,383,675,240)	(1,691,837,615)	(3,383,675,240)
Dividend paid to non-controlling interests of subsidiaries		(177,310,867)	(140,217,617)	-	-
Interest paid		(5,087,905,475)	(3,838,689,872)	(2,683,906,887)	(2,189,978,101)
Interest paid capitalised as property, plant and equipment		(76,284,410)	(68,848,880)	-	(8,252,130)
Net cash generated from (used in) financing activities		(10,192,177,106)	11,601,456,445	(6,427,694,603)	10,560,352,038

The notes to the consolidated and separate financial statements are on integral part of these financial statements.

# Global Power Synergy Public Company Limited

## Statement of Cash Flows

For the year ended 31 December 2023

	Consolidated		Separate	
	financial statements		financial statements	
	2023	2022	2023	2022
	Baht	Baht	Baht	Baht
<b>Net increase (decrease) in cash and cash equivalents</b>	(1,081,849,293)	947,159,493	(9,264,530,091)	8,602,350,195
Effect of exchange rate on cash and cash equivalents	42,523,911	(503,711,160)	-	(46,026,385)
Cash and cash equivalents at beginning of year	14,235,987,519	13,792,539,186	12,041,922,817	3,485,599,007
Cash and cash equivalents at ending of year	13,196,662,137	14,235,987,519	2,777,392,726	12,041,922,817
<b>Supplementary information</b>				
Changes in payables for assets under construction	(1,035,761,010)	(1,919,901,097)	(16,882,281)	(221,401,662)
Changes in payables for intangible assets	(123,212,856)	106,741,514	(123,212,856)	106,741,514
Changes in payables for investments in a subsidiary	-	-	(162,620,000)	162,620,000
Changes in dividend receivable from a joint venture	21,699,999	(14,700,001)	21,699,999	(14,700,001)
Acquisitions of right to use assets under lease agreement	104,428,113	(17,839,792)	82,369,689	1,354,796
Change in lease liabilities	31,110,651	100,568,442	31,326,115	100,508,442

The notes to the consolidated and separate financial statements are on integral part of these financial statements.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 1 General information

Global Power Synergy Public Company Limited (the Company) is a public limited company which listed on the Stock Exchange of Thailand. The Company is incorporated in Thailand and the address of its registered office is No.555/2, Energy Complex, Building B, 5th Floor, Vibhavadi Rangsit Road, Chatuchak, Bangkok 10900.

For reporting purposes, the Company and its subsidiaries are referred to as the Group.

The principal business of the Group is the production and distribution of electricity, steam and water for industrial use to the government and industrial customers.

These consolidated and separate financial statements were authorised for issue by the Board of Directors on 9 February 2024.

### 2 Basis of preparation

The consolidated and separate financial statements have been prepared in accordance with Thai Financial Reporting Standards (TFRS) and the financial reporting requirements issued under the Securities and Exchange Act.

The consolidated and separate financial statements have been prepared under the historical cost convention except as disclosed in the below accounting policies.

The preparation of financial statements in conformity with TFRS requires management to use certain critical accounting estimates and to exercise its judgement in applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas that are more likely to be materially adjusted due to changes in estimates and assumptions are disclosed in Note 9.

An English version of the consolidated and separate financial statements has been prepared from the statutory financial statements that are in the Thai language. In the event of a conflict or a difference in interpretation between the two languages, the Thai language statutory financial statements shall prevail.

### 3 Amended financial reporting standards

#### 3.1 Amended financial reporting standards that are effective for accounting periods beginning on or after 1 January 2023 and relevant to the Group.

- a) **Amendment to TAS 16 Property, plant and equipment** clarified to prohibit entities from deducting from the cost of an item of Property plant and equipment any proceeds received from selling any items produced while the entity is preparing that asset for its intended use.
- b) **Amendment to TAS 37 Provisions, contingent liabilities and contingent assets** clarified that, in considering whether a contract is onerous, the direct costs of fulfilling a contract include both the incremental costs of fulfilling the contract and an allocation of other costs directly related to fulfilling the contract. Before recognising a separate provision for an onerous contract, the entity must recognise any impairment losses that have occurred on the assets used in fulfilling the contract.
- c) **Amendment to TFRS 3 Business combinations** clarified some minor amendments to update its references to the Conceptual Framework for Financial Reporting and added a consideration for the recognition of liabilities and contingent liabilities acquired from business combinations. The amendments also confirmed that contingent assets shouldn't be recognised at the acquisition date.
- d) **Amendment to TFRS 9 Financial Instruments** clarified which fees should be included in the 10% test for the derecognition of financial liabilities. It should only include fees between the borrower and lender.

Since 1 January 2023, the Group has adopted the amended financial reporting standards as above. The adoption of those standards does not have significant impact on the Group.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 3.2 Amended financial reporting standards that are effective for accounting period beginning or after 1 January 2024 and relevant to the Group. The Group did not early adopt these standards.

- a) **Amendment to TAS 1 Presentation of financial statements** revised the disclosure from 'significant accounting policies' to 'material accounting policies'. The amendment also provides guidelines on identifying when the accounting policy information is material. Consequently, immaterial accounting policy information does not need to be disclosed. If it is disclosed, it should not obscure material accounting information.
- b) **Amendment to TAS 8 Accounting policies, changes in accounting estimates and errors** revised to the definition of 'accounting estimates' to clarify how companies should distinguish between changes in accounting policies and changes in accounting estimates. The distinction is important because changes in accounting estimates are applied prospectively to transactions, other events and conditions from the date of that change. Whereas changes in accounting policies are generally applied retrospectively to past transactions and other past events as well as the current period as if the new accounting policy had always been applied.
- c) **Amendments to TAS 12 Income taxes**

- c.1) Companies must recognise any deferred tax related to assets and liabilities arising from a single transaction that, on initial recognition, gives rise to equal amounts of taxable and deductible temporary differences. Example transactions are leases and decommissioning obligations.

The amendment should be applied to transactions on or after the beginning of the earliest comparative period presented. In addition, entities should recognise deferred tax assets (to the extent that they can probably be utilised) and deferred tax liabilities at the beginning of the earliest comparative period for all deductible and taxable temporary differences associated with:

- right-of-use assets and lease liabilities, and
- decommissioning, restoration and similar liabilities, and the corresponding amounts recognised as part of the cost of the related assets.

The cumulative effect of recognising these adjustments is recognised at the beginning of retained earnings or any other component of equity, as appropriate.

- c.2) Companies must apply all income taxes arising from the tax law enacted or substantively enacted to implement the Pillar Two model rules published by the Organisation for Economic Co-operation and Development (OECD), an international organisation.

In December 2021, the OECD released the Pillar Two model rules to apply the Global Anti-Base Erosion Proposal, or 'GloBE') to reform international corporate taxation. Large multinational enterprises within the rules' scope must calculate the GloBE effective tax rates for each territory in which they operate and pay a top-up tax for the differences between these and the 15% minimum rate.

In December 2023, the amendments to TAS 12 provide a temporary relief from the requirement to recognise and disclose deferred taxes arising from enacted or substantively enacted tax law that implements the Pillar Two model rules, including tax law that implements qualified domestic minimum top-up taxes described in those rules. The amendments also require affected companies to disclose:

- the fact that they have applied the exception to recognising and disclosing information about deferred tax assets and liabilities related to Pillar Two income taxes
- their current tax expense (if any) related to the Pillar Two income taxes, and
- during the period between the legislation being enacted or substantially enacted and the legislation becoming effective, known or reasonably estimable information that would help users of financial statements to understand an entity's exposure to Pillar Two income taxes arising from that legislation. If this information is not known or reasonably estimable, entities are instead required to disclose a statement to that effect and information about their progress in assessing the exposure.

Earlier application is permitted.

- d) **Amendment to Accounting Guidance related to financial instruments and disclosures applicable to insurance business** revised the disclosures in 'material accounting policies' to align with Amendment to TAS 1 - Presentation of financial statements.

The Group's management is currently assessing the impact of adoption of these standards.



# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 4 Reclassification

The Group has reclassified comparative figures in the statement of financial position as at 31 December 2022 to conform with the current period presentation are as follows:

	Consolidated financial statements		
	As previous reported Baht	Reclassified Baht	As reclassified Baht
<b>Statement of financial position as at 31 December 2022</b>			
<b>Current assets</b>			
Trade receivables, net	20,177,602,231	(210,747,559)	19,966,854,872
Current portion of finance lease receivable, net	1,430,054,230	210,747,559	1,640,801,789
Fuel, spare parts and supplies, net	11,914,731,995	(1,113,248,201)	10,801,483,794
<b>Non-current assets</b>			
Property, plant and equipment, net	92,647,395,456	1,113,248,201	93,760,643,657
<b>Current liabilities</b>			
Other payables	2,538,706,682	(155,653,690)	2,383,052,992
Payable for assets under construction	1,442,354,404	155,653,690	1,598,008,094
<b>Statement of Comprehensive income for the year ended 31 December 2022</b>			
<b>Other comprehensive income (expense) :</b>			
Items that will be reclassified subsequently to profit or loss			
Share of other comprehensive expense from investments in associates and joint ventures	(1,971,425,441)	43,135,756	(1,928,289,685)
Items that will not be reclassified subsequently to profit or loss			
Share of other comprehensive expense from investments in associates and joint ventures	-	(43,135,756)	(43,135,756)
	Separate financial statements		
	As previous reported Baht	Reclassified Baht	As reclassified Baht
<b>Statement of financial position as at 31 December 2022</b>			
<b>Current assets</b>			
Trade receivables, net	7,127,647,281	(210,747,559)	6,916,899,722
Current portion of finance lease receivable, net	933,274,239	210,747,559	1,144,021,798

### 5 Accounting Policies

The principal accounting policies applied in the preparation of these consolidated and separate financial statements are set out belows:

#### 5.1 Principles of consolidation accounting

##### 5.1.1 Subsidiaries

Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are consolidated from the date on which control is transferred to the Group until the date that control ceases.

In the separate financial statements, investments in subsidiaries are accounted for using cost method less impairment (if any).

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

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### 5.1.2 Associates

Associates are all entities over which the Group has significant influence but not control or joint control. Investments in associates are accounted for using the equity method of accounting.

In the separate financial statements, investments in associates are accounted for using cost method less impairment (if any).

### 5.1.3 Joint arrangements

Investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangements.

#### *Joint operations*

A joint operation is a joint arrangement whereby the Group has rights to the assets, and obligations for the liabilities relating to the arrangement. The Group recognises its direct right to the assets, liabilities, revenues and expenses of joint operations and its share of any jointly held or incurred assets, liabilities, revenues and expenses. These have been incorporated in the Group's financial statement line items.

#### *Joint ventures*

A joint venture is a joint arrangement whereby the Group has rights to the net assets of the arrangement. Interests in joint ventures are accounted for using the equity method in the consolidated financial statements.

In the separate financial statements, investments in joint ventures are accounted for using cost method less impairment (if any).

### 5.1.4 Equity method

The investment is initially recognised at cost which is consideration paid and directly attributable costs.

The Group subsequently recognises shares of its associates and joint ventures' profits or losses and other comprehensive income in the profit or loss and other comprehensive income, respectively. The subsequent cumulative movements are adjusted against the carrying amount of the investment.

When the Group's share of losses in associates and joint ventures equals or exceeds its interest in the associates and joint ventures together with any long-term interests, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associates and joint ventures.

### 5.1.5 Changes in ownership interests

The Group treats transactions with non-controlling interests that do not result in a loss of control as transactions with equity owners of the Group. A difference between the amount of the adjustment to non-controlling interests to reflect their relative interest in the subsidiary and any consideration paid or received is recognised within equity.

If the ownership interest in associates and joint ventures is reduced but significant influence and joint control is retained, only a proportionate share of the amounts previously recognised in other comprehensive income is reclassified to profit or loss or retained earnings where appropriate. Profit or loss from reduce of the ownership interest in associates and joint ventures is recognise in profit or loss.

When the Group losses control, joint control or significant influence over investments, any retained interest in the investment is remeasured to its fair value, with the change in carrying amount recognised in profit or loss. The fair value becomes the initial carrying amount of the retained interest which is reclassified to investment in an associate, or a joint venture or a financial asset accordingly.

### 5.1.6 Intercompany transactions on consolidation

Intra-group transactions, balances and unrealised gains on transactions are eliminated. Unrealised gains on transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in the associates and joint ventures. Unrealised losses are also eliminated in the same manner unless the transaction provides evidence of an impairment of the asset transferred.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

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### 5.2 Business combination

The Group applies the acquisition method to account for business combinations with an exception on business combination under common control. The consideration transferred for the acquisition of a subsidiary comprises.

- fair value of the assets transferred,
- liabilities incurred to the former owners of the acquiree
- equity interests issued by the Group

Identifiable assets and liabilities acquired and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date.

On an acquisition-by-acquisition basis, the Group initially recognises any non-controlling interest in the acquiree either at fair value or at the non-controlling interest's proportionate share of the acquiree's net assets.

The excess of the consideration transferred, the amount of any non-controlling interest recognised and the acquisition-date fair value of any previous equity interest in the acquiree (for business combination achieved in stages) over the fair value of the identifiable net assets acquired is recorded as goodwill. In the case of a bargain purchase, the difference is recognised directly in profit or loss.

#### *Acquisition-related costs*

Acquisition-related costs are recognised as expenses in the consolidated financial statements.

#### *Step-up acquisition*

If the business combination is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is re-measured to fair value at the acquisition date; any gains or losses arising from such re-measured are recognised in profit or loss.

#### *Changes in fair value of contingent consideration paid/received*

Subsequent changes to the fair value of the contingent consideration that is an asset or liability is recognised in profit or loss. Contingent consideration that is classified as equity is not re-measured.

### 5.3 Foreign currency translation

#### 5.3.1 Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The financial statements are presented in Thai Baht, which is the functional currency of the Company and the presentation currency of the Group and the Company.

#### 5.3.2 Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are re-measured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the profit or loss.

When a gain or loss on a non-monetary item is recognised in other comprehensive income, any exchange component of that gain or loss is recognised in other comprehensive income. Conversely, when a gain or loss on a non-monetary item is recognised in profit and loss, any exchange component of that gain or loss is recognised in profit and loss.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 5.3.3 Group companies

The results and financial position of all of the Group's entities (none of which has the currency of a hyper-inflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- Assets and liabilities for each statement of financial position presented are translated at the closing rate at the date of that statement of financial position;
- Income and expenses for each statement of income and statement of comprehensive income are translated at average exchange rates; and
- All resulting exchange differences are recognised in other comprehensive income.

### 5.4 Cash and cash equivalents

In the statements of cash flows, cash and cash equivalents include cash on hand, deposits held at call, short-term highly liquid investments with maturities of three months or less from acquisition date.

### 5.5 Trade receivables

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. They are generally due for settlement within 30 days and therefore are all classified as current.

Trade receivables are recognised initially at the amount of consideration that is unconditional unless they contain significant financing components, they are recognised at fair value. The Group holds the trade receivables with the objective to collect the contractual cash flows and therefore measures them subsequently at amortised cost.

### 5.6 Fuel, spare parts and supplies

Fuel, spare parts and supplies are stated at the lower of cost or net realisable value.

Cost of fuel, spare parts and supplies are determined by the weighted average basis method. Spare parts and supplies are classified as spare parts and supplies used for specific equipment in power plants and spare parts and supplies used for other general equipment.

The cost of purchase comprises both the purchase price and costs directly attributable to the acquisition of the fuel, spare parts and supplies, such as import duties and transportation charges, less all attributable discounts. The allowance for obsolescence of spare parts and supplies is made on an aging analysis.

### 5.7 Financial assets

#### 5.7.1 Classification

The Group classifies its debt instrument financial assets in the following measurement categories depending on i) business model for managing the asset and ii) the cash flow characteristics of the asset whether they represent solely payments of principal and interest (SPPI).

- those to be measured subsequently at fair value (either through other comprehensive income or through profit or loss); and
- those to be measured at amortised cost.

The Group reclassifies debt investments when and only when its business model for managing those assets changes.

For investments in equity instruments, the Group has an irrevocable election at the time of initial recognition to account for the equity investment at FVPL or at FVOCI except those that are held for trading, they are measured at FVPL.

#### 5.7.2 Recognition and derecognition

Regular way purchases, acquires and sales of financial assets are recognised on trade-date, the date on which the Group commits to purchase or sell the asset. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Group has transferred substantially all the risks and rewards of ownership.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 5.7.3 Measurement

At initial recognition, the Group measures a financial asset at its fair value plus, in the case of a financial asset not at FVPL, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at FVPL are expensed in profit or loss.

Financial assets with embedded derivatives are considered in their entirety when determining whether the cash flows are solely payment of principal and interest.

### 5.7.4 Debt instruments

Subsequent measurement of debt instruments depends on the Group's business model for managing the asset and the cash flow characteristics of the financial assets. There are three measurement categories into which the Group classifies its debt instruments:

- Amortised cost: Financial assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortised cost. Interest income from these financial assets is included in other income using the effective interest rate method. Any gain or loss arising on derecognition and foreign exchange gains and losses are recognised directly in profit or loss and presented in other gain/ (losses) and currency exchange gain (loss), respectively. Impairment losses are presented as a separate line item in the profit or loss.
- FVOCI: Financial assets that are held for i) collection of contractual cash flows; and ii) for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at FVOCI. Movements in the carrying amount are taken through other comprehensive income (OCI), except for 1) the recognition of impairment gains or losses, 2) interest income using the effective interest method, and 3) foreign exchange gains and losses which are recognised in profit or loss. When the financial assets are derecognised, the cumulative gain or loss previously recognised in OCI is reclassified from equity to profit or loss and recognised in other gains/(losses). Interest income is included in other income. Impairment expenses are presented separately in profit or losses.
- FVPL: Financial assets that do not meet the criteria for amortised cost or FVOCI are measured at FVPL. A gain or loss on a debt investment that is subsequently measured at FVPL is recognised in profit or loss and presented net within other gain/(loss) from measurement of financial instruments in the period in which it arises.

### 5.7.5 Equity instruments

The Group measures all equity investments at fair value. Where the Group has elected to present fair value gains and losses on equity instruments in OCI, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognised in profit or loss as dividend income when the right to receive payments is established.

Changes in the fair value of financial assets at FVPL are recognised in other gains/ (losses).

Impairment losses and reversal of impairment losses on equity investments are reported together with changes in fair value.

### 5.7.6 Impairment

The Group applies the TFRS 9 simplified approach and general approach in measuring the impairment of trade receivables and lease receivables under Power Purchase Agreement, which applies lifetime expected credit loss, from initial recognition, for all trade receivables and lease receivables under Power Purchase Agreement.

To measure the expected credit losses by using simplified approach, the management grouped the receivables based on shared credit risk characteristics and the days past due. The expected credit loss rates are based on payment profiles, historical credit losses as well as forward-looking information and factors that may affect the ability of the customers to settle the outstanding balances. In addition to the simplified approach, the management applies the general approach, which is to consider the individual assessments by using the discounted cashflow method. For this, management uses an estimate debtor's future cash flows based on the original effective interest rate.



# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

For other financial assets carried at amortised cost and FVOCI, the Group applies TFRS 9 general approach in measuring the expected credit loss of those financial assets. Under the general approach, the 12-month or the lifetime expected credit loss is applied depending on whether there has been a significant increase in credit risk since the initial recognition.

The significant increase in credit risk (from initial recognition) assessment is performed every end of reporting period by comparing i) expected risk of default as of the reporting date and ii) estimated risk of default on the date of initial recognition.

The Group assesses expected credit loss by taking into consideration forward-looking information and past experiences. The expected credit loss is a probability-weighted estimate of credit losses (probability-weighted present value of estimated cash shortfall). The cash shortfall is the difference between all contractual cash flows that are due to the Group and all cash flows expected to receive, discounted at the original effective interest rate.

When measuring expected credit losses, the Group reflects the following:

- probability-weighted estimated uncollectible amounts
- time value of money; and
- supportable and reasonable information as of the reporting date about past experience, current conditions and forecasts of future situations.

Impairment and reversal of impairment losses are recognised in profit or loss and included in administrative expenses.

### 5.8 Non-current assets held-for-sale

Non-current assets are classified as assets held-for-sale when their carrying amount will be recovered principally through a sale transaction and a sale is considered highly probable. They are measured at the lower of the carrying amount and fair value less costs to sell.

An impairment loss is recognised for write-down of the asset to fair value less costs to sell. A gain is recognised for any subsequent increases in fair value less costs to sell of an asset (or disposal group), but not in excess of any cumulative impairment loss previously recognised.

Non-current assets are not depreciated or amortised.

### 5.9 Property, plant and equipment

Property, plant and equipment are initially stated at historical cost. All plant and equipment are subsequently stated at historical cost less accumulated depreciation and allowance for impairment (if any). Initial cost includes expenditure that is directly attributable to the acquisition of the items. These can include the initial estimate of costs of dismantling and removing the item, and restoring the site on which it is located, the obligation for which the Group incurs either when the item is acquired or as a consequence of having used the item during a particular period.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged to profit or loss during the financial period in which they are incurred.

Depreciation is calculated using the straight-line method to allocate their cost to their residual values over their estimated useful lives, except land, which is considered to have an indefinite life, as follows:

	Years
Buildings and leasehold improvements	5 to 40
Power plant, machinery and equipment	3 to 40
Furniture, fixture and office equipment	3 to 28
Vehicles	5

Depreciation of power plant of Houay Ho Power Company Limited is calculated using the unit of production method.

The asset's residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

The asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Gains or losses on disposals of property, plant and equipment are determined by comparing the proceeds with the carrying amount. The net gains or losses are recognised in profit or loss.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 5.10 Intangible assets

Intangible assets with limited life are initially recognised at historical cost and subsequently stated at historical cost less accumulated amortisation and allowance for impairment losses (if any). The amortisation is calculated using the straight-line method over their estimated useful lives as follows:

	Years
Right to use grid system	22 - 24
Right to operate power plant	20
Right to use transmission line	25
Land leasehold right	16 - 30
Right to use pipe rack	8 - 16
Right of way	20 - 31
Right to use gas pipeline	13 - 28
Right to use dedicated berth	14
Computer software	3 - 10
Right to power purchase agreements	5 - 31

### 5.11 Goodwill

Goodwill represents the excess of the consideration transferred over the fair value of the Group's share of the net identifiable assets, liabilities and contingent liabilities of the acquired subsidiary undertaking or associate or joint venture at the date of acquisition.

Goodwill on acquisitions of subsidiaries is separately reported in the consolidated statement of financial position. Goodwill on acquisition of joint ventures or associates is included in investments in joint ventures or associates and is tested for impairment as part of the overall balance.

Goodwill is tested annually for impairment and carried at cost less accumulated impairment losses. Impairment losses on goodwill are not reversed. Gains and losses on the disposal of an entity include the carrying amount of goodwill relating to the entity sold.

Goodwill is allocated to cash generating units for the purpose of impairment testing. The allocation is made to those cash generating units or groups of cash generating units that are expected to benefit from the business combination in which the goodwill arose, identified according to operating segment.

### 5.12 Impairment of assets

Assets that have an indefinite useful life are tested annually for impairment, or more frequently if events or changes in circumstances indicate that it might be impaired. Assets that are subject to amortisation are reviewed for impairment whenever there is an indicator of impairment. An impairment loss is recognised for the amount by which the carrying amount of the assets exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to disposal and value in use.

Where the reasons for previously recognised impairments no longer exist, the impairment losses on the assets concerned other than goodwill is reversed.

### 5.13 Leases

#### *Leases - where the Group is the lessee*

Leases are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group. Each lease payment is allocated between the liability and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term.

The Group allocates the consideration in the contract to the lease and non-lease components based on their relative stand-alone prices. However, for leases of real estate for which the group is a lessee, it has elected not to separate lease and non-lease components and instead accounts for these as a single lease component.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable
- variable lease payment that are based on an index or a rate
- amounts expected to be payable by the lessee under residual value guarantees
- the exercise price of a purchase option if the lessee is reasonably certain to exercise that option, and
- payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

Lease payments to be made under reasonably certain extension options are also included in the measurement of the liability.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be determined, the lessee's incremental borrowing rate is used, being the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability
- any lease payments made at or before the commencement date less any lease incentives received
- any initial direct costs, and
- restoration costs.

Payments associated with short-term leases and leases of low-value assets are recognised on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less. Low-value assets comprise of office furniture.

### Leases - where the Group is the lessor

When assets are leased out under a finance lease, the present value of the lease payments is recognised as a receivable. The difference between the gross receivable and the present value of the receivable is recognised as unearned finance income. Lease income is recognised over the term of the lease which reflects a constant periodic rate of return. Initial direct costs are included in initial measurement of the finance lease receivables and reduce the amount of income recognised over the lease term.

Rental income under operating leases (net of any incentives given to lessees) is recognised on a straight-line basis over the lease term. Initial direct costs incurred in obtaining an operating lease are added to the carrying amount of the underlying asset and recognised as expense over the lease term on the same basis as lease income. The respective leased assets are included in the statement of financial position based on their nature.

## 5.14 Financial liabilities

### 5.14.1 Classification

Financial instruments issued by the Group are classified as either financial liabilities or equity securities by considering contractual obligations.

- Where the Group has an unconditional contractual obligation to deliver cash or another financial asset to another entity, it is considered a financial liability unless there is a predetermined or possible settlement for a fixed amount of cash in exchange of a fixed number of the Group's own equity instruments.
- Where the Group has no contractual obligation or has an unconditional right to avoid delivering cash or another financial asset in settlement of the obligation, it is considered an equity instrument.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting date.

### 5.14.2 Measurement

Financial liabilities are initially recognised at fair value and are subsequently measured at amortised cost.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

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### 5.14.3 Derecognition and modification

Financial liabilities are derecognised when the obligation specified in the contract is discharged, cancelled, or expired.

Where the terms of a financial liability are renegotiated/modified, the Group assesses whether the renegotiation / modification results in the derecognition of that financial liability. Where the modification results in an extinguishment, the new financial liability is recognised based on fair value of its obligation. The remaining carrying amount of financial liability is derecognised. The difference as well as proceed paid is recognised as administrative expense.

Where the modification does not result in the derecognition of the financial liability, the carrying amount of the financial liability is recalculated as the present value of the renegotiated / modified contractual cash flows discounted at its original effective interest rate. The difference is recognised in administrative expense.

### 5.15 Borrowing costs

General and specific borrowing costs directly attributable to the acquisition or construction of qualifying assets (assets that take several time to get ready for its intended use) are added to the cost of those assets less investment income earned from those specific borrowings. The capitalisation of borrowing costs is ceased when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete.

### 5.16 Current and deferred income taxes

The tax expense for the period comprises current and deferred tax. Tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity.

#### *Current tax*

The current income tax is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. The Group establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

#### *Deferred income tax*

Deferred income tax is recognised on temporary differences arising from differences between the tax base of assets and liabilities and their carrying amounts in the financial statements. However, deferred income tax is not recognised for temporary differences arise from:

- initial recognition of an asset or liability in a transaction other than a business combination that affects neither accounting nor taxable profit or loss is not recognised.
- investments in subsidiaries, associates and joint arrangements where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred income tax is measured using tax rates of the period in which temporary difference is expected to be reversed, based on tax rates and laws that have been enacted or substantially enacted by the end of the reporting period.

Deferred tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

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### 5.17 Employee benefits

The Group operates various post-employment benefits schemes which comprised defined benefit, defined contribution plans and other long-term benefits.

#### 5.17.1 Defined contribution

The Group provides provident fund, which is contributed by the employees and the Group, and managed by an external fund manager in accordance with the Provident Fund Act. B.E. 2530. The Group has no legal or constructive obligations to pay further contributions once the contributions have been paid even if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. The contributions are recognised as employee benefit expense when they are due.

#### 5.17.2 Retirement benefits

The Group provides for post-employment benefits, payable to employees under the labour laws applicable in Thailand and other countries in which the Group has its operations, or when the term of service is terminated according to the agreement between the Group and employees. Typically, defined benefit plans define an amount of retirement benefit that an employee will receive on retirement, usually depends on many factors such as age, years of service and compensation.

The liability in respect of employee benefits is the present value of the defined benefit obligation at the end of the reporting date which is calculated by an independent actuary using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting estimated future cash flows using yields on government bonds that matches the terms and currency of the expected cash outflows.

Remeasurement gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise.

Past-service costs are recognised immediately in profit or loss.

#### 5.17.3 Other long-term benefits

The Group gives gold rewards to employees when they have worked for the Group for 10, 15, 20, 25 and 30 years.

These obligations are measured similar to defined benefit plans except remeasurement gains and losses that are charged to profit or loss.

### 5.18 Provisions

#### 5.18.1 General provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated.

#### 5.18.2 Provisions for decommissioning cost

The Group recognises provision for decommissioning costs, which are provided at the onset of completion of the project, for the estimate of the eventual costs that relate to the removal of the assets. The recognised provision for decommissioning costs is based on future removal cost estimates and incorporate many assumptions such as abandonment times and future inflation rate and discounted to present value at the discount rate estimated by the management. Those costs are included as part of the assets.



# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 5.19 Revenue recognition

Revenue are recorded net of value added tax. They are recognised in accordance with the provision of goods or services, provided that collectability of the consideration is probable.

Multiple element arrangements involving delivery or provision of multiple products or services are separated into distinct performance obligations. Total transaction price of the bundled contract is allocated to each performance obligation based on their relative standalone selling prices or estimated standalone selling prices. Each performance obligation is recognised as revenue on fulfilment of the obligation to the customer as details below.

#### Revenue under the Power Purchase Agreements (PPA)

##### (a) Revenue under the PPA which are not classified as lease

- The Group recognises Capacity Payments or Availability Payments which are the revenue for maintaining availabilities of power plants as agreed with EGAT and industrial customers in accordance with terms of PPA. The Group recognises this revenue in profit or loss when rendering services to customer according to the agreements. If the Group receives consideration above the services rendered, the Group recognises the excess consideration as a contract liability. On the other hand, if the Group receives consideration less than the services rendered, the Group recognises the consideration as a contract asset.
- Energy Payments are recognised at a point in time when the controls over the products are transferred to the customers at destinations as stated in the agreements. The revenue from Energy Payments are recognised based on transaction price net of output tax, rebates and discounts.

##### (b) Revenue under the Power Purchase Agreements which are classified as lease

- Finance lease income under the power purchase agreements is recognised on an effective interest method over the period of the agreements. Rental income from operating lease under the power purchase agreements is recognised on a straight-line basis over the period of the agreements.
- Service income under finance and operating lease agreements related to power purchase agreements, which comprises revenue for maintaining availabilities of power plants, other service income and Energy Payments received from financial lease receivables and operating lease receivables with respect to the leased assets, is recognised when the services are rendered. If the Group receives consideration above the services rendered, the Group recognises the excess consideration as a contract liability. On the other hand, if the Group receives consideration less than the services rendered, the Group recognises the consideration as a contract asset.
- Contingent rents are recognised in profit or loss in the period in which they are incurred. Contingent rent is that portion of lease payments that is not fixed in amount but varies based on a future factor, such as the amount of use or production.

#### Revenue under the steam and water purchase agreements

Revenue under the steam and water purchase agreements are recognised at a point in time when the controls over the products are transferred to customers at destinations as stated in the agreements. The revenue is recognised based on transaction price net of output tax, rebates and discounts.

#### Dividend income

Dividend income is recognised when the right to receive payment is established.

#### Interest income

Interest income are recognised by the effective interest rate method.

### 5.20 Dividend distribution

Dividend distribution to the Company's shareholders is recognised as a liability in the financial statements in the period in which the dividends are approved by the Company's shareholders, and interim dividend are approved by the Board of Directors.

### 5.21 Derivatives and hedging activities

#### 5.21.1 Embedded derivative and derivatives that do not qualify for hedge accounting

Embedded derivative that is separately accounted for and derivatives that do not qualify for hedge accounting is initially recognised at fair value. Changes in the fair value are included in gains (losses) from measurement of financial instruments, net.

Fair value of derivative is classified as a current or non-current following its remaining maturity.

#### 5.21.2 Hedge accounting

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently remeasured to their fair value at the end of each reporting period. The Group designates certain derivatives as either:

- hedges of the fair value of i) recognised assets or liabilities or ii) unrecognised firm commitments (fair value hedges); or
- hedges of a particular risk associated with the cash flows of i) recognised assets and liabilities and ii) highly probable forecast transactions (cash flow hedges).

At inception of the hedge relationship, the Group documents i) the economic relationship between hedging instruments and hedged items including whether changes in the cash flows of the hedging instruments are expected to offset changes in the cash flows of hedged items and ii) its risk management objective and strategy for undertaking its hedge transactions.

The full fair value of a hedging derivative is classified as a current or non-current asset or liability following the maturity of related hedged item.

#### *Cash flow hedges that qualify for hedge accounting*

The effective portion of changes in the fair value of derivatives that are designated and qualified as cash flow hedges is recognised in the cash flow hedge reserve within equity. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss from measurement of financial instruments, net.

The Group has entered into foreign currency forward contracts, interest rate swap contracts, cross currency and interest rate swap contracts and commodity swap agreement to hedge forecast transactions. The Group generally designates only the change in fair value related to the spot component as the hedging instrument. Gains or losses relating to the effective portion of the change in the spot component are recognised as the cash flow hedge reserve in the other comprehensive income within equity. The change in the forward element that relates to the hedged item ('aligned forward element') is recognised as the cost of hedging reserve in other comprehensive income within equity.

In some cases, the Group may designate the full change in fair value of the derivatives (including forward points) as the hedging instrument. In such cases, the gains or losses relating to the effective portion of the change in fair value of the entire contract are recognised as the cash flow hedge reserve in the other comprehensive income within equity.

Amounts accumulated in equity are reclassified in the periods when the hedged item affects profit or loss

When a hedging instrument expires, or is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, any cumulative deferred gain or loss and deferred costs of hedging in equity at that time remains in equity until the forecast transaction occurs. When the forecast transaction is no longer expected to occur, the cumulative gain or loss and deferred costs of hedging that were reported in equity are immediately reclassified to profit or loss.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 5.22 Financial guarantee contracts

Financial guarantee contracts are recognised as a financial liability at the time the guarantee is issued. The liability is initially measured at fair value and subsequently at the higher of:

- The amount determined in accordance with the expected credit loss model under TFRS 9; and
- The amount initially recognised less the cumulative amount of income recognised in accordance with the principles of TFRS 15.

The fair value of financial guarantees is determined based on the present value of the difference in cash flows between a) the contractual payments required under the debt instrument; and b) the payments that would be required without the guarantee, or the estimated amount that would be payable to a third party for assuming the obligations.

Where guarantees in relation to loans or other payables are provided for no compensation, the fair values are accounted for as contributions and recognised as part of the cost of the investment.

### 5.23 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The Steering Committee has been identified as the chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments that makes strategic decisions.

## 6 Financial risk management

### 6.1 Financial risk

The Group exposes to a variety of financial risk: market risk (including foreign exchange risk, interest rate risk and price risk), credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance. The Group uses derivative financial instruments to hedge certain exposures.

Financial risk management is carried out by the Group treasury management division. The Group's policy includes areas such as foreign exchange risk, interest rate risk, credit risk and liquidity risk. The framework parameters are approved by the Board of Directors and uses as the key communication and control tools for Treasury team.

The Group's risk management is controlled by a treasury management division under policies approved by the Board of Directors. The treasury management division, evaluates and manages financial risks in close co-operation with the Group's operating units. The board provides written principles for overall risk management, as well as policies covering specific areas, such as foreign exchange risk, interest rate risk, credit risk, use of derivative and other financial instruments as well as investment of excess liquidity.

The use of derivative contracts that are speculative in nature is prohibited. All derivative contracts must be approved by the Board of Directors of each company within the Group.

Where all relevant criteria are met, hedge accounting is applied to remove the accounting mismatch between the hedging instrument and the hedged item.

#### 6.1.1 Market risk

##### a) Foreign exchange risk

The Group are exposed to foreign exchange risk from future commercial transactions and net monetary assets and liabilities that are denominated in a currency that is not the entity's functional currency.

##### Financial instruments using for risk management

The Group uses a combination of foreign currency forwards and cross currency and interest rate swap to hedge its exposure to foreign currency risk. Under the Group's policy, the critical terms of such contracts must align with the hedged items. In respect of foreign currency risk arising from the generation and sale of electricity to EGAT, the formula for the calculation of the Availability Payment and Energy Payment charged to EGAT allows for the minimisation of the impact of foreign currency risk.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### Exposure

The Group's exposure to foreign currency risk which is not a functional currency at the end of the reporting period, expressed in Baht are as follows:

	Consolidated financial statements						
	As at 31 December 2023				As at 31 December 2022		
	US Dollar Million Baht	Euro Million Baht	Swedish Krona Million Baht	US Dollar Million Baht	Euro Million Baht	Swedish Krona Million Baht	Japanese Yen Million Baht
Financial assets	9,209	-	-	9,156	-	-	155
Financial liabilities	7,391	77	15	12,480	45	11	19
Derivatives not qualifying as hedge accounting							
- Foreign currency forwards	221	189	-	1,089	305	282	-
Derivatives qualifying as hedge accounting							
- Foreign currency forwards	369	-	389	667	-	1,287	-

	Separate financial statement						
	As at 31 December 2023				As at 31 December 2022		
	US Dollar Million Baht	Euro Million Baht	Swedish Krona Million Baht	US Dollar Million Baht	Euro Million Baht	Swedish Krona Million Baht	Japanese Yen Million Baht
Financial assets	5,912	-	-	6,922	-	-	155
Financial liabilities	107	4	15	55	9	9	19

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### Effects of hedge accounting on the financial position and performance

The effects of the foreign currency-related hedging instruments on the Group and the Company's financial position and performance are as follows:

#### Foreign currency forward contracts

	Consolidated financial statements			
	Construction service contract US Dollar Million Baht	Power plant construction service contract US Dollar Million Baht	Power plant construction service contract Swedish Krona Million Baht	
<b>As at 31 December 2023</b>				
Carrying amount	(1)	4	— <sup>(*)</sup>	
Notional amount	US Dollar 3 Million	US Dollar 8 Million	Swedish Krona 112 Million	
Maturity date	22 January 2024 - 27 February 2024	28 June 2024	28 June 2024	
Change in discounted spot value of outstanding hedging instruments as at 1 January 2023	(1)	1	40	
Change in value of hedged item used to determine hedge effectiveness	1	(1)	(40)	
Weighted average hedged rate for outstanding hedging instruments (including forward points)	Baht 32.85 - 35.34 to US Dollar 1	Baht 33.01 - 34.15 to US Dollar 1	Baht 3.35 - 3.51 to Swedish Krona 1	

	Consolidated financial statements			
	Power plant construction service contract US Dollar Million Baht	Power plant construction service contract Swedish Krona Million Baht		
<b>As at 31 December 2022</b>				
Carrying amount	(11)	(47)		
Notional amount	US Dollar 19 Million	Swedish Krona 385 Million		
Maturity date	31 January 2023 - 28 June 2024	31 January 2023 - 28 June 2024		
Change in discounted spot value of outstanding hedging instruments as at 1 January 2022	(36)	(109)		
Change in value of hedged item used to determine hedge effectiveness	36	109		
Weighted average hedged rate for outstanding hedging instruments (including forward points)	Baht 29.99 - 37.91 to US Dollar 1	Baht 3.34 - 3.35 to Swedish Krona 1		

<sup>(\*)</sup> The amount is less than Baht 1 million



# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### Sensitivity

As shown in the table above, the Group is primarily exposed to changes in Baht and US Dollar, Baht and Euro, Baht and Swedish Krona and Baht and Japanese Yen exchange rates. The sensitivity of profit or loss to changes in the exchange rates arises mainly from financial assets and financial liabilities denominated in US Dollar, Euro, Swedish Krona, and Japanese Yen and the impact on other components of equity arises from foreign forward exchange designated as cash flow hedges.

	Consolidated financial statements			
	Impact to net profit		Impact to other components of equity	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
US Dollar to Baht exchange rate				
- increase 10%*	(219)	(663)	537	601
- decrease 10%*	219	663	(537)	(601)
Euro to Baht exchange rate				
- increase 10%*	11	19	-	-
- decrease 10%*	(11)	(19)	-	-
Swedish Krona to Baht exchange rate				
- increase 10%*	(2)	27	38	124
- decrease 10%*	2	(27)	(38)	(124)
Japanese Yen to Baht exchange rate				
- increase 10%*	-	14	-	-
- decrease 10%*	-	(14)	-	-

\* Holding all other variables constant

	Separate financial statements			
	Impact to net profit		Impact to other components of equity	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
US Dollar to Baht exchange rate				
- increase 10%*	185	257	396	430
- decrease 10%*	(185)	(257)	(396)	(430)
Euro to Baht exchange rate				
- increase 10%*	-	(1)	-	-
- decrease 10%*	-	1	-	-
Swedish Krona to Baht exchange rate				
- increase 10%*	(2)	(1)	-	-
- decrease 10%*	2	1	-	-
Japanese Yen to Baht exchange rate				
- increase 10%*	-	14	-	-
- decrease 10%*	-	(14)	-	-

\* Holding all other variables constant

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### b) Interest rate risk

The Group's main interest rate risk arises from long-term loans with variable rates, which expose the Group to cash flow interest rate risk. Group policy is to maintain at fixed rate, using floating-to-fixed interest rate swaps to achieve this when necessary. Generally, the Group enters into long-term loans at floating rates and swaps them into fixed rates that are lower than those available if the Group borrowed at fixed rates directly. As at 31 December 2023, the Group's borrowings at variable rate were mainly denominated in Baht and US Dollars. (As at 31 December 2022, the Group's borrowings at variable rate were mainly denominated in Baht and US Dollars).

The exposure of the Group's borrowings to interest rate changes at the end of the reporting period are as follows:

	<b>Consolidated financial statements</b>		<b>Separate financial statements</b>	
	<b>2023</b>	<b>2022</b>	<b>2023</b>	<b>2022</b>
	<b>Million Baht</b>	<b>Million Baht</b>	<b>Million Baht</b>	<b>Million Baht</b>
Long-term loans from financial institutions, net				
- Fixed rate	7,259	14,826	3,898	7,495
- Floating rate	47,884	43,139	3,286	3,425
Total Long-term loans from financial institutions, net	55,143	57,965	7,184	10,920
Long-term loans from related parties, net				
- Fixed rate	16,100	16,100	16,100	16,100
- Floating rate	-	-	9,237	10,437
Total Long-term loans from related parties, net	16,100	16,100	25,337	26,537
Debentures, net				
- Fixed rate	54,453	51,450	54,453	51,450
Total debentures, net	54,453	51,450	54,453	51,450

An analysis by maturities is provided in Note 6.1.3

### *Instruments used by the Group*

The Group entered into interest rate swaps covering approximately 5% (2022: 18%) of the variable loan principal outstanding. The fixed interest rates of the interest rate swap contracts is 4.30% (2022: range between 1.96% and 4.49%), and the variable rates of the loans from the market reference rate are as disclosed in Note 29.

The interest rate swap contracts require settlement of net interest receivable or payable between 3 months and 6 months. The settlement dates coincide with the dates on which interest is payable on the underlying debt.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### Effect of hedge accounting on the financial position and performance

The effects of the interest rate-related hedging instruments on the Group financial position and performance are as follows:

#### Interest rate swap contracts

	Consolidated financial statements
	Long-term loan Baht Million Baht
<b>As at 31 December 2023</b>	
Carrying amount (liability)	(146)
Notional amount	Baht 2,236 Million
Maturity date	31 October 2028
Change in fair value of outstanding hedge instruments as at 1 January 2023	(28)
Change in value of hedged item used to determine hedge effectiveness	28
Weighted average strike rate for outstanding hedging instruments for the year	4.30%

	Consolidated financial statements	
	Long-term loan Baht Million Baht	Long-term loan US Dollar Million Baht
<b>As at 31 December 2022</b>		
Carrying amount (liability)	(119)	(3)
Notional amount	Baht 2,813 Million	US Dollar 153 Million
Maturity date	31 January 2027	15 December 2023 - 31 October 2028
Change in fair value of outstanding hedge instruments as at 1 January 2022	157	589
Change in value of hedged item used to determine hedge effectiveness	(157)	(589)
Weighted average strike rate for outstanding hedging instruments for the year	3.60% - 3.63%	1.96% - 4.49%

### Sensitivity

Profit or loss is sensitive to higher or lower interest income from loan to related parties, and interest expenses from borrowings as a result of changes in interest rates. Other components of equity changes as a result of an increase or decrease in the fair value of the cash flow hedges of borrowings and the fair value of interest rate swap contract.

	Consolidated financial statements			
	Impact to net profit		Impact to other components of equity	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Interest rate - increase 1.0%*	(459)	(332)	48	162
Interest rate - decrease 1.0%*	459	332	(48)	(162)

\* Holding all other variables constant.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

	Separate financial statements			
	Impact to net profit		Impact to other components of equity	
	2023 Million Baht	2022 Million Baht	2023 Million Baht	2022 Million Baht
Interest rate - increase 1.0%*	(110)	(109)	-	-
Interest rate - decrease 1.0%*	110	109	-	-

\* Holding all other variables constant

### c) Price risk

The Group exposures to the fluctuations in coal price from Global Coal Newcastle Index which is partly consumed as fuel in electricity generation by the Group. The Group monitors coal price index in order to plan a purchase of coal at appropriate quantity.

As at 31 December 2023 and 2022, the Group did not entered into the commodity swap agreement to exposure the fluctuation in coal price.

### 6.1.2 Credit risk

Credit risk arises from cash and cash equivalents, contractual cash flows of debt investments carried at amortised cost, derivative financial instruments as well as credit exposures to customers, including outstanding receivables.

#### a) Risk management

The Group has no material credit risks for cash and short-term investments. This is because the Group uses quality financial institutions for cash and short-term investments. The Group manages credit risk by categorising the risks. To reduce potential risks for deposits with banks and financial institutions, the Group has laid down a policy to limit the transactions to be made with a particular financial institution and to invest surplus only in low-risk investments. In its experience, the Group has never suffered any losses from cash and investments.

For trade receivables, the Group's sales are made to state-owned enterprises and industrial users under the terms and conditions of the long-term Power Purchase Agreements and the long-term Electricity and Steam Sales and Purchase Agreements. There are no significant concentrations of credit risk for the Group's customers. However, the Group regularly monitors credit term compliance granted to each customer.

#### b) Impairment of financial assets

The Group and the Company have following financial assets that are subject to the expected credit loss model:

- Cash and cash equivalents
- Financial assets measured at amortised cost
- Trade and other receivables
- Finance lease receivable
- Loan to related parties

Management considered the amount of those expected credit losses on financial assets are immaterial.

### 6.1.3 Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash and marketable securities and the availability of funding through an adequate amount of committed credit facilities to meet obligations when due and to close out market positions. Due to the dynamic nature of the underlying businesses, the Group Treasury maintains flexibility in funding by maintaining availability under committed credit lines.

The tables below analyse the Group's financial liabilities into relevant maturity groupings based on their contractual maturities for:

- (a) all non-derivative financial liabilities; and
- (b) net and gross settled derivative financial instruments for which the contractual maturities are essential for an understanding of the timing of the cash flows.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

The amounts disclosed in the table are the contractual undiscounted cash flows.

	Consolidated financial statements				
	Within 1 year Million Baht	1 - 5 years Million Baht	Over 5 years Million Baht	Total Million Baht	Carrying amount Million Baht
<b>The maturity of financial liabilities as at 31 December 2023</b>					
Trade and other payables	8,818	-	-	8,818	8,818
Payables for assets under construction	441	-	-	441	441
Lease liabilities	207	709	2,232	3,148	2,392
Short-term loans from financial institutions	111	-	-	111	111
Long-term loans from financial institutions	4,388	30,637	20,358	55,383	55,143
Long-term loan from a related party	16,100	-	-	16,100	16,100
Debentures	6,500	11,500	36,500	54,500	54,453
Interest payables of long-term loans from financial institutions and debentures	4,256	11,766	7,413	23,435	506
Interest payables of long-term loan from a related party	224	-	-	224	4
Retentions	14	25	-	39	39
<b>Total financial liabilities that are not derivatives</b>	<b>41,059</b>	<b>54,637</b>	<b>66,503</b>	<b>162,199</b>	<b>138,007</b>
Derivative contracts					
- Foreign currency forwards	36	28	-	64	60
- Interest rate swaps	44	111	-	155	147
<b>Total derivatives</b>	<b>80</b>	<b>139</b>	<b>-</b>	<b>219</b>	<b>207</b>
<b>Total</b>	<b>41,139</b>	<b>54,776</b>	<b>66,503</b>	<b>162,418</b>	<b>138,214</b>
	Consolidated financial statements				
	Within 1 year Million Baht	1 - 5 years Million Baht	Over 5 years Million Baht	Total Million Baht	Carrying amount Million Baht
<b>The maturity of financial liabilities as at 31 December 2022</b>					
Trade and other payables	12,961	-	-	12,961	12,961
Payables for assets under construction	1,442	-	-	1,442	1,442
Lease liabilities	205	652	2,342	3,199	2,390
Short-term loans from financial institutions	3,371	-	-	3,371	3,371
Long-term loans from financial institutions	11,484	25,391	21,192	58,067	57,964
Long-term loan from a related party	-	16,100	-	16,100	16,100
Debentures	-	18,000	33,500	51,500	51,450
Interest payables of short-term loans from financial institutions	1	-	-	1	1
Interest payables of long-term loans from financial institutions and debentures	3,715	10,278	7,107	21,100	464
Interest payables of long-term loan from a related party	426	218	-	644	2
Retentions	-	3	-	3	3
<b>Total financial liabilities that are not derivatives</b>	<b>33,605</b>	<b>70,642</b>	<b>64,141</b>	<b>168,388</b>	<b>146,148</b>
Derivative contracts					
- Foreign currency forwards	94	83	-	177	180
- Interest rate swaps	19	121	1	141	140
<b>Total derivatives</b>	<b>113</b>	<b>204</b>	<b>1</b>	<b>318</b>	<b>320</b>
<b>Total</b>	<b>33,718</b>	<b>70,846</b>	<b>64,142</b>	<b>168,706</b>	<b>146,468</b>



# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

	Separate financial statements				
	Within 1 year Million Baht	1 - 5 years Million Baht	Over 5 years Million Baht	Total Million Baht	Carrying amount Million Baht
<b>The maturity of financial liabilities as at 31 December 2023</b>					
Trade and other payables	2,282	-	-	2,282	2,282
Payables for assets under construction	66	-	-	66	66
Lease liabilities	87	236	190	513	455
Long-term loans from financial institutions	740	3,660	2,790	7,190	7,184
Long-term loans from related parties	17,496	5,124	2,724	25,344	25,337
Debentures	6,500	11,500	36,500	54,500	54,453
Interest payables of long-term loans from financial institutions and debentures	2,158	6,072	5,469	13,699	284
Interest payables of long-term loans from related parties	590	897	153	1,640	7
Retentions	2	6	-	8	8
<b>Total financial liabilities that is not derivatives</b>	<b>29,921</b>	<b>27,495</b>	<b>47,826</b>	<b>105,242</b>	<b>90,076</b>
	Separate financial statements				
	Within 1 year Million Baht	1 - 5 years Million Baht	Over 5 years Million Baht	Total Million Baht	Carrying amount Million Baht
<b>The maturity of financial liabilities as at 31 December 2022</b>					
Trade and other payables	6,058	-	-	6,058	6,058
Payables for assets under construction	205	-	-	205	205
Lease liabilities	83	193	188	464	410
Long-term loans from financial institutions	3,740	3,380	3,810	10,930	10,920
Long-term loans from related parties	1,203	20,875	4,468	26,546	26,538
Debentures	-	18,000	33,500	51,500	51,450
Interest payables of long-term loans from financial institutions and debentures	2,078	6,001	5,927	14,006	263
Interest payables of long-term loans from related parties	709	998	266	1,973	4
Retentions	-	2	-	2	2
<b>Total financial liabilities that is not derivatives</b>	<b>14,076</b>	<b>49,449</b>	<b>48,159</b>	<b>111,684</b>	<b>95,850</b>

## 6.2 Capital management

### Risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

As at 31 December, net debt to equity ratios of the Group are as follows:

	Consolidated financial statements		Separate financial statements	
	2023 Million Baht	2022 Million Baht	2023 Million Baht	2022 Million Baht
Net debt	112,134	113,885	84,196	76,866
Equity (including non-controlling interests)	117,525	115,100	129,179	130,343
<b>Net debt to equity ratio</b>	<b>0.95</b>	<b>0.99</b>	<b>0.65</b>	<b>0.59</b>

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 7 Derivatives and hedging activities

As at 31 December, the Group had following derivative contracts.

	Consolidated financial statements	
	2023 Million Baht	2022 Million Baht
<b>Current derivative assets</b>		
Derivative contracts not qualifying as hedge accounting		
- Foreign currency forwards	5	1
Derivative contracts qualifying as hedge accounting		
- Foreign currency forwards	7	6
- Interest rate swaps	-	8
<b>Total current derivative assets</b>	<b>12</b>	<b>15</b>
<b>Non-current derivative assets</b>		
Derivative contracts qualifying as hedge accounting		
- Interest rate swaps	-	10
<b>Total non-current derivative assets</b>	<b>-</b>	<b>10</b>
<b>Current derivative liabilities</b>		
Derivative contracts not qualifying as hedge accounting		
- Foreign currency forwards	(30)	(59)
Derivative contracts qualifying as hedge accounting		
- Foreign currency forwards	(4)	(43)
<b>Total current derivative liabilities</b>	<b>(34)</b>	<b>(102)</b>
<b>Non-current derivative liabilities</b>		
Derivative contracts not qualifying as hedge accounting		
- Foreign currency forwards	(26)	(58)
Derivative contracts qualifying as hedges accounting		
- Foreign currency forwards	-	(21)
- Interest rate swaps	(147)	(140)
<b>Total non-current derivative liabilities</b>	<b>(173)</b>	<b>(219)</b>

#### 7.1 Classification of derivatives

Derivatives are for the purpose of hedging against economic risks, not for investment for profit. The Group applies hedge accounting for some derivatives. This qualifies as a cash flow hedge instrument with a hedge ratio of 1:1 based on the relationship of the underlying risk variables between the hedged item and the hedging instrument. However, if a derivative contract doesn't meet the criteria for hedge accounting, it's classified as trading and measured at fair value through profit or loss.

The Group presents fair value of derivative contracts as current and non-current based on each maturity of hedged items.

#### 7.2 Hedge effectiveness

Hedge effectiveness is determined at the inception of the hedge relationship, and through periodic prospective effectiveness assessments, to ensure that an economic relationship exists between the hedged item and hedging instrument.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### Exchange rate risk

For hedges of foreign currency purchases, the Group enters into hedge relationships where the critical terms of the hedging instrument match exactly with the terms of the hedged item. The Group therefore performs a qualitative assessment of effectiveness. If changes in circumstances affect the terms of the hedged item such that the critical terms no longer match exactly with the critical terms of the hedging instrument, the Group uses the hypothetical derivative method to assess effectiveness.

In hedges of foreign currency purchases, ineffectiveness may arise if the timing of the forecast transaction changes from what was originally estimated, or if there are changes in the credit risk of the derivative counterparty.

### Interest rate risk

The Group enters into interest rate swaps that have similar critical terms as the hedged item, such as reference rate, reset dates, payment dates, maturities and notional amount. The Group does not hedge 100% of its loans, therefore the hedged item is identified as a proportion of the outstanding loans up to the notional amount of the swaps. As all critical terms matched during the year, there is an economic relationship.

Hedge ineffectiveness for interest rate swaps is assessed using the same principles as for hedges of foreign currency purchases. It may occur due to the credit value/debit value adjustment on the interest rate swaps which is not matched by the loan and differences in critical terms between the interest rate swaps and loans.

## 7.3 Hedging reserves

Hedging reserves comprise hedging costs and a cash flow hedge reserves. The cash flow hedge reserve is used to recognise gain/loss relating to the effective portion of the change in fair value of the derivatives for which hedge accounting is applied.

Hedging reserves are listed in other components of equity, which consists of the following hedging instruments.

	<b>Consolidated financial statements</b>			
	<b>Cash flow hedging reserves</b>			
	<b>Cost of hedging reserve</b>	<b>Spot component of currency forwards</b>	<b>Interest rate swaps</b>	<b>Total cash flow hedge reserves</b>
	<b>Million Baht</b>	<b>Million Baht</b>	<b>Million Baht</b>	<b>Million Baht</b>
Opening balance 1 January 2023	(12)	(35)	(63)	(98)
<u>Add</u> Change in fair value of hedging instruments recognised in OCI	-	47	(66)	(19)
<u>Add</u> Costs of hedging deferred and recognised in OCI	22	-	-	-
<u>Less</u> Reclassification from OCI to profit or loss included in				
- Finance costs	-	-	49	49
- Cost of services	-	(8)	-	(8)
- Property, plant and equipment, net	-	1	-	1
<u>Less</u> Deferred tax	(4)	(8)	1	(7)
Closing balance 31 December 2023	6	(3)	(79)	(82)

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

	Consolidated financial statements			
	Cash flow hedging reserves			
	Cost of hedging reserve	Spot component of currency forwards	Interest rate swaps	Total cash flow hedge reserves
	Million Baht	Million Baht	Million Baht	Million Baht
Opening balance 1 January 2022	10	74	(473)	(399)
<u>Add</u> Change in fair value of hedging instruments recognised in OCI	-	(52)	310	258
<u>Add</u> Costs of hedging deferred and recognised in OCI	(28)	-	-	-
<u>Less</u> Reclassification from OCI to profit or loss included in				
- Finance costs	-	8	144	152
- Currency exchange gain	-	(122)	-	(122)
- Property, plant and equipment, net	-	28	-	28
<u>Less</u> Deferred tax	6	29	(44)	(15)
Closing balance 31 December 2022	(12)	(35)	(63)	(98)

### Note

1) Derivatives consist of foreign currency forward, cross currency and interest rate swap.

2) Cost of hedges consists of cost of hedges of foreign currency forward and cross currency and interest rate swap.

## 7.4 Amounts recognised in profit or loss

In addition to the amounts disclosed in the reconciliation of hedging reserves above, the following amounts were recognised in profit or loss in relation to derivatives presented in note 7.3.

For the year ended 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Net gain on derivatives not qualifying as hedges included in net gains/(losses) from measurement of financial instruments, net	679	106	605	-

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 8 Fair value

The following table presented financial assets and liabilities that are measured at fair value in each level including fair value of financial assets and financial liabilities. The table exclude financial assets and liabilities measured at amortised cost where their carrying value approximated fair value.

		Consolidated financial statements				
		Fair value through profit or loss (FVPL)	Fair value through other comprehensive income (FVOCI)	Amortised cost	Total carrying value	Fair value
Fair value level		Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
<b>As at 31 December 2023</b>						
<b>Assets</b>						
Financial assets						
- Other long-term investments	3	-	4,754	-	4,754	4,754
- Long-term loans to related parties (fixed rate portion)	2	-	-	3,397	3,397	4,281
Derivatives not qualifying as hedge accounting						
- Foreign currency forwards	2	5	-	-	5	5
Derivatives qualifying as hedge accounting						
- Foreign currency forwards	2	7	-	-	7	7
<b>Total assets</b>		<b>12</b>	<b>4,754</b>	<b>3,397</b>	<b>8,163</b>	<b>9,047</b>
<b>Liabilities</b>						
Long-term loans from financial institutions (fixed rate portion)	2	-	-	7,259	7,259	7,000
Long-term loan from a related party (fixed rate portion)	2	-	-	16,100	16,100	15,995
Debentures	2	-	-	54,453	54,453	54,331
Derivatives not qualifying as hedge accounting						
- Foreign currency forwards	2	56	-	-	56	56
Derivatives qualifying as hedge accounting						
- Foreign currency forwards	2	4	-	-	4	4
- Interest rate swap	2	147	-	-	147	147
<b>Total liabilities</b>		<b>207</b>	<b>-</b>	<b>77,812</b>	<b>78,019</b>	<b>77,533</b>



# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

		Separate financial statements				
		Fair value through profit or loss (FVPL)	Fair value through other comprehensive income (FVOCI)	Amortised cost	carrying value	Total fair value
		Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
<b>As at 31 December 2023</b>						
<b>Assets</b>						
Financial assets						
- Other long-term investments		-	4,702	-	4,702	4,702
Long-term loans to related parties (fixed rate portion)		-	-	1,063	1,063	1,042
<b>Total assets</b>		-	<b>4,702</b>	<b>1,063</b>	<b>5,765</b>	<b>5,744</b>
<b>Liabilities</b>						
Long-term loans from financial institutions (fixed rate portion)		-	-	3,898	3,898	3,721
Long-term loan from a related party (fixed rate portion)		-	-	16,100	16,100	15,995
Debentures		-	-	54,453	54,453	54,331
<b>Total liabilities</b>		-	-	<b>74,451</b>	<b>74,451</b>	<b>74,047</b>

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

		Consolidated financial statements				
		Fair value through profit or loss (FVPL) Million Baht	Fair value through other comprehensive income (FVOCI) Million Baht	Amortised cost Million Baht	Total carrying value Million Baht	Fair value Million Baht
Fair value level						
As at 31 December 2022						
Assets						
Financial assets						
3	- Other long-term investments	-	5,303	-	5,303	5,303
2	- Long-term loans to related parties (fixed rate portion)	-	-	1,617	1,617	1,527
Derivatives that qualifying as hedge accounting						
2	- Foreign currency forwards	6	-	-	6	6
2	- Interest rate swap	18	-	-	18	18
Total assets		24	5,303	1,617	6,944	6,854
Liabilities						
Long-term loans from financial institutions (fixed rate portion)						
2	Long-term loan from a related party (fixed rate portion)	-	-	14,826	14,826	14,680
2	Debentures	-	-	16,100	16,100	15,984
2	Derivatives not qualifying as hedge accounting	-	-	51,450	51,450	51,294
2	- Foreign currency forwards	116	-	-	116	116
Derivatives qualifying as hedge accounting						
2	- Foreign currency forwards	65	-	-	65	65
2	- Interest rate swap	140	-	-	140	140
Total liabilities		321	-	82,376	82,697	82,279

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

		Separate financial statements				
		Fair value through profit or loss (FVPL)	Fair value through other comprehensive income (FVOCI)	Amortised cost	Total carrying value	Total fair value
		Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
As at 31 December 2022		Fair value level				
<b>Assets</b>						
Financial assets						
- Other long-term investments	3	-	5,251	-	5,251	5,251
Long-term loans to related parties (fixed rate portion)	2	-	-	783	783	1,527
<b>Total assets</b>		-	<b>5,251</b>	<b>783</b>	<b>6,034</b>	<b>6,778</b>
<b>Liabilities</b>						
Long-term loans from financial institutions (fixed rate portion)	2	-	-	7,495	7,495	7,416
Long-term loan from a related party (fixed rate portion)	2	-	-	16,100	16,100	15,984
Debentures	2	-	-	51,450	51,450	51,294
<b>Total liabilities</b>		-	-	<b>75,045</b>	<b>75,045</b>	<b>74,694</b>

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

Fair value of following financial assets and financial liabilities measured at amortised cost where their carrying value approximated fair value are as follows:

Consolidated financial statements	Separate financial statements
<b>Financial assets</b> <ul style="list-style-type: none"> <li>- Cash and cash equivalents</li> <li>- Deposits at financial institutions used as collateral</li> <li>- Financial assets measured at amortised cost</li> <li>- Trade receivables, net</li> <li>- Finance lease receivable, net</li> <li>- Other receivables</li> <li>- Dividend receivables</li> <li>- Long-term loans to and interest receivables from related parties (float rate portion)</li> </ul>	<b>Financial assets</b> <ul style="list-style-type: none"> <li>- Cash and cash equivalents</li> <li>- Trade receivables, net</li> <li>- Finance lease receivable, net</li> <li>- Other receivables</li> <li>- Dividend receivables</li> <li>- Short-term loan to a related party</li> <li>- Long-term loans to and interest receivables from related parties (float rate portion)</li> </ul>
<b>Financial liabilities</b> <ul style="list-style-type: none"> <li>- Trade payables</li> <li>- Other payables</li> <li>- Payables for assets under construction</li> <li>- Other current liabilities</li> <li>- Short-term loans from financial institutions</li> <li>- Long-term loans from financial institutions (float rate portion)</li> <li>- Retentions</li> </ul>	<b>Financial liabilities</b> <ul style="list-style-type: none"> <li>- Trade payables</li> <li>- Other payables</li> <li>- Payables for assets under construction</li> <li>- Other current liabilities</li> <li>- Long-term loans from financial institutions (float rate portion)</li> <li>- Long-term loan from a related party (float rate portion)</li> <li>- Retentions</li> </ul>

### 8.1 Valuation techniques used to measure fair value level 2

Valuation techniques used to measure fair value level 2 for derivatives are as follows:

- Fair values of foreign currency forward contracts are determined using forward exchange rates that are quoted in an active market.
- Fair values of interest rate swap contracts are determined using forward interests extracted from observable yield curves.
- Fair value of commodity swap agreement is calculated by using forward price of coal.

Fair value of debt instruments is determined from discounted contractual cash flows where discount rate extracted from price of counterparty's debt instruments.

### 8.2 Valuation techniques used to measure fair value level 3

Changes in level 3 financial assets measured at fair value through other comprehensive income for year ended 31 December 2023 are as follows:

	Consolidated financial statements
	Financial assets measured at fair value through other comprehensive income
	Million Baht
Opening balance as at 1 January 2023	5,303
Share of other comprehensive income (expense)	
- change in fair value through other comprehensive income (expense)	(549)
Closing balance as at 31 December 2023	4,754

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

	Separate financial statements
	Financial assets measured at fair value through other comprehensive income Million Baht
Opening balance as at 1 January 2023	5,251
Share of other comprehensive income (expense)	
- Change in fair value through other comprehensive income (expense)	(549)
Closing balance as at 31 December 2023	4,702

The following table summarises the quantitative information about the significant unobservable inputs used in level 3 fair value measurements.

	Consolidated financial statements				
	Fair value			Range of inputs	
	31 December 2023 Million Baht	31 December 2022 Million Baht	Unobservable inputs	31 December 2023	31 December 2022
Financial assets measured at fair value through other comprehensive income	4,754	5,303	Enterprise multiple ratio Growth rate of cash flows Risk-adjusted discount rate	7 times 0% - 3% 6% - 17%	7 times 0% - 3% 6% - 17%

	Separate financial statements				
	Fair value			Range of inputs	
	31 December 2023 Million Baht	31 December 2022 Million Baht	Unobservable inputs	31 December 2023	31 December 2022
Financial assets measured at fair value through other comprehensive income	4,702	5,251	Enterprise multiple ratio Growth rate of cash flows Risk-adjusted discount rate	7 times 0% - 3% 6% - 17%	7 times 0% - 3% 6% - 17%

Relationship of unobservable inputs to fair value are shown as follows:

	Consolidated financial statements			
	Change in fair value			
	Increase in assumptions		Decrease in assumptions	
	31 December 2023 Million Baht		31 December 2023 Million Baht	
	Unobservable inputs	Movement		
Financial assets measured at fair value through other comprehensive income	Enterprise multiple ratio Growth rate of cash flows Risk-adjusted discount rate	1 time 1% 1%	Increase by 81 Increase by 6 Decrease by 161	Decrease by 81 Decrease by 5 Increase by 174

	Consolidated financial statements			
	Change in fair value			
	Increase in assumptions		Decrease in assumptions	
	31 December 2022 Million Baht		31 December 2022 Million Baht	
	Unobservable inputs	Movement		
Financial assets measured at fair value through other comprehensive income	Enterprise multiple ratio Growth rate of cash flows Risk-adjusted discount rate	1 time 1% 1%	Increase by 162 Increase by 6 Decrease by 182	Decrease by 162 Decrease by 5 Increase by 194



# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

			Separate financial statements	
			Change in fair value	
			Increase in assumptions	Decrease in assumptions
			31 December 2023	31 December 2023
			Million Baht	Million Baht
	Unobservable inputs	Movement		
Financial assets measured at fair value through other comprehensive income	Enterprise multiple ratio	1 time	Increase by 81	Decrease by 81
	Risk-adjusted discount rate	1%	Decrease by 157	Increase by 169
			Separate financial statements	
			Change in fair value	
			Increase in assumptions	Decrease in assumptions
			31 December 2022	31 December 2022
			Million Baht	Million Baht
	Unobservable inputs	Movement		
Financial assets measured at fair value through other comprehensive income	Enterprise multiple ratio	1 time	Increase by 162	Decrease by 162
	Risk-adjusted discount rate	1%	Decrease by 178	Increase by 189

### The Group's valuation processes

The Company regularly discuss valuation processes and results.

Significant unobservable input of fair value hierarchy level 3 is risk adjusted discount rate. It is estimated based on public companies' weighted average cost of capital and cost of equity that, are in opinion of the Group, in a comparable financial position with the counterparty in the contract.

## 9 Critical accounting estimates and judgements

Estimates, assumptions and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

During the year 2023, the Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are outlined below.

### 9.1 Impairment of goodwill

The Group annually tests for impairment of goodwill in accordance with the accounting policy stated in Note 5.10. The recoverable amounts of cash-generating units have been determined based on value-in-use calculations. These calculations use cash flow projections based on financial budgets covering the remaining period of the long-term power purchase agreements of the Group and assumed electricity tariffs and capacity of the power plants stated in the agreements. Discount rates used are based on pre-tax weighted average cost of capital (see in Note 24).

### 9.2 Fair value estimation of net assets arising from an acquisition of investments in associates

The Group estimates fair value of net assets arising from an acquisition of investments in subsidiaries by basing on the valuation technique (the discounted cash flows) that involves many assumptions for example the electricity tariffs, assumed capacity of the power plants, growth rate, operating expenditures, etc. The assumptions used also involved significant management judgement to assess the future cash flows and discounted rate applied for the future cash flows (Note 19.2).

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 10 Segment information - consolidated financial statements

The Group has three segment reports, which comprise Independent Power Producer (IPP), Small Power Producer (SPP) and others, as follows:

<b>Consolidated financial statements</b>				
<b>For the year ended 31 December 2023</b>				
	<b>IPP</b>	<b>SPP</b>	<b>Others</b>	<b>Total</b>
	<b>Million Baht</b>	<b>Million Baht</b>	<b>Million Baht</b>	<b>Million Baht</b>
Revenue from sales and services				
- External revenue	13,595	74,754	1,511	89,860
Revenue from finance leases	443	-	-	443
Cost of sales and services	(9,819)	(68,995)	(1,444)	(80,258)
Segment results	4,219	5,759	67	10,045
Dividend income	-	228	-	228
Other income	672	661	433	1,766
Currency exchange gain (loss)	-	(423)	66	(357)
Administrative expenses	(214)	(2,274)	(221)	(2,709)
Gain (loss) from remeasurement of financial instruments, net	1	554	77	632
Finance costs	(1,454)	(2,355)	(1,488)	(5,297)
Share of profit from investments in associates and joint ventures, net	532	247	229	1,008
Profit (loss) before income tax	3,756	2,397	(837)	5,316
Income tax	(370)	(67)	(70)	(507)
Profit (loss) for the year	3,386	2,330	(907)	4,809
<b>Attributable to:</b>				
Owners of the parent	2,799	1,796	(900)	3,695
Non-controlling interests	587	534	(7)	1,114
<b>Timing of revenue recognition</b>				
Point in time	7,296	69,281	1,511	78,088
Over time	6,299	5,473	-	11,772
Total revenue from sales and services	13,595	74,754	1,511	89,860
<b>Separate financial statements</b>				
<b>For the year ended 31 December 2023</b>				
	<b>IPP</b>	<b>SPP</b>	<b>Others</b>	<b>Total</b>
	<b>Million Baht</b>	<b>Million Baht</b>	<b>Million Baht</b>	<b>Million Baht</b>
<b>Timing of revenue recognition</b>				
Point in time	3,321	20,286	985	24,592
Over time	504	347	-	851
Total revenue from sales and services	3,825	20,633	985	25,443

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

<b>Consolidated financial statements</b>				
<b>For the year ended 31 December 2022</b>				
	<b>IPP</b>	<b>SPP</b>	<b>Others</b>	<b>Total</b>
	<b>Million Baht</b>	<b>Million Baht</b>	<b>Million Baht</b>	<b>Million Baht</b>
Revenue from sales and services				
- External revenue	41,721	80,519	843	123,083
Revenue from finance leases	602	-	-	602
Cost of sales and services	(38,018)	(81,404)	(902)	(120,324)
Segment results	4,305	(885)	(59)	3,361
Dividend income	-	192	-	192
Other income	160	2,347	32	2,539
Currency exchange gain (loss)	(173)	(31)	157	(47)
Administrative expenses	(73)	(2,091)	(146)	(2,310)
Gain (loss) from remeasurement of financial instruments, net	(29)	(76)	211	106
Finance costs	(1,399)	(2,163)	(737)	(4,299)
Share of profit from investments in associates and joint ventures, net	1,274	14	251	1,539
Profit (loss) before income tax	4,065	(2,693)	(291)	1,081
Income tax	236	111	29	376
Profit (loss) for the year	4,301	(2,582)	(262)	1,457
<b>Attributable to:</b>				
Owners of the parent	4,184	(3,034)	(259)	891
Non-controlling interests	117	452	(3)	566
<b>Timing of revenue recognition</b>				
Point in time	36,631	76,538	843	114,012
Over time	5,090	3,981	-	9,071
Total revenue from sales and services	41,721	80,519	843	123,083
<b>Separate financial statements</b>				
<b>For the year ended 31 December 2022</b>				
	<b>IPP</b>	<b>SPP</b>	<b>Others</b>	<b>Total</b>
	<b>Million Baht</b>	<b>Million Baht</b>	<b>Million Baht</b>	<b>Million Baht</b>
<b>Timing of revenue recognition</b>				
Point in time	18,440	23,682	206	42,328
Over time	165	348	-	513
Total revenue from sales and services	18,605	24,030	206	42,841

### Geographical information

The Group is managed and operates principally in Thailand. There are no material revenues derived from, or assets located in, foreign countries.

### Major customers

For the year ended 31 December 2023, the Group earned revenue from a single customer from both SPP and IPP businesses, totalling approximately Baht 32,232 million of the Group's total revenue (2022: Baht 69,000 million).

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 11 Cash and cash equivalents

As at 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Cash on hand and deposits at financial institutions				
- maturities within three months	13,197	6,536	2,777	4,342
Promissory notes				
- maturities within three months	-	7,700	-	7,700
Total cash and cash equivalents	13,197	14,236	2,777	12,042

As at 31 December 2023, the interest rates on deposits at financial institutions with maturities within three months were 0.05% to 2.23% per annum (as at 31 December 2022: 0.05% to 0.60% per annum) and no short-term investments in promissory notes with maturities within three months. (as at 31 December 2022: 0.09% to 1.20% per annum).

As at 31 December 2023, the Group's deposits at financial institutions of Baht 2,692 million were used as collateral to secure credit facilities obtained from financial institutions. However, the pledged deposits at financial institutions can be withdrawn according to the objectives and conditions stipulated in the loan agreements for use as working capital required in the normal course of their business (Note 29). During the year 2023, an indirect subsidiary had fully repaid its long-term loan to a financial institution. Currently the indirect subsidiary is in the process of withdrawing the collateral of its deposit at a financial institution which are mortgaged and pledged under the loan agreement.

### 12 Deposits at financial institutions used as collateral

As at 31 December 2023, deposits at financial institutions used as short-term collateral represented deposits in savings accounts of the Group which have been pledged as collateral for its long-term loans from financial institutions as described in Note 29. The deposits were for the purpose of principal repayment due in the next period. During the year 2023, an indirect subsidiary had fully repaid its long-term loan to a financial institution. Currently, the indirect subsidiary is in the process of withdrawing the collateral of its deposit at a financial institution which are mortgaged and pledged under the loan agreement. (Note 29).

### 13 Financial assets measured at amortised cost

As at 31 December 2023, financial assets measured at amortised cost represented fixed deposits with maturities over three months but not longer than one year. The financial assets of the Group bear interest rates at 1.60% to 2.10% per annum (as at 31 December 2022: interest rates at 0.60% to 0.80% per annum) which the particular financial assets of Baht 475 million (as at 31 December 2022: Baht 447 million) were pledged as collateral for long-term loans from financial institutions as described in Note 29.

### 14 Trade receivables, net

Trade receivables comprise:

As at 31 December	Note	Consolidated financial statements		Separate financial statements	
		2023	2022	2023	2022
		Million Baht	Million Baht	Million Baht	Million Baht
Trade receivables - related parties	40.2	3,816	3,124	2,406	1,773
Trade receivables - third parties		7,070	16,844	887	5,144
Less Expected credit loss		-	(1)	-	-
Total trade receivables, net		10,886	19,967	3,293	6,917

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

Trade receivables as at 31 December can be analysed by aging as follows:

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
<b>Trade receivables - related parties</b>				
Not overdue	3,815	2,864	2,406	1,513
Overdue less than 1 month	1	260	-	260
Overdue 1 - 2 months	-	-	-	-
Overdue 2 - 3 months	-	-	-	-
Overdue over 3 months	-	-	-	-
<b>Total trade receivables - related parties</b>	<b>3,816</b>	<b>3,124</b>	<b>2,406</b>	<b>1,773</b>
<b>Trade receivables - third parties</b>				
Not overdue	6,996	16,671	887	5,042
Overdue less than 1 months	3	104	-	102
Overdue 1 - 2 months	1	1	-	-
Overdue 2 - 3 months	1	8	-	-
Overdue over 3 months	69 <sup>(1)</sup>	60 <sup>(1)</sup>	-	-
<u>Less</u> Loss allowance	-	(1)	-	-
<b>Total trade receivables - third parties</b>	<b>7,070</b>	<b>16,843</b>	<b>887</b>	<b>5,144</b>
<b>Total trade receivables</b>	<b>10,886</b>	<b>19,967</b>	<b>3,293</b>	<b>6,917</b>

(1) The outstanding of trade receivables which are overdue more than 3 months, amounting to Baht 37 million, is due from EGAT, which resulted from an expiration date dispute of the Power Purchase Agreement entered into by the subsidiary (Project 1). The subsidiary submitted a dispute to the Thai Arbitration Institute (TAI) and on 21 November 2019, the TAI ruled that the expiration date of Project 1's Power Purchase Agreement was 31 March 2017, which gave the subsidiary the right to receive outstanding balance due from EGAT. Subsequently, on 18 February 2020, EGAT petitioned the Central Administrative Court to revoke the award of the TAI. Currently, the case remains in process at the Central Administrative Court.

### 15 Finance lease receivable, net

	Consolidated financial statements			
	Minimum payment		Present value of minimum payment	
As at 31 December	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Finance lease receivable				
- Less than one year	2,248	2,156	1,880	1,641
- Later than one year and not later than five years	2,442	4,454	2,140	3,817
	4,690	6,610	4,020	5,458
<u>Less</u> Deferred financial revenue	(670)	(1,152)		
<b>Present value of minimum payment</b>	<b>4,020</b>	<b>5,458</b>		
Finance lease receivable can be analysed as follows:				
- Current portion of finance lease receivable			1,880	1,641
- Non-current portion of finance lease receivable			2,140	3,817
			4,020	5,458



# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

As at 31 December	Separate financial statements			
	Minimum payment		Present value of minimum payment	
	2023 Million Baht	2022 Million Baht	2023 Million Baht	2022 Million Baht
Finance lease receivable				
- Less than one year	1,677	1,425	1,490	1,144
- Later than one year and not later than five years	625	2,065	589	1,879
	2,302	3,490	2,079	3,023
<u>Less</u> Deferred financial revenue	(223)	(467)		
Present value of minimum payment	2,079	3,023		
Finance lease receivable can be analysed as follows:				
- Current portion of finance lease receivable			1,490	1,144
- Non-current portion of finance lease receivable			589	1,879
			2,079	3,023

As at 31 December 2023 and 2022, the Group and the Company had no overdue balances of finance lease receivable.

### 16 Other receivables

As at 31 December	Note	Consolidated financial statements		Separate financial statements	
		2023 Million Baht	2022 Million Baht	2023 Million Baht	2022 Million Baht
Other receivables - related parties	40.2	182	64	189	76
Other receivables - third parties		1,515	1,993	265	150
Prepaid expenses		896	762	156	166
Total other receivables		2,593	2,819	610	392

### 17 Fuel, spare parts and supplies, net

As at 31 December	Consolidated financial statements		Separate financial statements	
	2023 Million Baht	2022 Million Baht	2023 Million Baht	2022 Million Baht
Coal	6,117	5,842	-	-
Diesel fuel	349	184	16	10
Spare parts and supplies	5,224	5,030	866	744
Others	13	17	13	17
	11,703	11,073	895	771
<u>Less</u> Allowance for obsolescence of spare parts and supplies	(272)	(272)	-	-
Total fuel, spare parts and supplies, net	11,431	10,801	895	771

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 18 Assets held-for-sale, net

As at 31 December 2023, the Group classified some equipments and machineries of power plants amounting to Baht 174 million as the assets held-for-sale since the Group entered into sale and purchase agreements for the equipments and machineries of power plants with third parties. The management expected to sell all relevant assets within one year from the date of the statement of financial position.

### 19 Investments in subsidiaries, associates and joint ventures

As at 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Investments in subsidiaries (Note 19.1)	-	-	179,614	171,688
Investments in associates (Note 19.2)	47,845	41,446	4,104	3,847
Investments in joint ventures (Note 19.3)	2,967	2,925	2,829	2,829
Total investments in subsidiaries, associates and joint ventures	50,812	44,371	186,547	178,364

#### 19.1 Investments in subsidiaries

Movements of investments in subsidiaries for the years ended 31 December are as follows:

	Separate financial statements	
	2023 Million Baht	2022 Million Baht
Opening net book value	171,688	161,063
Additional investments <sup>(a)</sup> , <sup>(b)</sup>	7,929	11,259
Dissolution of the subsidiary <sup>(c)</sup>	(3)	-
Disposal of investments	-	(634)
Closing net book value	179,614	171,688

Significant changes in investments in subsidiaries for the year ended 31 December 2023 are as follows:

#### (a) Global Renewable Synergy Company Limited

During the year ended 31 December 2023, Global Renewable Synergy Company Limited called for the additional paid-up share capital for 164,990,000 ordinary shares at Baht 3.38 and 122,000,000 ordinary shares at Baht 26.15, totalling Baht 3,748 million. The Company already paid for the additional paid-up share capital during the year.

In addition, the shareholders of Global Renewable Synergy Company Limited approved to increase of the registered share capital by issuing 58,464,397 ordinary shares at a par value of 100 baht and called for the paid-up share capital in the same proportion as the Company's investment at 70.95 baht per share, totalling Baht 4,148 million. The Company paid-up share capital on 25 July 2023.

#### (b) Wind Power Development Company Limited

On 30 January 2023, the Company established Wind Power Development Company Limited, which was incorporate in Thailand with total registered share capital of Baht 1 million. The principal business operation is to conduct feasibility studies and support plans for the expansion of investment in renewable energy in Thailand. The Company paid for the 5,097 ordinary shares at Baht 100 per share, totaling Baht 0.5 million or holding interest at 51% of total issued and paid-up share capital.

At the Extraordinary General Meeting of shareholders of the subsidiary No. 1/2023, the shareholders approved to increase of the registered share capital by issuing 640,000 ordinary shares at par value of Baht 100 and called up for an additional paid-up capital according to the existing shareholding interests. The Company already paid for an additional paid-up capital at Baht 100 per share, totaling Baht 32 million on 13 March 2023.

#### (c) GPSC International Holdings Limited

At the Board of Directors meeting of the Company, The shareholder passed the resolution to dissolution the GPSC International Holdings Limited. Such subsidiary completed the liquidation and registered its dissolution on 17 November 2023.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

The detail of investments in direct subsidiaries are as follows:

Company	Business	Portion of ordinary shares held by the Company		Cost method		Separate financial statements	
		2023	2022	2023	2022	Dividend income during the year	2022
		%	%	Million Baht	Million Baht	Million Baht	Million Baht
<b>Direct subsidiaries established in Thailand</b>							
Combined Heat and Power Producing Company Limited	Generate and supply electricity and cold water, construction and installation of electricity system services	100	100	266	266	-	-
Natee Synergy Company Limited	Invest in other companies	100	100	7,062	7,062	120	115
IRPC Clean Power Company Limited	Generate and supply electricity and steam for industrial use	51	51	1,965	1,965	-	-
Glow Energy Public Company Limited and its subsidiaries	Generate and supply electricity	45.67	45.67	60,924	60,924	518	1,212
GPSC Holding (Thailand) Company Limited (formally as ENGIE Holding (Thailand) Company Limited)	Invest in other companies	100	100	72,883	72,883	615	1,438
Energy Recovery Unit Company Limited	Generate and supply electricity	100	100	3,316	3,316	-	-
GPSC Treasury Center Company Limited	Financial services	100	100	20	20	-	-
Global Renewable Synergy Company Limited <sup>(a)</sup>	Invest in other companies	100	100	32,848	24,952	-	-
Boree Plus Company Limited	Generate and supply electricity	51	51	93	93	-	-
Eurus Plus Company Limited	Generate and supply electricity	51	51	54	54	-	-
Helios 1 Company Limited	Generate and supply electricity	50	50	49	49	-	-
Helios 2 Company Limited	Generate and supply electricity	50	50	62	62	-	-
Helios 3 Company Limited	Generate and supply electricity	50	50	8	8	-	-
Helios 4 Company Limited	Generate and supply electricity	50	50	16	16	-	-
Helios 5 Company Limited <sup>***</sup>	Generate and supply electricity	50	50	15	15	-	-
WindPower Development Company Limited <sup>(b)</sup>	Power project development	51	-	33	-	-	-
<b>Direct subsidiary established in Japan</b>							
Ichinoseki Solar Power 1 GK	Generate and supply electricity	-	-	-	-	-	134
<b>Direct subsidiary established in Hong Kong</b>							
GPSC International Holdings Limited <sup>(c)</sup>	Invest in other companies	-	100	-	-	-	-
Total investments in subsidiaries				179,614	171,688	1,253	2,899

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

The detail of investments in indirect subsidiaries are as follows:

Company	Business	Portion of ordinary shares held by the Group		Cost method		Separate financial statements	
		2023	2022	2023	2022	Dividend income during the year	
		%	%	Million Baht	Million Baht	2023	2022
<b><u>Indirect subsidiaries established in Thailand</u></b>							
Glow Energy Public Company Limited	Generate and supply electricity Provide management services, consultant services and management advisory for related companies	54.16	54.16	-	-	-	-
Glow Company Limited		100	100	-	-	-	-
Glow IPP Company Limited	Generate and supply electricity to EGAT	95	95	-	-	-	-
Glow SPP 2 Company Limited	Generate and supply electricity and steam for industrial use	100	100	-	-	-	-
Glow SPP 3 Company Limited	Generate and supply electricity, steam and water for industrial use	100	100	-	-	-	-
Glow IPP 2 Holding Company Ltd	Invest in other companies	100	100	-	-	-	-
GHECO-One Company Limited*	Generate and supply electricity to EGAT	65	65	-	-	-	-
Glow IPP 3 Company Limited	Develop power generation projects	100	100	-	-	-	-
Glow SPP 11 Company Limited	Generate and supply electricity and water for industrial use	100	100	-	-	-	-
Houay Ho Thai Company Limited	Invest in other companies	49	49	-	-	-	-
<b><u>Indirect subsidiary established in Laos</u></b>							
Houay Ho Power Company Limited*	Generate and supply electricity to EGAT and Electricity du Laos (EDL)	67.25	67.25	-	-	-	-
<b><u>Indirect subsidiary established in Myanmar</u></b>							
Glow Energy Myanmar Company Limited**	Provide technical and consultancy services for power sector	100	100	-	-	-	-
<b><u>Indirect subsidiary established in Taiwan</u></b>							
Global Renewable Synergy Company Limited Taiwan	Invest in other companies	100	100	-	-	-	-

\* As at 31 December 2023 and 2022, the Group pledged the common shares of GHECO-One Company Limited and Houay Ho Power Company Limited as collateral for their long-term loans from financial institutions (Note 29). During the year 2023, Houay Ho Power Company Limited had fully repaid its long-term loan to a financial institution. Currently, the Company is in the process of withdrawing the collateral.

\*\* **Glow Energy Myanmar Company Limited**  
At the Board of Directors meeting of the Company No.12/2022 on 27 September 2022, the shareholder passed the resolution to dissolution of Glow Energy Myanmar Company Limited. Such subsidiary registered for the dissolution during the fourth quarter of 2022 and currently on the process of liquidation.

\*\*\* **Helios 5 Company Limited**  
At the Extraordinary General Meeting of shareholders of Helios 5 Company Limited No. 2/2023 on 23 August 2023, the shareholders passed the resolution to dissolution of Helios 5 Company Limited. Such subsidiary registered its dissolution on 25 August 2023 and currently on the process of liquidation.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### Summarised financial information for subsidiaries with material non-controlling interests

Set out below are the summarised financial information of each subsidiary that has non-controlling interests that are material to the Group. The amounts disclosed for each subsidiary are the amounts before inter-company elimination.

### Summarised statement of financial position

As at 31 December	IRPC Clean Power Company Limited		GHECO-One Company Limited				Total	
	2023	2022	2023	2022	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
Current assets	3,968	3,314	9,641	9,329	13,609	12,643		
Current liabilities	(2,044)	(1,567)	(1,492)	(5,120)	(3,536)	(6,687)		
Total current net assets	1,924	1,747	8,149	4,209	10,073	5,956		
Non-current assets	11,427	10,615	30,799	31,184	42,226	41,799		
Non-current liabilities	(4,101)	(4,215)	(23,034)	(20,949)	(27,135)	(25,164)		
Total non-current net assets	7,326	6,400	7,765	10,235	15,091	16,635		
Net assets	9,250	8,147	15,914	14,444	25,164	22,591		
Non-controlling interests	4,533	3,992	5,563	5,080	10,095	9,072		



# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### Summarised statement of comprehensive income

#### For the years ended 31 December

Revenue  
Profit (Loss)  
Other comprehensive income (expense)

Total comprehensive income

Income attributable to non-controlling interests

### Summarised of statement of cash flows

#### For the years ended 31 December

Net cash generated from (used in) operating activities  
Net cash used in investing activities  
Net cash generated from (used in) financing activities

**Net increase (decrease) in cash and cash equivalents**  
Cash and cash equivalents at the beginning of the year

Cash and cash equivalents at the ending of the year

	IRPC Clean Power Company Limited		GHECO-One Company Limited		Total	
	2023	2022	2023	2022	2023	2022
Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
Revenue	8,112	9,297	6,465	15,871	14,577	25,168
Profit (Loss)	1,091	922	1,493	30	2,584	952
Other comprehensive income (expense)	12	-	(9)	614	3	614
Total comprehensive income	1,103	922	1,484	644	2,587	1,566
Income attributable to non-controlling interests	541	452	485	222	1,026	674

	IRPC Clean Power Company Limited		GHECO-One Company Limited		Total	
	2023	2022	2023	2022	2023	2022
Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
Net cash generated from (used in) operating activities	2,293	1,369	3,579	(3,177)	5,872	(1,808)
Net cash used in investing activities	(1,202)	(667)	(1,291)	(139)	(2,493)	(806)
Net cash generated from (used in) financing activities	(234)	(494)	(1,705)	1,096	(1,939)	602
<b>Net increase (decrease) in cash and cash equivalents</b>	857	208	583	(2,220)	1,440	(2,012)
Cash and cash equivalents at the beginning of the year	919	712	101	2,321	1,020	3,033
Cash and cash equivalents at the ending of the year	1,776	920	684	101	2,460	1,021

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 19.2 Investments in associates

Movements of investments in associates for the years ended 31 December are as follows:

	<b>Consolidated financial statements</b>	
	<b>Investment at equity method</b>	
	<b>2023 Million Baht</b>	<b>2022 Million Baht</b>
Opening net book value	41,446	24,623
Additional investments <sup>(a), (b), (c)</sup>	6,319	17,824
Share of profit	544	1,239
Share of other comprehensive income (expense)		
- Cash flow hedges	202	(41)
- Gain (loss) from remeasurement of equity investments at fair value through other comprehensive income	40	(43)
- Exchange difference on translation of the financial statements	(576)	(1,913)
Dividend income	(130)	(243)
Closing net book value	47,845	41,446

	<b>Separate financial statements</b>	
	<b>Investment at cost method</b>	
	<b>2023 Million Baht</b>	<b>2022 Million Baht</b>
Opening net book value	3,847	1,871
Additional investments <sup>(c)</sup>	257	1,976
Closing net book value	4,104	3,847

Significant changes in investments in associates during the year ended 31 December 2023 are as follows:

#### (a) CI Changfang Limited and CI Xidao Limited and subsidiaries

On 26 September 2022, Global Renewable Synergy Company Limited Taiwan, an indirect subsidiary of the Company, completed the conditions precedent of the share purchase agreement to acquire shares of CI Changfang Limited and CI Xidao Limited, which are developing offshore wind power project in Taiwan. The share acquisition represents 25% of the total registered and paid-up capital totalling NTD 12,548 million which is equivalent to Baht 15,007 million. The indirect subsidiary made a full payment to the funds Copenhagen Infrastructure II K/S ("CI-II") and Copenhagen Infrastructure III K/S ("CI-III") on the same day.

During the first quarter of 2023, the Group has completed the measurement of the fair value of the acquired identifiable net assets at the acquisition date which was done in accordance with the measurement period of a business combination of Thai Financial Reporting Standard 3 Business Combinations. The fair value of net identifiable assets acquired mainly consists of cash and cash equivalents, property plant and equipment, and the rights to power purchase agreements. Such the measurement of fair value does not have significant impact to the consolidated financial statements for the year ended 31 December 2022.

Details of the consideration paid at the acquisition date are as follows:

	<b>Consolidated financial statements Million Baht</b>
Cash	15,007
Total purchase consideration	15,007

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

Details of the investment are described as follows:

	<b>Consolidated financial statements Million Baht</b>
Fair value of identifiable net assets acquired	1,164
Rights to power purchase agreements (included in investments in associates)	10,642
Goodwill (included in investments in associates)	3,201
Total purchase consideration	15,007

The Group amortised rights to power purchase agreements by using the unit of production method over power purchase agreements term of CI Changfang Limited and CI Xidao Limited and its subsidiaries.

### (b) **Avaada Energy Private Limited**

During the second quarter of 2023, Avaada Energy Private Limited called for the additional paid-up share capital from the Company's subsidiary in the same proportion as the Company's investment for 55,350,064 shares at Indian Rupee 100.84 per share, totalling Indian Rupee 5,582 million or equivalent to Baht 2,336 million. The subsidiary already paid for the additional paid-up share capital on 3 May 2023.

During the third quarter of 2023, Avaada Energy Private Limited increased of the registered capital and called for the additional paid-up share capital from the Company's subsidiary in the same proportion as the Company's investment for 85,768,426 shares at Indian Rupee 100.84 per share, totalling Indian Rupee 8,649 million or equivalent to Baht 3,726 million. The subsidiary already paid for the additional paid-up share capital on 25 July 2023.

### (c) **Nuovo Plus Company Limited**

On 20 September 2023, Nuovo Plus Company Limited called for the additional paid-up share capital from the Company in the same proportion as the Company's investment for 20,580,000 shares at Baht 12.50 per share, totalling Baht 257 million. The Company already paid for the additional paid-up share capital on 31 October 2023.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

The details of the investments in associates are as follows:

Company	Business	Portion of ordinary shares held by the Group				Cost Method				Equity Method				Consolidated financial statements			
		2023		2022		2023		2022		2023		2022		2023		2022	
		%		%		Million Baht		Million Baht		Million Baht		Million Baht		Million Baht		Million Baht	
Direct associate established in Thailand Bangpa-in Cogeneration Company Limited Global Renewable Power Company Limited and its subsidiaries	Generate and supply electricity Invest in other companies, generate and supply electricity and provide management services	25	25	50	50	924	924	1,122	1,122	937	937	814	814	-	-	74	74
Nuovo Plus Company Limited and its subsidiaries <sup>(c)</sup>	Manufacturing and sale of battery	49	49			2,058	2,058	1,801	1,801	1,760	1,760	1,726	1,726	-	-	-	-
Indirect associate established in Laos Xayaburi Power Company Limited	Generate and supply electricity	25	25			6,994	6,994	6,994	6,994	8,751	8,751	8,366	8,366	122	122	122	122
Indirect associate established in Thailand Eastern Seaboard Clean Energy Company Limited and its subsidiaries	Studying, generating and supply electricity for industrial use, including generating electricity from renewable energy	33	33			339	339	339	339	356	356	337	337	8	8	47	47
Indirect associate established in India Avaada Energy Private Limited <sup>(b)</sup>	Generate and supply electricity	42.93	42.93			21,888	21,888	15,826	15,826	20,632	20,632	14,604	14,604	-	-	-	-
Indirect associate established in Taiwan CI Changfang Limited, CI Xidao Limited and its subsidiaries <sup>(a)</sup>	Invest in other companies, generate and supply electricity	25	25			15,007	15,007	15,007	15,007	14,232	14,232	14,377	14,377	-	-	-	-
Total investments in associates						48,332	48,332	42,013	42,013	47,845	47,845	41,446	41,446	130	130	243	243

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

The details of an investment in an associate are as follows:

Company	Business	Portion of ordinary shares held by the Company				Cost Method		Dividend income during the year					
		2023		2022		2023		2022		2023		2022	
		%	%	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht		
Associate established in Thailand Bangpa-in Cogeneration Company Limited Global Renewable Power Company Limited and its subsidiaries Nuovo Plus Company Limited and its subsidiaries (c)	Generate and supply electricity Invest in other companies, generate and supply electricity and provide management services Manufacturing and sale of battery	25	25	924	924	-	-	74					
		50	50	1,122	1,122	-	-	-					
		49	49	2,058	1,801	-	-	-					
Total investments in associates				4,104	3,847	-	-	74					



# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### Summarised financial information for associates

The table below is the summarised financial information for associates that are material to the Group. The financial information is included in its own financial statements which has been adjusted with adjustments for the equity method, including fair value adjustments and modifications for differences in accounting policies.

### Summarised statement of financial position

	Xayaburi Power Company Limited		Avaada Energy Private Limited		Changfang & Xidao		Total	
	2023	2022	2023	2022	2023	2022	2023	2022
As at 31 December	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
Total current assets	7,592	8,278	10,265	5,424	3,456	2,518	21,313	16,220
Total non-current assets	123,361	126,320	74,237	68,420	139,664	71,172	337,262	265,912
Total current liabilities	(5,359)	(5,040)	(5,307)	(4,869)	(749)	(1,140)	(11,415)	(11,049)
Total non-current liabilities	(90,731)	(96,232)	(43,055)	(47,012)	(97,302)	(59,122)	(231,088)	(202,366)
Net assets	34,863	33,326	36,140	21,963	45,069	13,428	116,072	68,717

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### Summarised statement of comprehensive income

#### For the years ended 31 December

	Xayaburi Power Company Limited		Avaada Energy Private Limited		Changfang & Xidao		Total	
	2023	2022	2023	2022	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
Revenue	13,922	16,230	7,966	6,083	834	54	22,722	22,367
Profit (loss) from continuing operations	2,130	5,095	711	(683)	(568)	1,078	2,273	5,490
Other comprehensive income (expense)	(101)	(164)	(292)	(766)	656	(802)	263	(1,732)
Income (expense) on comprehensive income	2,029	4,931	419	(1,449)	88	276	2,536	3,758
Dividend received from associates	122	122	-	-	-	-	122	122
<b>Reconciliation to carrying amounts:</b>								
Opening net assets at 1 January	33,326	28,878	21,963	14,533	13,428	-	68,717	43,411
Adjust fair value of net assets	-	-	-	8,038	31,553	-	31,553	8,038
Net assets at acquisition date	-	-	-	-	-	13,152	-	13,152
Capital increase	-	-	13,758	841	-	-	13,758	841
Profit (loss) for the year	2,130	5,095	711	(683)	(568)	1,078	2,273	5,490
Other comprehensive income (expense) for the year	(101)	(164)	(292)	(766)	656	(802)	263	(1,732)
Dividends paid	(492)	(483)	-	-	-	-	(492)	(483)
Closing net assets	34,863	33,326	36,140	21,963	45,069	13,428	116,072	68,717
Group's share in associates (%)	25%	25%	42.93%	42.93%	25%	25%	-	-
Group's share in associates	8,716	8,331	15,515	9,429	11,267	3,357	35,498	21,117
Goodwill	35	35	5,117	5,175	2,965	11,020	8,117	16,230
Associate carrying amount	8,751	8,366	20,632	14,604	14,232	14,377	43,615	37,347

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### Individually immaterial associates

In addition to the interests in the associate disclosed above, the Group also has interests in a number of individually immaterial associates that are accounted for using the equity method as follows:

	Consolidated financial statements	
	2023 Million Baht	2022 Million Baht
<b>Aggregate carrying amount of individually immaterial associates</b>	4,230	4,099
<b>The Group's share of:</b>		
Profit (loss) from continuing operations	(152)	16
Other comprehensive income (expense)	33	(91)
Total comprehensive income (expense)	(119)	(75)

### 19.3 Investments in joint ventures

Movements of investments in joint ventures for the years ended 31 December are as follows:

	Consolidated financial statements	
	2023 Million Baht	2022 Million Baht
<b>Investment at equity method</b>		
Opening net book value	2,925	3,077
Additional investment	-	15
Share of profit	464	300
Share of other comprehensive income (expense)		
- Exchange difference on translation of financial statements	(8)	25
Dividend income	(414)	(491)
Dissolution of the joint venture	-	(1)
Closing net book value	2,967	2,925
	Separate financial statements	
	2023 Million Baht	2022 Million Baht
<b>Investment at cost method</b>		
Open net book value	2,829	2,814
Additional investment	-	15
Closing net book value	2,829	2,829

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

The details of investments in joint ventures are as follows:

Company	Business	Consolidated financial statements					
		Portion of ordinary shares held by the Group		Cost Method		Equity Method	
		2023	2022	2023	2022	2023	2022
		%	%	Million Baht	Million Baht	Million Baht	Million Baht
Joint ventures established in Thailand							
Thai Solar Renewable Company Limited and its subsidiary	Invest in other companies	40	40	1,697	1,697	1,395	1,469
Navanakorn Electricity Generating Company Limited	Generate and supply electricity	30	30	638	638	734	613
Joint venture established in Laos							
Nam Lik 1 Power Company Limited	Generate and supply electricity	40	40	494	494	838	843
Total investments in joint ventures				2,829	2,829	2,967	2,925
							414
							491

The detail of investments in joint ventures are as follows:

Company	Business	Separate financial statements					
		Portion of ordinary shares held by the Company		Cost Method		Dividend income during the year	
		2023	2022	2023	2022	2023	2022
		%	%	Million Baht	Million Baht	Million Baht	Million Baht
Joint ventures established in Thailand							
Thai Solar Renewable Company Limited and its subsidiary	Invest in other companies	40	40	1,697	1,697	414	401
Navanakorn Electricity Generating Company Limited	Generate and supply electricity	30	30	638	638	-	90
Joint venture established in Laos							
Nam Lik 1 Power Company Limited	Generate and supply electricity	40	40	494	494	-	-
Total investments in joint ventures				2,829	2,829	414	491

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### Summarised financial information for joint ventures

The table below summarises the financial information for a joint venture that is material to the Group. The financial information is included in its own financial statements which has been adjusted with necessary adjustments for the equity method, including fair value adjustments and modifications for differences in accounting policies.

### Summarised statement of financial position

#### As at 31 December

#### Current assets

Cash and cash equivalents  
Other current assets (excluding cash)

Total current assets

#### Non-current assets

#### Current liabilities

Current financial liabilities (excluding trade payables)  
Other current liabilities (including trade payables)

Total current liabilities

#### Non-current liabilities

Non-current financial liabilities  
Other non-current liabilities

Total non-current liabilities

Total net assets

Thai Solar Renewable Company Limited	
2023	2022
Million Baht	Million Baht
1	-
465	616
466	616
3,961	4,454
(268)	(376)
(294)	(354)
(562)	(730)
(464)	(730)
(4)	(26)
(468)	(756)
3,397	3,584

### Summarised statement of comprehensive income

#### For the years ended 31 December

Revenue  
Depreciation and amortisation  
Interest expenses  
**Profit from continuing operations**  
Income tax expenses

**Post-tax profit from discontinued operations**  
**Other comprehensive income (expense)**

**Total comprehensive income**

**Dividend received from joint ventures**

#### Reconciliation to carrying amounts:

Opening net assets at 1 January  
Profit for the year  
Other comprehensive income (expense)  
Dividends paid

Closing net assets

Group's share in joint ventures (%)  
Group's share in joint ventures  
Goodwill

Joint venture's carrying amount

Thai Solar Renewable Company Limited	
2023	2022
Million Baht	Million Baht
1,597	1,622
(245)	(245)
(51)	(49)
959	956
(111)	(99)
848	857
-	-
848	857
414	402
3,588	3,734
848	857
-	-
(1,039)	(1,003)
3,397	3,588
40%	40%
1,359	1,435
36	35
1,395	1,470



# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

	<b>Consolidated financial statements</b>	
	<b>2023</b>	<b>2022</b>
	<b>Million Baht</b>	<b>Million Baht</b>
<b>Aggregate carrying amount of individually immaterial joint ventures</b>	1,572	1,455
<b>The Group's share of:</b>		
Profit from continuing operations	125	41
Other comprehensive income (expense)	(8)	26
Total comprehensive income	117	67

### 19.4 Dividend receivables from subsidiaries, associates and joint ventures

The movements of dividend receivables for the years ended 31 December can be analysed as follows:

	<b>Consolidated financial statements</b>	
	<b>2023</b>	<b>2022</b>
	<b>Million Baht</b>	<b>Million Baht</b>
<b>For the years ended 31 December</b>		
Opening balance	106	91
Dividends declared by associates and joint ventures	544	734
Dividends received from associates and joint ventures	(566)	(719)
Closing balance	84	106
	<b>Separate financial statements</b>	
	<b>2023</b>	<b>2022</b>
	<b>Million Baht</b>	<b>Million Baht</b>
<b>For the years ended 31 December</b>		
Opening balance	106	91
Dividends declared by subsidiaries, associates and joint ventures	1,667	3,464
Dividends received from subsidiaries, associates and joint ventures	(1,689)	(3,448)
Loss on exchange rate	-	(1)
Closing balance	84	106

## 20 Financial assets measured at fair value through other comprehensive income

Movements of financial assets measured at fair value through other comprehensive income for the years ended 31 December are as follows:

	<b>Consolidated financial statements</b>	
	<b>2023</b>	<b>2022</b>
	<b>Million Baht</b>	<b>Million Baht</b>
Opening book value	5,303	5,860
Share of other comprehensive income (expense)		
- Change in fair value through other comprehensive income (expense)	(549)	59
- Exchange difference on translation of the financial statements	-	(2)
Disposal of an investment	-	(614)
Closing book value	4,754	5,303
	<b>Separate financial statements</b>	
	<b>2023</b>	<b>2022</b>
	<b>Million Baht</b>	<b>Million Baht</b>
Opening book value	5,251	5,181
Change in fair value through other comprehensive income (expense)	(549)	70
Closing book value	4,702	5,251

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

The details of financial assets measured at fair value through other comprehensive income are as follows:

Consolidated financial statements									
Measured at fair value through other comprehensive income method									
Company		Business		Portion of shares held by the Group		Dividend income during the year		2022	
		2023 %	2022 %	2023 Million Baht	2022 Million Baht	2023 Million Baht	2022 Million Baht	2023 Million Baht	2022 Million Baht
<b>Other non-marketable equity securities</b>									
Ordinary shares									
- Ratchaburi Power Company Limited		15	15	742	955	225	186		
- San Palung Social Enterprise Company Limited		10	10	1	1	-	-		
- Eastern Fluid Transport Company Limited		15	15	52	52	3	6		
Preferred shares									
- Business Services Alliance Company Limited		25	25	- <sup>(1)</sup>	- <sup>(1)</sup>	- <sup>(1)</sup>	- <sup>(1)</sup>		
- 24M Technologies, Inc. <sup>(1)</sup>		13.59	14.17	3,959	4,295	-	-		
Total financial assets measured at fair value through other comprehensive income									
				4,754	5,303	228	192		

<sup>(1)</sup> 24M Technologies, Inc.

During the year ended 31 December 2023, the Company's shareholding interests in 24M Technologies, Inc. was decreased from 14.17% to 13.59% since 24M Technologies, Inc issued the additional shares capital and the Company waived its rights to subscribe to any additional shares in proportion to its respective shareholding.

<sup>(1)</sup> Amount less than Baht 1 million

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

The details of financial assets measured at fair value through other comprehensive income are as follows:

	Company	Business	Separate financial statements				
			Measured at fair value			Dividend income	
			Portion of shares held by the Company		through other comprehensive income method	during the year	
			2023 %	2022 %	2023 Million Baht	2022 Million Baht	2022 Million Baht
<b>Other non-marketable equity securities</b>							
Ordinary shares							
- Ratchaburi Power Company Limited		Generate and supply electricity	15	15	742	955	186
- San Palung Social Enterprise Company Limited		Social enterprise	10	10	1	1	-
Preferred shares							
- Business Services Alliance Company Limited		Human resource management	25	25	- <sup>(*)</sup>	- <sup>(*)</sup>	- <sup>(*)</sup>
- 24M Technologies, Inc. <sup>(1)</sup>		Research and development in battery	13.59	14.17	3,959	4,295	-
Total financial assets measured at fair value through other comprehensive income					4,702	5,251	186

<sup>(1)</sup> **24M Technologies, Inc.**

During the year ended 31 December 2023, the Company's shareholding interests in 24M Technologies, Inc. was decreased from 14.17% to 13.59% since 24M Technologies, Inc issued the additional shares capital and the Company waived its rights to subscribe to any additional shares in proportion to its respective shareholding.

<sup>(\*)</sup> Amount less than Baht 1 million

For the year ended 31 December 2023

## 21 Property, plant and equipment, net

Consolidated financial statements												
	Buildings and building improvements		Power plant, machinery and equipment		Furniture, fixtures and office equipment		Vehicles		Construction in progress		Total	
	Land	Buildings and building improvements	Power plant, machinery and equipment	Furniture, fixtures and office equipment	Vehicles	Construction in progress	Total					
	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
As at 1 January 2022												
Cost	1,844	2,916	161,198	555	56	5,776	172,345					
Less Accumulated depreciation	-	(893)	(74,216)	(442)	(38)	-	(75,589)					
Less Allowance for impairment	-	-	(62)	-	-	-	(62)					
Net book value	1,844	2,023	86,920	113	18	5,776	96,694					
For the year ended 31 December 2022												
Opening net book value	1,844	2,023	86,920	113	18	5,776	96,694					
Additions	-	10	365	33	3	4,832	5,243					
Disposals and write-off, net	-	(2)	-	-	-	-	(2)					
Transfer in (out)	-	165	4,532	33	3	(4,744)	(11)					
Disposal of business unit, net	-	(301)	(88)	(11)	-	(1,081)	(1,481)					
Decrease of provision for decommissioning expenses	-	-	(185)	-	-	-	(185)					
Depreciation	-	(110)	(6,083)	(39)	(5)	-	(6,237)					
Loss on impairment	-	-	(338)	-	-	-	(338)					
Exchange difference on translation	-	1	76	-	-	-	77					
Closing net book value	1,844	1,786	85,199	129	19	4,783	93,760					
As at 31 December 2022												
Cost	1,844	2,776	165,824	501	61	4,783	175,789					
Less Accumulated depreciation	-	(990)	(80,225)	(372)	(42)	-	(81,629)					
Less Allowance for impairment	-	-	(400)	-	-	-	(400)					
Net book value	1,844	1,786	85,199	129	19	4,783	93,760					

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

	Consolidated financial statements						
	Land Million Baht	Buildings and building improvements Million Baht	Power plant, machinery and equipment Million Baht	Furniture, fixtures and office equipment Million Baht	Vehicles Million Baht	Construction in progress Million Baht	Total Million Baht
<b>For the year ended 31 December 2023</b>							
Opening net book value	1,844	1,786	85,199	129	19	4,783	93,760
Additions	-	2	159	28	5	6,183	6,377
Disposals and write-off, net	-	- <sup>(*)</sup>	(133)	- <sup>(*)</sup>	-	-	(133)
Transfer in (out)	-	72	4,589	16	-	(4,703)	(26)
Reclassification	-	30	(30)	-	-	-	-
Reclassification to asset held for sale, net	-	-	(113)	-	-	-	(113)
Depreciation	-	(112)	(6,595)	(42)	(6)	-	(6,755)
Loss on impairment	-	-	(293)	-	-	(3)	(296)
Exchange difference on translation	-	-	(15)	-	-	-	(15)
Closing net book value	1,844	1,778	82,768	131	18	6,260	92,799
<b>As at 31 December 2023</b>							
Cost	1,844	2,880	165,427	540	66	6,263	177,019
Less Accumulated depreciation	-	(1,102)	(82,333)	(409)	(48)	-	(83,891)
Less Allowance for impairment	-	-	(326)	-	-	(3)	(329)
Net book value	1,844	1,778	82,768	131	18	6,260	92,799

<sup>(\*)</sup> Amount less than Baht 1 million



# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

	Separate financial statements						
	Land	Buildings	Power plant,	Furniture,			
	and building	and building	machinery and	fixtures			
	improvements	improvements	equipment	and office			
	equipment	equipment	equipment	equipment			
	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
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# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

		Separate financial statements						
		Buildings and building improvements		Power plant, machinery and equipment	Furniture, fixtures and office equipment	Vehicles	Construction in progress	Total
		Land	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
		Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
<b>For the year ended 31 December 2023</b>								
Opening net book value		581	699	13,952	71	12	282	15,597
Additions		-	1	47	17	3	254	322
Disposal and write-off, net		-	-	(5)	-( <sup>(*)</sup> )	-	-	(5)
Transfer in (out)		-	73	212	15	-	(300)	-
Reclassification		-	30	(30)	-	-	-	-
Depreciation		-	(55)	(1,402)	(23)	(3)	-	(1,483)
Closing net book value		581	748	12,774	80	12	236	14,431
<b>As at 31 December 2023</b>								
Cost		581	1,234	28,606	233	21	236	30,911
Less: Accumulated depreciation		-	(486)	(15,832)	(153)	(9)	-	(16,480)
Net book value		581	748	12,774	80	12	236	14,431

(<sup>(\*)</sup>) Amount less than Baht 1 million

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

During the year ended 31 December 2023, the Group recognised a Baht 276 million impairment loss for the power plant's discontinued machine in the consolidated statements of comprehensive income. Management determined the recoverable amount using value in use and net selling price (31 December 2022: 338 million impairment loss for the power plant's discontinued machine. Management determined the recoverable amount using net selling price).

### Security

As at 31 December 2023, the Group's property, plant and equipment with a net book value of Baht 36,775 million were mortgaged and pledged as collateral for the long-term loans, as described in Note 29. During the year 2023, an indirect subsidiary had fully repaid its long-term loan to a financial institution. Currently, the indirect subsidiary is in the process of withdrawing the collateral of its power plant, machinery and equipment which are mortgaged and pledged under the loan agreement. (as at 31 December 2022: Baht 36,768 million).

### Borrowing costs

The Group capitalised borrowing costs of Baht 76 million (2022: Baht 73 million) which arose from financing for the construction of new power plants. The capitalisation rates were from 2.51% to 4.84% per annum (2022: capitalisation rates from 2.42% to 4.80% per annum).

## 22 Right-of-use assets, net

	Consolidated financial statements				
	Land Million Baht	Office Space Million Baht	Machinery Million Baht	Vehicles Million Baht	Total Million Baht
Balance as at 1 January 2022	2,388	39	4	85	2,516
Additions	38	23	-	19	80
Lease termination	(96)	-	-	(2)	(98)
Lease modification	(98)	-	-	-	(98)
Depreciation	(133)	(12)	(1)	(34)	(180)
Balance as at 31 December 2022	2,099	50	3	68	2,220
Balance as at 1 January 2023	2,099	50	3	68	2,220
Additions	48	8	-	48	104
Lease termination	-	-	-	(2)	(2)
Lease modification	-	31	-	-	31
Depreciation	(125)	(14)	(1)	(34)	(174)
Balance as at 31 December 2023	2,022	75	2	80	2,179

	Separate financial statements			
	Land Million Baht	Office Space Million Baht	Vehicles Million Baht	Total Million Baht
Balance as at 1 January 2022	438	31	71	540
Additions	1	24	15	40
Lease termination	(96)	-	(2)	(98)
Lease modification	(38)	-	-	(38)
Depreciation	(39)	(12)	(31)	(82)
Balance as at 31 December 2022	266	43	53	362
Balance as at 1 January 2023	266	43	53	362
Additions	30	8	45	83
Lease termination	-	-	(2)	(2)
Lease modification	-	31	-	31
Depreciation	(32)	(13)	(29)	(74)
Balance as at 31 December 2023	264	69	67	400

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

Expenses relating to leases that are not included in the measurement of lease liabilities and right-of-use are as follows:

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2023 Million Baht	2022 Million Baht	2023 Million Baht	2022 Million Baht
Expense relating to short-term leases	45	25	18	14
Expense relating to leases of low-value assets	33	27	26	25
Total cash outflow for leases	180	186	61	66

### 23 Intangible assets, net

	Consolidated financial statements			
	Right to power purchase agreement/ to operate Million Baht	Computer software Million Baht	Right to use of assets Million Baht	Total Million Baht
<b>At 1 January 2022</b>				
Cost	44,480	567	3,800	48,847
Less Accumulated amortisation	(5,293)	(359)	(1,669)	(7,321)
Net book value	39,187	208	2,131	41,526
<b>For the year ended 31 December 2022</b>				
Opening net book value	39,187	208	2,131	41,526
Additions	-	361	-	361
Transfer in	-	11	-	11
Disposals of business unit, net	-	(7)	-	(7)
Amortisation	(1,893)	(45)	(177)	(2,115)
Closing net book value	37,294	528	1,954	39,776
<b>At 31 December 2022</b>				
Cost	44,480	931	3,800	49,211
Less Accumulated amortisation	(7,186)	(403)	(1,846)	(9,435)
Net book value	37,294	528	1,954	39,776
<b>For the year ended 31 December 2023</b>				
Opening net book value	37,294	528	1,954	39,776
Additions	-	438	-	438
Transfer in	-	29	-	29
Amortisation	(1,893)	(107)	(164)	(2,164)
Closing net book value	35,401	888	1,790	38,079
<b>At 31 December 2023</b>				
Cost	44,480	1,398	3,800	49,678
Less Accumulated amortisation	(9,079)	(510)	(2,010)	(11,599)
Net book value	35,401	888	1,790	38,079

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

	Separate financial statements			
	Right to power purchase agreement/ to operate Million Baht	Computer software Million Baht	Right to use of assets Million Baht	Total Million Baht
<b>At 1 January 2022</b>				
Cost	-	328	338	666
<u>Less</u> Accumulated amortisation	-	(136)	(253)	(389)
Net book value	-	192	85	277
<b>For the year ended 31 December 2022</b>				
Opening net book value	-	192	85	277
Additions	-	359	-	359
Transfer in	-	3	-	3
Disposals of business unit, net	-	(7)	-	(7)
Amortisation	-	(40)	(25)	(65)
Closing net book value	-	507	60	567
<b>At 31 December 2022</b>				
Cost	-	682	338	1,020
<u>Less</u> Accumulated amortisation	-	(175)	(278)	(453)
Net book value	-	507	60	567
<b>For the year ended 31 December 2023</b>				
Opening net book value	-	507	60	567
Additions	-	435	-	435
Transfer in	-	7	-	7
Amortisation	-	(103)	(20)	(123)
Closing net book value	-	846	40	886
<b>At 31 December 2023</b>				
Cost	-	1,124	338	1,462
<u>Less</u> Accumulated amortisation	-	(278)	(298)	(576)
Net book value	-	846	40	886

The Group's right-to-use assets consisted of the right to use the grid system, the right of power plant operation, the right to use the transmission line, right to use the gas pipeline, right of way, right to use the pipe rack and right to use the dedicated berth.



# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 24 Goodwill

	Consolidated financial statements	
	2023 Million Baht	2022 Million Baht
<b>As at 1 January</b>		
Cost	36,090	36,090
<u>Less</u> Provision for impairment	-	-
Net book value	36,090	36,090
<b>As at 31 December</b>		
Cost	36,090	36,090
<u>Less</u> Provision for impairment	-	-
Net book value	36,090	36,090

Goodwill of Baht 36,090 million arose from the acquisition of the small power producer segment of Glow Energy Public Company Limited (GLOW), a company that produces and distributes electricity, steam and water for industrial use in Thailand.

Goodwill arising from the small power producer segment is tested annually for impairment by comparing the carrying amount to the recoverable amount, based on value-in-use. The value-in-use was calculated by using a cash flow projection, approved by the management, covering the remaining periods of the power purchase agreements (PPAs) and estimates for electricity tariffs and the power plant's capacity as specified in the PPAs. The inflation rate of 1.79% per annum and discount rates of 6.39% per annum were applied (as at 31 December 2022: inflation rate of 1.76% per annum and discount rates of 6.22% per annum). Based on the value-in-use, the recoverable amount was greater than the carrying amount. Even if the discount rate increased by 1% per annum, the recoverable amount is still not lower than the carrying amount.

### 25 Trade payables

	Note	Consolidated financial statements		Separate financial statements	
		2023 Million Baht	2022 Million Baht	2023 Million Baht	2022 Million Baht
<b>As at 31 December</b>					
Trade payables - related parties	40.7	5,409	8,293	1,289	4,864
Trade payables - third parties		1,651	2,594	238	75
Total trade payables		7,060	10,887	1,527	4,939

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 26 Other payables

As at 31 December	Note	Consolidated financial statements		Separate financial statements	
		2023 Million Baht	2022 Million Baht	2023 Million Baht	2022 Million Baht
Other payables - related parties	40.7	277	399	268	542
Other payables - third parties		556	625	279	387
Advances received		159	81	56	57
Interest payables		506	467	284	263
Accrued expenses		784	811	161	138
Total other payables		2,282	2,383	1,048	1,387

### 27 Short-term loans from financial institutions

As at 31 December	Consolidated financial statements	
	2023 Million Baht	2022 Million Baht
Trust receipt payable	81	2,171
Promissory note	30	1,200
Total short-term loans from financial institutions	111	3,371

As at 31 December 2023, Short-term loans from financial institutions of the Group bear interest at the rates at 3.80% to 3.87% per annum (As at 31 December 2022: 1.85% to 3.89% per annum).

### 28 Other current liabilities

As at 31 December 2023, other current liabilities of the Group consisted of income tax payable and undue value added tax amounting to Baht 832 million and Baht 705 million, respectively. (2022: income tax payable, undue value added tax, and short-term provision totalling Baht 305 million, Baht 1,424 million and Baht 256 million, respectively).

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 29 Long-term loans from financial institutions, net

#### 29.1 The long-term loans from financial institutions are as follows:

As at 31 December	Consolidated financial statements		Separate financial statements	
	2023 Million Baht	2022 Million Baht	2023 Million Baht	2022 Million Baht
Long-term Thai Baht loans	49,021	46,529	7,190	10,930
<u>Add</u> Fair value adjustment from business acquisition - net	-	110	-	-
Total long-term Thai Baht loans	49,021	46,639	7,190	10,930
Long-term US Dollar loans	6,362	11,538	-	-
<u>Less</u> Deferred financing fees	(241)	(212)	(6)	(10)
	55,142	57,965	7,184	10,920
<u>Less</u> Current portion of long-term loans from financial institutions	(4,361)	(11,458)	(739)	(3,738)
Total long-term loans from financial institutions, net	50,781	46,507	6,445	7,182

#### Long-term loans from financial institutions of the Company

Details of long-term loans from financial institutions of the Company which are all Thai Baht loans and unsecured are as follows:

Number	Outstanding balance As at 31 December 2023 (Million Baht)	Outstanding balance As at 31 December 2022 (Million Baht)	Interest rate	Principal repayment term	Interest payment period
1	3,900	4,500	Fixed interest rate	Repayment every six months from September 2020	Payment every six months
2	-	3,000	Fixed interest rate	Repayment on July 2023	Payment every six months
3	3,290	3,430	THOR one-month plus a certain margin per annum	Repayment every six months from September 2022	Payment every month
Total	7,190	10,930			

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### Long-term loans from financial institutions of subsidiaries

Details of long-term loans from financial institutions of subsidiaries which are guaranteed by the Company and a subsidiary are as follows:

#### Thai Baht loans

Number	Outstanding balance As at 31 December 2023 (Million Baht)	Outstanding balance As at 31 December 2022 (Million Baht)	Interest rate	Principal repayment term	Interest payment period
1	2,848	3,403	FDR six-month plus a certain margin per annum	Repayment every six months from June 2018	Payment every six months
2	88	99	Fixed interest rate	Repayment every six months from June 2017	Payment every six months
3	_(a)	2,813	THBFIX plus a certain margin per annum	Repayment every six months from October 2012	Payment every three months
4	532	649	BIBOR three-month plus a certain margin per annum	Repayment every six months from May 2021	Payment every three months
5	225	290	BIBOR three-month plus a certain margin per annum	Repayment every six months from June 2021	Payment every three months
6	2,398	2,713	THOR one-month plus certain margin per annum	Repayment every six months from October 2021	Payment every month
7	4,589	5,294	THOR one-month plus certain margin per annum	Repayment every six months from February 2022	Payment every month
8	1,500	1,500	THBFIX six-month plus a certain margin per annum	Repayment every six months from January 2024	Payment every six months
9	3,000	3,000	BIBOR six-month plus a certain margin per annum	Repayment every six months from February 2024	Payment every six months
10	6,110	6,370	THOR one-month plus a certain margin per annum	Repayment every six months from September 2022	Payment every months
11	3,000	3,000	Fixed interest rate per annum	Payment in January 2025	Payment every six months
12	-	4,000	Fixed interest rate per annum	Payment in May 2023	Payment every six months
13	949	1,134	THOR plus a certain margin per annum	Repayment every six months from September 2022	Payment every months

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

Number	Outstanding balance As at 31 December 2023 (Million Baht)	Outstanding balance As at 31 December 2022 (Million Baht)	Interest rate	Principal repayment term	Interest payment period
14	1,090	400	THOR plus a certain margin per annum	Repayment every six months from thirty months after the first drawdown date	Payment every month
15	2,000	700	THOR plus a certain margin per annum	Repayment every six months from thirty-six months after the first drawdown date	Payment every six months
16	279	233	Fixed interest rate per annum	Repayment every three months after the first drawdown date	Payment every three months
17	2,000	-	BIBOR three-month plus a certain margin per annum	Repayment on March 2026	Payment every three months
18	2,000	-	FDR six-month plus a certain margin per annum	Repayment every six months from thirty months after the first drawdown date	Payment every six months
19	6,844 <sup>(a)</sup>	-	MLR less a certain margin per annum	Repayment every six months from April 2024	Payment every three months
20	144 <sup>(a)</sup>	-	MLR less a certain margin per annum	Repayment every six months from October 2023	Payment every three months
21	1,304 <sup>(a)</sup>	-	THOR three-month plus a certain margin per annum	Repayment every six months from October 2023	Payment every three months
22	932 <sup>(a)</sup>	-	THOR three-month plus a certain margin per annum	Repayment every six months from October 2023	Payment every three months
Total	41,832	35,598			

- <sup>(a)</sup> On 12 April 2023, an indirect subsidiary entered into a loan agreement with three financial institutions for loan facilities of Baht 11,500 million which consist of long-term loan facilities of Baht 9,400 million and short-term loan facilities of Baht 2,100 million. On 28 April 2023, the indirect subsidiary drew down the loan amounting to Baht 9,400 million for early repayment of the existing US Dollar loans amounting to US Dollar 137 million or equivalent to Baht 4,695 million and Thai Baht loans amounting to Baht 2,813 million and to use for working capital and liquidity management of the indirect subsidiary.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### US Dollar loans

Number	Outstanding balance As at 31 December 2023 (Million US Dollar)	Outstanding balance As at 31 December 2022 (Million US Dollar)	Interest rate	Principal repayment term	Interest payment period
1	-	137	USD-LIBOR plus a certain margin per annum	Repayment every six months from October 2012	Payment every three months
2	-	10	USD-LIBOR plus a certain margin per annum	Repayment every six months from June 2015	Payment every six months
3	185	185	SOFR plus a certain margin per annum	Repayment every twelve months after thirty-six months from the first drawdown date	Payment every six months
Total	185	332			

The Group has entered into long-term loan facility agreements and has not been drawn down with a financial institution as at 31 December as follows:

Number	Facility 2023 (Million Baht)	Facility 2022 (Million Baht)	Interest rate	Principal repayment term	Interest payment period
1	5,000	-	THOR plus a certain margin per annum	Repayment every six months from March 2025	Payment every three months
2	2,000	-	THOR plus a certain margin per annum	Repayment every six months from August 2026	Payment every six months
3	-	2,000	BIBOR three-month plus a certain margin per annum	Repayment on March 2026	Payment every three months
4	-	2,000	FDR six-month plus a certain margin per annum	Repayment every six months from thirty months after the first drawdown date	Payment every six months
Total	7,000	4,000			

As at 31 December 2023, the Company had the loan guarantee facility amounting to Baht 24,353 million and US Dollar 185 million. Another subsidiary had the guarantee facility for loans of such subsidiary totalling Baht 3,000 million. (as at 31 December 2022 the Company has the guarantee facility for loans of a subsidiary totalling Baht 25,816 million and US Dollar 185 million. An another subsidiary had the guarantee facility for loans of such subsidiary totalling Baht 7,000 million.). During the year ended 31 December 2023, an indirect subsidiary had fully repaid its US Dollar long-term loan from a financial institution amounting to US Dollar 10 million. Currently, the indirect subsidiary is in the process of withdrawing the collaterals which are mortgaged and pledged under the loan agreement.

According to the aforementioned loan agreements, the Group must comply with certain financial requirements such as the timing of future capital increases, dividend payments, reduction of share capital, merger and acquisition and maintaining financial ratios e.g. debt to equity ratio, debt service coverage ratio and maintaining coal stockpile.



# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 29.2 The movement of long-term loans from financial institutions can be analysed as follows:

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Opening net book value	57,965	57,262	10,920	11,588
<b>Cash flows</b>				
Cash received during the year	15,451	8,271	-	-
Cash repayments during the year	(18,011)	(7,124)	(3,740)	(670)
Deferred financing fee	(128)	(82)	-	-
<b>Other non-cash movement</b>				
Amortisation of fair value from business acquisition	(110)	(25)	-	-
Amortisation of deferred financing fee	100	35	4	2
Unrealised exchange gain	(128)	(401)	-	-
Exchange difference on translation of the financial statements	3	29	-	-
Closing book value	55,142	57,965	7,184	10,920

### 29.3 Maturity of long-term loans from financial institutions are as follows:

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Within 1 year	4,362	11,458	739	3,738
Later than 1 year but not later than 5 years	30,497	25,375	3,656	3,375
Later than 5 years	20,283	21,132	2,789	3,807
Total long-term loans from financial institution, net	55,142	57,965	7,184	10,920

## 30 Debentures, net

As at 31 December	Consolidated and Separate financial statements	
	2023	2022
	Million Baht	Million Baht
Debentures in Thai Baht	54,500	51,500
<u>Less</u> Deferred financing fee	(47)	(50)
	54,453	51,450
<u>Less</u> Current portion of debentures	(6,498)	-
Total debentures, net	47,955	51,450

### Debentures of the Company

On 4 April 2023, the Company issued unsubordinated and unsecured debentures of Baht 3,000 million. The detail of debenture is as follows:

Number	Amount (Million Baht)	Interest rate	Tenor	Interest payment term
1	3,000	3.78% per annum	12 years	Payment in April and October
Total	3,000			

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

As at 31 December 2023, the Company's debentures of Baht 54,453 million are unsubordinated and unsecured debentures. The Company is required to comply with certain terms and conditions such as maintaining the net debt to equity ratio and which the bearing interest rate at 2.11% to 4.40% per annum (as at 31 December 2022: Baht 51,450 million and bearing interest rate at 2.11% to 4.40% per annum).

Maturities of the debentures are as follows:

	<b>Consolidated and Separate financial statements</b>	
	<b>2023</b>	<b>2022</b>
	<b>Million Baht</b>	<b>Million Baht</b>
Within 1 year	6,498	-
Later than 1 year but not later than 5 years	11,492	17,987
Later than 5 years	36,463	33,463
<b>Total debentures, net</b>	<b>54,453</b>	<b>51,450</b>

The debentures' movement can be analysed as follows:

	<b>Consolidated financial statements</b>		<b>Separate financial statements</b>	
	<b>2023</b>	<b>2022</b>	<b>2023</b>	<b>2022</b>
<b>For the years ended 31 December</b>	<b>Million Baht</b>	<b>Million Baht</b>	<b>Million Baht</b>	<b>Million Baht</b>
Opening net book value	51,450	44,370	51,450	41,456
<b>Cash flows</b>				
Cash received during the year	3,000	12,000	3,000	12,000
Cash repayment during the year	-	(5,000)	-	(2,000)
Deferred front-end fee	(3)	(14)	(3)	(14)
<b>Other non-cash movement</b>				
Fair value adjustments from business acquisition	-	84	-	-
Amortisation of deferred financing fee	6	10	6	8
<b>Closing net book value</b>	<b>54,453</b>	<b>51,450</b>	<b>54,453</b>	<b>51,450</b>

### 31 Other non-current liabilities

	<b>Consolidated financial statements</b>		<b>Separate financial statements</b>	
	<b>2023</b>	<b>2022</b>	<b>2023</b>	<b>2022</b>
	<b>Million Baht</b>	<b>Million Baht</b>	<b>Million Baht</b>	<b>Million Baht</b>
Contract liabilities <sup>(1)</sup>	14,731	14,639	448	487
Others	778	511	162	160
<b>Total other non-current liabilities</b>	<b>15,509</b>	<b>15,150</b>	<b>610</b>	<b>647</b>

<sup>(1)</sup> These are advance receipts of availability payments in relation to the availabilities of a subsidiary's power plant, as agreed with EGAT and in accordance with the terms of PPA.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 32 Deferred income taxes, net

The analysis of deferred tax assets and deferred tax liabilities is as follows:

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Deferred tax assets	5,130	4,818	350	426
Deferred tax liabilities	(9,973)	(10,474)	(626)	(917)
<b>Total deferred income taxes, net</b>	<b>(4,843)</b>	<b>(5,656)</b>	<b>(276)</b>	<b>(491)</b>

The movements of the deferred income tax account are as follows:

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
<b>As at 1 January</b>	(5,656)	(6,713)	(491)	(552)
(Charged) /credited to profit or loss	769	1,090	149	76
(Charged) /credited to other comprehensive income (expense)	44	(33)	66	(15)
<b>As at 31 December</b>	<b>(4,843)</b>	<b>(5,656)</b>	<b>(276)</b>	<b>(491)</b>

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

The movements of deferred tax assets and liabilities are as follows:

	Consolidated financial statements									
	Property, plant and equipment Million Baht	Provision for employee benefits Million Baht	Investment expenses Million Baht	Provisions Million Baht	Deferred Income Million Baht	Finance lease receivable Million Baht	Derivative contracts Million Baht	Lease liabilities Million Baht	Loss carried forward Million Baht	Total Million Baht
<b>Deferred tax assets</b>										
As at 1 January 2023	604	119	72	287	2,765	342	44	50	535	4,818
Charged /(credited) to profit or loss	(70)	6	4	62	35	6	(8)	7	336	378
Charged /(credited) to other comprehensive income (expense)	-	(55)	-	-	-	-	(11)	-	-	(66)
As at 31 December 2023	534	70	76	349	2,800	348	25	57	871	5,130
<b>As at 1 January 2022</b>	693	109	91	258	2,727	328	102	38	1	4,347
Charged /(credited) to profit or loss	(89)	10	(19)	29	38	14	-	12	534	529
Charged /(credited) to other comprehensive income (expense)	-	-	-	-	-	-	(58)	-	-	(58)
As at 31 December 2022	604	119	72	287	2,765	342	44	50	535	4,818

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

	Consolidated financial statements						
	Financial assets measured at fair value through other comprehensive income						
	Finance lease receivable	Property, plant and equipment	Fair value from business acquisition	Deferred expense	Derivative contracts	Others	Total
	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
<b>Deferred tax liabilities</b>							
As at 1 January 2023	(561)	(1,643)	(7,876)	(61)	(1)	-	(10,474)
(Charged) / credited to profit or loss	177	29	332	9	-	(156)	391
(Charged) / credited to other comprehensive income (expense)	-	-	-	-	-	-	110
As at 31 December 2023	(384)	(1,614)	(7,544)	(52)	(1)	(156)	(9,973)
As at 1 January 2022	(729)	(1,670)	(8,216)	(87)	(23)	-	(11,060)
(Charged) / credited to profit or loss	168	27	340	26	-	-	561
(Charged) / credited to other comprehensive income (expense)	-	-	-	-	22	-	25
As at 31 December 2022	(561)	(1,643)	(7,876)	(61)	(1)	-	(10,474)

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

	Separate financial statements						
	Property, plant and equipment	Provisions for employee benefits	Investment expenses	Lease liabilities	Provisions	Loss carried forward	Total
	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
<b>Deferred tax assets</b>							
As at 1 January 2023	244	71	70	10	31	-	426
Charged/(credited) to profit or loss	(83)	7	4	1	1	38	(32)
Charged/(credited) to other comprehensive income (expense)	-	(44)	-	-	-	-	(44)
As at 31 December 2023	161	34	74	11	32	38	350
<b>As at 1 January 2022</b>	337	65	91	8	31	-	532
Charged/(credited) to profit or loss	(93)	6	(21)	2	-	-	(106)
As at 31 December 2022	244	71	70	10	31	-	426



# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

	Separate financial statements				
	Finance lease receivable Million Baht	Property, plant and equipment Million Baht	Financial assets measured at fair value through other comprehensive income Million Baht	Deferred expense Million Baht	Total Million Baht
<b>Deferred tax liabilities</b>					
As at 1 January 2023	(561)	(28)	(321)	(7)	(917)
(Charged) /credited to profit or loss	177	13	-	(9)	181
(Charged) /credited to other comprehensive income (expense)	-	-	110	-	110
As at 31 December 2023	(384)	(15)	(211)	(16)	(626)
As at 1 January 2022	(729)	(42)	(306)	(7)	(1,084)
(Charged) /credited to profit or loss	168	14	-	-	182
(Charged) /credited to other comprehensive income (expense)	-	-	(15)	-	(15)
As at 31 December 2022	(561)	(28)	(321)	(7)	(917)

Deferred tax assets are recognised for tax loss and carried forward only to the extent that realisation of the related tax benefit through future taxable profits is probable. The Group did not recognise the deferred tax asset of Baht 90 million (2022: Baht 3 million) from losses of Baht 448 million (2022: Baht 16 million) that can be carried forward against future taxable income. Losses of Baht 8 million will be expired in 2026 (2022: losses of Baht 8 million will be expired in 2026).

### 33 Legal reserve

	Consolidated and Separate financial statements	
	2023 Million Baht	2022 Million Baht
Opening book value	2,268	2,088
Appropriation during the year	40	180
Closing book value	2,308	2,268

Under the Public Companies Act BE 2535, the Company must set aside as a legal reserve at least 5% of its net profit after accumulated deficit brought forward (if any) until the reserve is not less than 10% of the registered capital. The legal reserve is non-distributable.

### 34 Other income

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2023 Million Baht	2022 Million Baht	2023 Million Baht	2022 Million Baht
Gain on disposal the investments	-	789	-	897
Gain on disposal a business unit	-	388	-	388
Income from insurance claim	852	586	214	14
Interest income	615	281	197	160
Others	299	495	185	171
<b>Total other income</b>	<b>1,766</b>	<b>2,539</b>	<b>596</b>	<b>1,630</b>

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 35 Expense by nature

The following expenditure items have been charged in arriving at net profit:

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Fuel cost and expenses for supplies used	64,880	105,035	19,356	37,366
Manufacturing overhead	2,058	1,387	185	243
Depreciation and amortisation expenses	9,309	9,112	1,718	1,588
Employee benefit expenses and salary for outsourcing	3,362	3,280	2,335	2,004
Repair and maintenance expenses	2,023	2,349	650	666
Loss from impairment of assets	327	388	-	-

### 36 Finance costs

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Interest expenses	4,375	3,285	2,708	2,208
Amortised deferred finance costs	111	48	12	12
Other finance costs	811	966	13	18
Total finance costs	5,297	4,299	2,733	2,238

### 37 Income tax

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Current tax:				
Current tax on profits for the year	1,275	714	117	81
<b>Total current tax</b>	1,275	714	117	81
Deferred tax:				
Decrease (increase) in deferred tax assets (Note 32)	(378)	(529)	32	106
Increase (decrease) in deferred tax liabilities (Note 32)	(391)	(561)	(181)	(182)
<b>Total deferred tax</b>	(769)	(1,090)	(149)	(76)
<b>Income tax expense (benefit)</b>	506	(376)	(32)	5

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

The tax on the Group's profit before tax differs from the theoretical amount that would arise using the basic tax rate of the Parent's home country as follows:

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2023 Million Baht	2022 Million Baht	2023 Million Baht	2022 Million Baht
Profit before tax	5,316	1,081	759	3,607
Tax rate	20%	20%	20%	20%
Result of accounting profit multiplied by the income tax rate	1,063	216	152	721
Tax effect of:				
Expenses not deductible for tax purposes	223	157	51	41
Revenues that are granted income tax exemption or expenses that are deductible at a greater amount	(782)	(350)	(434)	(774)
Tax losses for the year for which no deferred income tax asset was recognised	86	2	82	-
Share of profit of investments accounted for using the equity method	(202)	(308)	-	-
Adjustment in respect of the prior year	(14)	(31)	117	17
Difference on tax rate in which country the Group operates	(20)	(62)	-	-
Recognition of deferred tax from previously unrecognised temporary difference	152	-	-	-
Income tax	506	(376)	(32)	5

The weighted average applicable tax rate for the Group and the Company were 9.52% and 4.22%, respectively (2022: 34.78% and 0.14%, respectively).

The tax charged /(credited) relating to component of other comprehensive income (expense) are as follows:

For the years ended 31 December	Consolidated financial statements					
	2023			2022		
	Before tax Million Baht	Tax charge (credit) Million Baht	After tax Million Baht	Before tax Million Baht	Tax charge (credit) Million Baht	After tax Million Baht
Gain from remeasurement of employee benefits obligation	(262)	55	(207)	-	-	-
Cash flow hedges	(14)	6	(7)	(562)	41	(521)
Costs of hedging	(22)	5	(17)	28	(6)	22
Loss (Gain) from remeasurement of equity investments at fair value through other comprehensive income	549	(110)	439	(59)	12	(47)
For the years ended 31 December	Separate financial statements					
	2023			2022		
	Before tax Million Baht	Tax charge (credit) Million Baht	After tax Million Baht	Before tax Million Baht	Tax charge (credit) Million Baht	After tax Million Baht
Gain from remeasurement of employee benefits obligation	(220)	44	(176)	-	-	-
Loss (Gain) from remeasurement of equity investments at fair value through other comprehensive income	549	(110)	439	(70)	14	(56)

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 38 Earnings per share

Basic earnings per share is calculated by dividing the net profit attributable to the Company's shareholders by the weighted average number of ordinary shares.

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Net profit attributable to the Company's ordinary shareholders (million Baht)	3,694	891	791	3,602
Weighted average number of ordinary shares outstanding (million shares)	2,819	2,819	2,819	2,819
Basic earnings per share (Baht per share)	1.31	0.32	0.28	1.28

The Group has no potential dilutive ordinary shares in issue during the year presented. Therefore, diluted earnings per share are not presented.

### 39 Dividends

At the Annual General Meeting of Shareholders of the Company held on 31 March 2023, the shareholders approved to distribute an annual dividend for the year 2022 at Baht 0.50, totalling Baht 1,410 million. The dividend consists of interim dividends at Baht 0.20 which were paid to the Company's shareholders in September 2022. Therefore, remaining dividends at Baht 0.30, totalling Baht 846 million, were already paid on 19 April 2023.

At the Company's Board of Directors' meeting held on 22 August 2023, the Board of Directors approved to distribute an interim dividend for the first half performance of 2023 at Baht 0.30 per share, totalling Baht 846 million. These dividends were paid to the shareholders on 20 September 2023.

### 40 Related party transactions

Major shareholders during the year are PTT Public Company Limited (holding 47.27% of shares), Thai Oil Power Company Limited (holding 10.00% of shares) and PTT Global Chemical Public Company Limited (holding 10.00% of shares). All three companies are incorporated in Thailand and PTT Public Company Limited is the ultimate parent company.

The information of the Company's subsidiaries, associates and joint ventures are disclosed in Note 19.

The pricing policies for particular types of transactions are explained further below:

Transactions	Pricing policies
Sale of goods	Contract price
Rendering of service	Contract price
Purchase of goods and raw materials	Contract price based on market
Rental fees	Contract price
Service fees	Contract price
Technical fees	Contract price
Interest income and interest expenses	Contract rate

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

The following material transactions were carried out with related parties:

### 40.1 Business transactions

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
The ultimate parent company				
- Revenue from sales	486	683	4	3
- Revenue from services	15	-	-	-
- Other income	1	1	-	-
- Cost of sales	50,184	60,586	15,328	19,492
- Administrative expenses	69	112	69	106
- Interest expenses	2	3	-	-
Shareholders				
- Revenue from sales	15,194	10,571	11,313	7,035
- Revenue from services	1	1	1	1
- Other income	10	9	7	6
- Cost of sales	2,558	16,614	2,515	16,214
- Administrative expenses	2	-	2	-
- Interest expenses	2	3	1	3
- Cost of property, plant and equipment and intangible assets	1	-	-	-
Subsidiaries				
- Revenue from sales	-	-	296	195
- Revenue from services	-	-	883	780
- Interest income	-	-	83	71
- Other income	-	-	86	64
- Dividend income	-	-	1,253	2,899
- Cost of sales	-	-	578	762
- Administrative expenses	-	-	17	25
- Interest expenses	-	-	365	266
- Cost of property, plant and equipment and intangible assets	-	-	2	10
Associates				
- Revenue from services	8	5	7	5
- Interest income	16	18	16	18
- Other income	36	447	36	572
- Dividend income	-	-	-	74
- Cost of sales	1	-	-	-
- Administrative expenses	-	1	-	1
- Cost of property, plant and equipment and intangible assets	1	-	1	-

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Joint ventures				
- Revenue from services	1	1	1	1
- Interest income	10	6	10	6
- Other income	5	5	5	5
- Dividend income	-	-	414	492
- Administrative expenses	1	1	1	1
Indirect associates				
- Revenue from services	10	28	9	9
- Interest income	384	159	-	-
- Cost of sales	6	1	1	-
- Administrative expenses	-	1	-	1
- Cost of property, plant and equipment and intangible assets	-	-	1	-
Other related parties				
- Revenue from sales	13,279	19,065	3,194	10,041
- Revenue from services	473	223	-	-
- Other income	38	22	20	16
- Dividend income	225	192	225	186
- Cost of sales	997	7,489	461	507
- Administrative expenses	217	140	176	128
- Interest expenses	427	267	427	267
- Cost of property, plant and equipment and intangible assets	60	39	58	39

### 40.2 Trade receivables and other receivables from related parties

As at 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Trade receivables				
- The ultimate parent company	35	38	1	-
- Shareholders	2,432	939	1,808	640
- Subsidiaries	-	-	342	145
- Joint venture	1	1	1	1
- Associate	5	2	4	1
- Indirect associates	3	3	2	3
- Other related parties	1,340	2,141	248	983
Total trade receivables	3,816	3,124	2,406	1,773
Other receivables				
- The ultimate parent company	2	2	1	1
- Shareholders	17	1	-	1
- Subsidiaries	-	-	31	15
- Joint ventures	3	2	4	2
- Associates	18	22	18	22
- Indirect associate	2	1	-	-
- Other related parties	140	36	135	35
Total other receivables	182	64	189	76



# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 40.3 Dividend receivables from related parties

As at 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Dividend receivables				
- Joint venture	84	106	84	106
Total dividend receivables	84	106	84	106

### 40.4 Short-term loan to a related party

As at 31 December	Separate financial statements	
	2023	2022
	Million Baht	Million Baht
Short-term loan to a related party		
- Indirect subsidiaries	-	1,000
	-	1,000

Movements of short-term loans to related parties can be analysed as follows:

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Opening balance	-	968	1,000	968
<u>Cashflows</u>				
Cash paid for short-term loan	-	602	-	1,602
Cash received from repayment	-	(1,570)	(1,000)	(1,570)
Ending balance	-	-	-	1,000

On 20 December 2023, the Company made a short-term loan agreement, providing Baht 500 million facility bearing interest rate at MMR and maturing 1 year after the signing date to the ultimate parent company using for working capital and liquidity management. As at 31 December 2023, the loan has not been drawn down. (as at 31 December 2022: Baht 500 million).

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 40.5 Long-term loans to related parties and related interests

As at 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Long-term loans to related parties				
- Subsidiaries				
- Due within 1 year	-	-	433	48
- Due over 1 year	-	-	1,610	1,967
- Interest receivable	-	-	121	55
- Joint venture				
- Due over 1 year	99	100	99	100
- Interest receivable	26	17	26	17
- Associate				
- Due within 1 year	92	92	92	92
- Due over 1 year	401	493	401	493
- Indirect associates				
- Due over 1 year	4,515	2,988	-	-
- Interest receivable	1,181	862	670	709
	6,314	4,552	3,452	3,481

Movements of long-term loans to related parties can be analysed as follows:

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Opening balance	3,673	3,433	2,700	3,292
<u>Cashflows</u>				
Cash paid for long-term loans	1,915	1,089	422	198
Cash received from repayments	(436)	(797)	(484)	(794)
<u>Other non-cash movement</u>				
Unrealised gain (loss) on exchange rate	(20)	(6)	(3)	4
Exchange difference on translation of financial statements	(25)	(46)	-	-
Ending balance	5,107	3,673	2,635	2,700

#### Long-term loans to related parties agreements

##### Combined Heat and Power Producing Company Limited

The loan agreement for a Baht 314 million credit facility, dated 24 June 2014, It is due in 10 years and has an interest rate at MLR minus discount per annum, payable in every six months commencing in December 2014. The purpose of this loan is to provide working capital. As at 31 December 2023, the outstanding loan balance is Baht 12 million (at 31 December 2022: Baht 60 million).

##### Xayaburi Power Company Limited

The loan agreement for a Baht 2,463 million credit facility, dated 2 August 2016, is under a condition of Sponsor Agreement between Xayaburi Power Company Limited and the company, which is one of the sponsors. The loan is due in 15 years and has an interest rate per annum at MLR plus margin, payable in semi-annual installments commencing in 2021 with a repayment rate of 5.6% to 14.0% per year of the total loan, as indicated in the agreement. Loan repayments must comply with the terms and conditions under the loan agreement with the financial institution before repayment can be made to the Company. The purpose of this loan is to support a construction project. On 30 November 2021, the associate made the payment of principal and interest Baht 106 million to the Company and the loan was novated to the subsidiary on the same date amounting to Baht 2,412 million. As at 31 December 2023, the associate has already drawdown in a full amount and the outstanding loan balance is Baht 1,462 million (as at 31 December 2022: Baht 1,756 million).

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

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### *Nam Lik 1 Power Company Limited*

The loan agreement for a US Dollar 3 million credit facility, dated 21 March 2017, is under a condition of a sponsor agreement between Nam Lik 1 Power Company Limited and the company, which is one of the sponsors. It is due in 12 years and has an interest rate at float rate plus margin per annum, payable in semi-annual installments, commencing in 2019. Loan repayments must comply with the terms and conditions under the loan agreement with the financial institution before repayment can be made to the Company. The loan is classified as a non-current asset. The purpose of the loan is to finance a construction project. As at 31 December 2023, the credit facility has been fully utilised at US Dollar 3 million, equivalent to Baht 99 million (at 31 December 2022: US Dollar 3 million, equivalent to Baht 100 million).

### *Chonburi Clean Energy Company Limited*

The loan agreement for a Baht 895 million credit facility, dated 30 January 2018, The loan purpose is for development and construction of a non-hazardous industrial waste-to-energy power plant. It is due in 10 years and has an interest rate at MLR minus discount per annum. The loan is payable on shareholder demand. On 29 April 2022, the Group novated the agreement to another subsidiary as a new lender for the facility of Baht 198 million. As at 31 December 2023, the outstanding loan balance is Baht 148 million (as at 31 December 2022: Baht 198 million).

### *Global Renewable Power Company Limited*

The loan agreement for a Baht 834 million credit facility, dated 4 January 2021. It is due in 10 years with a fixed interest rate per annum, payable in annual installments, commencing in June 2021 with the purpose for providing long term loans to two indirect associates. As at 31 December 2023, the outstanding loan balance is Baht 493 million. (as at 31 December 2022: Baht 585 million).

### *GPSC Treasury Center Company Limited*

The loan agreement for a Baht 2,412 million credit facility, dated 30 November 2021, it is due in 10 years and bears interest rate at THOR plus margin per annum. Its purpose is to provide a long-term loan to an indirect associate and the loan repayments depends on the repayment of an indirect associate. Such indirect associate must comply with the terms and conditions under the loan agreement with the financial institutions before repayment can be made to the subsidiary. As at 31 December 2023, the outstanding loan balance is Baht 1,462 million (as at 31 December 2022: Baht 1,756 million).

For the loan agreement for a Baht 198 million credit facility, dated 29 April 2022, it is due in 6 years after the first drawdown date and bears interest at fixed interest rate per annum and the subsidiary has already drawdown in a full amount. Its purpose is to provide a long-term loan to an indirect associate which bears interest MLR minus a certain margin per annum and dues within six years after the first drawdown date from the subsidiary. As at 31 December 2023, the outstanding loan balance is Baht 148 million (as at 31 December 2022: Baht 198 million).

For the loan agreement for a Baht 675 million credit facility, dated 29 March 2023, the principle and interests are due in September 2024 and bears interest at fixed interest rate per annum for the purpose of financial management in the future. As at 31 December 2023, the outstanding loan balance is Baht 422 million (as at 31 December 2022: nil).

### *CI Changfang Limited and CI Xidao Limited*

The loan agreements for US Dollar 32 million and NTD 2,471 million credit facility, dated on 26 November 2022. It is due in 20 years after the first drawdown date and bears interest at fixed interest rate per annum. Its purpose is to support for investment in offshore wind farm project. As at 31 December 2023, the indirect associates have already drawdown such loan amounting to US Dollar 32 million and NTD 1,635 million which is equivalent to Baht 2,905 million. (as at 31 December 2022: US Dollar 16 million and NTD 414 million which is equivalent to Baht 1,033 million).

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 40.6 Non-current assets - related parties

As at 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Non-current assets - related parties				
- The ultimate parent company	-	2	-	-
- Shareholder	3,095 <sup>(*)</sup>	3,095 <sup>(*)</sup>	3	3
- Subsidiary	-	-	44	-
- Other related parties	15	13	15	13
	3,110	3,110	62	16

(\*) As at 31 December 2023 and 2022, non-current assets of Baht 3,092 million was advance payment of the essential agreements as disclosed at Note 41.3.8.

### 40.7 Trade payables, accrued expenses and other payables from related parties

As at 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Trade payables and accrued expenses				
- The ultimate parent company	5,263	4,815	1,102	1,724
- Shareholders	64	3,096	51	3,075
- Subsidiary	-	-	68	41
- Indirect associate	3	-	-	-
- Other related parties	79	382	68	24
Total trade payables and accrued expenses	5,409	8,293	1,289	4,864
Other payables				
- The ultimate parent company	31	50	31	44
- Shareholders	4	78	4	77
- Subsidiaries	-	-	7	167
- Joint venture	1	2	1	1
- Indirect associates	1	2	1	1
- Other related parties	240	267	224	252
Total other payables	277	399	268	542

### 40.8 Non-current liabilities - related parties

As at 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Non-current liabilities - related parties				
- The ultimate parent company	3	4	-	-
- Shareholder	24	24	11	13
- Other related parties	248	218	184	198
	275	246	195	211

### 40.9 Short-term loans from related parties

On 20 December 2023, the Company has entered into a short-term loan agreement with the ultimate parent company. For loan facility of Baht 1,500 million, the loan is due in one year and bears interest rate at MMR with the purpose for short-term working capital. As at 31 December 2023, such loan has not yet been drawdown. (as at 31 December 2022: Baht 1,500 million).

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 40.10 Long-term loans from related parties, net

As at 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
- Subsidiary				
- Due within 1 year	-	-	1,427	1,203
- Due over 1 year	-	-	7,810	9,234
- Other related party				
- Due within 1 year	16,100	-	16,100	-
- Due over 1 year	-	16,100	-	16,100
	16,100	16,100	25,337	26,537

#### Long-term loans from related parties

Movements of long-term loans from related parties can be analysed as follows:

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	Million Baht	Million Baht	Million Baht	Million Baht
Opening balance	16,100	8,000	26,537	19,631
Cash flow:				
Increases during the year	-	8,100	-	8,100
Repayments during the year	-	-	(1,203)	(1,203)
Deferred financing fee	-	-	-	(1)
Other non-cash movement:				
Amortisation of deferred financing fee	-	-	3	10
Ending balance	16,100	16,100	25,337	26,537

The loan agreement for Baht 20,000 million, dated on 29 June 2021. Such loan bears interest at a fixed rate per annum. The interest shall be paid every six months and the principal shall be fully paid three years after the first drawdown date. The purpose is to support for investment in renewable energy abroad. Company must comply with the certain requirements and conditions, such as maintaining the net debt to equity ratio. As of 31 December 2023, the Company has already drawn down such loan amounting to Baht 16,100 million (as of 31 December 2022: Baht 16,100 million).

#### Long-term loans from a subsidiary

Details of long-term loan agreements that the Company entered into with a subsidiary which are all Thai Baht loans are as follows:

Number	Outstanding balance As at 31 December 2023	Outstanding balance As at 31 December 2022	Interest rate	Principal repayment term	Interest payment period
	Million Baht	Million Baht			
1	532	649	BIBOR three-month plus a certain margin per annum	Repayment every six months from May 2021	Payment every three months
2	225	290	BIBOR three-month plus a certain margin per annum	Repayment every six months from June 2021	Payment every three months
3	6,986	8,007	THOR plus a certain margin per annum	Repayment every six months from October 2021 and February 2022	Payment every month
4	1,500	1,500	THOR six-month plus a certain margin per annum	Repayment in full on maturity date	Payment every six months
Total	9,243	10,446			

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

The Company has entered into long-term loan facility agreements and has not been drawn down with a subsidiary as at 31 December as follows:

Number	Facility (Million Baht)	Interest rate	Principal repayment term	Interest payment term
1	3,000	THOR plus a certain margin per annum	Repayment every six months from March 2025	Payment every three months
2	2,000	THOR plus a certain margin per annum	Repayment every six months from August 2026	Payment every six months
Total	5,000			

### 40.11 Directors and managements remuneration

For the years ended 31 December	Consolidated financial statements		Separate financial statements	
	2023 Million Baht	2022 Million Baht	2023 Million Baht	2022 Million Baht
Short-term benefits	230	243	208	219

## 41 Commitments and significant agreements

### 41.1 Commitments

#### 41.1.1 Capital expenditure obligations

The Group had commitments under design, construction and installation of machinery and equipment and project construction contract considered as capital expenditure obligations as of the statement of financial position date but not recognized in the financial statement are as follow:

	Consolidated financial statement			
	Foreign currency Million	2023 Baht Million	Foreign currency Million	2022 Baht Million
Baht	-	1,629	-	2,960
US Dollar	606	20,845	630	21,869
Swedish krona	120	419	391	1,306
Euro	1	21	2	78
Japan Yen	23	6	-	-
<b>Total</b>		<b>22,920</b>		<b>26,213</b>

	Separate financial statement			
	Foreign currency Million	2023 Baht Million	Foreign currency Million	2022 Baht Million
Baht	-	237	-	561
US Dollar	-(1)	9	-	-
<b>Total</b>		<b>246</b>		<b>561</b>

(1) The amount is less than a million



# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### 41.1.2 Letters of guarantee

As at 31 December 2023 and 2022, there were outstanding letters of guarantee issued by financial institutions on behalf of the Group in respect of certain performance required in the normal course of business of the Group, as follows:

Company	Currency	2023 Million	2022 Million
Global Power Synergy Public Company Limited	Baht	82	84
IRPC Clean Power Company Limited	Baht	463	537
Combined Heat and Power Producing Company Limited	Baht	147	20
Boree Plus Company Limited	Baht	-	90
Eurus Plus Company Limited	Baht	-	52
Helios 1 Company Limited	Baht	-	49
Helios 2 Company Limited	Baht	-	61
Glow Energy Public Company Limited	Baht	393	741
Glow SPP 2 Company Limited	Baht	562	689
Glow SPP 3 Company Limited	Baht	327	589
Glow SPP 11 Company Limited	Baht	411	411
Glow IPP Company Limited	Baht	11	11
GHECO-One Company Limited <sup>(1)</sup>	Baht	37	42
Houay Ho Power Company Limited <sup>(2)</sup>	US Dollar	3	3

<sup>(1)</sup> The bank guarantee of GHECO-One Company Limited is guaranteed by a subsidiary up to a maximum of 65 percent of the amount.

<sup>(2)</sup> On 2 February 2015, the Group issued the letter of guarantee with amounts not exceeding an aggregate of US Dollar 3 million to a bank in order to guarantee Houay Ho Power Company Limited's liability to EGAT under the Power Purchase Agreement.

### 41.1.3 Letter of Credit

As at 31 December 2023, the Group had outstanding letters of credit issued by financial institutions on behalf of Combined Heat and Power Producing Company Limited in respect of purchase of asset totalling US Dollar 2.6 million and Global Renewable Synergy Limited Taiwan in respect of investing in Taiwan totalling Taiwan Dollar 1.6 million (as at 31 December 2022: GHECO-ONE Company Limited in respect of purchase of coal totalling US Dollar 29.5 million and Combined Heat and Power Producing Company Limited in respect of purchase of asset totalling US Dollar 1 million).

### 41.2 Long-term service commitments

The Group entered into service agreements with a related party for receiving management services, system management and inspection and other related services to be performed in accordance with the operations and maintenance procedures. Under term and conditions of the service agreements, the Group is obliged to the fee. Such agreements have the term of 10 years and automatically renewed for additional 5 years.

### 41.3 Significant agreements

#### 41.3.1 Significant Power Purchase Agreements

The Group entered into Power Purchase Agreements (PPAs) with the Electricity Generating Authority of Thailand (EGAT) totalling 17 agreements. The PPAs are effective for the periods of 21 years, 25 years and 30 years commencing from their commercial operation dates. Sales quantities and prices must comply with the agreements. In 2017, the Group entered into Amendments to two of the PPAs to revise their pricing structures and extend the PPAs' terms for another 3 years after their maturity dates.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

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### 41.3.2 Gas supply agreements

The Group entered into Gas Supply Agreements (GSAs) with PTT Public Company Limited (PTT) totalling 17 agreements. The agreements are effective for periods between 4 and 25 years. Sales quantities and prices must comply with the agreements. Four of these agreements can be extended for another 4 years commencing from the maturity date, with the conditions stipulated in the agreements.

### 41.3.3 Coal supply agreements

The Group entered into coal supply agreements with both domestic and overseas companies totalling 7 agreements to sale and purchase of coal. Sales quantities and prices must comply with the agreements.

### 41.3.4 Coal berth joint operation agreement

The Group entered into a joint operation agreement with the Industrial Estate Authority of Thailand (IEAT) to develop an area to construct a shipping berth at Map Ta Phut Industrial Estate. This berth is to be used for handling coal, other raw materials and necessary goods. The Group has the right to utilise this area for 30 years and must pay the specified benefits to IEAT. In addition, the dedicated berth's ownership is transferred to IEAT 15 years from the commencing date.

### 41.3.5 Long-term parts and repairs agreements

The Group entered into long-term parts and repairs agreements with domestic and overseas companies to provide certain parts and maintenance services on power plant machines and equipment. The scope of work performed, their conditions and prices must comply with the agreements.

### 41.3.6 Maintenance agreement

The Group entered into a Maintenance Service 230 kV Substation Agreement (MSA) with EGAT. In accordance with the MSA, EGAT commits to perform preventive maintenance services, including corrective maintenance and on-call services of the 230 kV substation and transmission line for 6 years. The scope of work performed, its condition and its price must comply with the agreement.

### 41.3.7 Royalty agreement

In consideration for the granting and issuance of all rights, leases, permits and other benefits to the Group under the Build-operate-transfer Agreement (BOT), the Group pays a royalty to the Government of Lao PDR each quarter, within 90 days of the end of each quarter. The royalty can be paid in Thai Baht, US Dollars and Kip at the rate of 3.15% during the first seven years of commercial operation and 7.2% thereafter, of sales revenue under its PPAs.

### 41.3.8 Essential agreements under the Energy Recovery Unit Project

On 10 May 2019, the Group entered into agreements relating to the Energy Recovery Unit (ERU) Project, which is a part of the Clean Fuel Project (CFP) of Thai Oil Public Company Limited (TOP). The agreements are detailed below.

#### a) Asset sale and purchase agreement (ERU)

The Group entered into an asset sale and purchase agreement for the transfer of ownership of the ERU Project from TOP for the amounts not exceeding US Dollar 757 million. The Group makes payments according to Project's milestones, and ownership will be transferred upon the Project's construction and issuing of the Provisional Acceptance Certificate (PAC) under the CFP, which expected to be completed within 2025.

#### b) Products sales agreement

The Group entered into a sales agreement for electricity, steam and other products under the ERU Project with TOP. The agreement's term is 25 years from the Project's ownership transfer date which sale quantity and renewal period must comply with the agreement.

# Global Power Synergy Public Company Limited

## Notes to the Consolidated and Separate Financial Statements

For the year ended 31 December 2023

### c) Fuel and utilities supply agreement

The Group entered into a fuel and utilities supply agreement with TOP for purchasing pitch, other fuels, and various utilities that are necessary to operate the ERU Project. The agreement term is 25 years from the Project's ownership transfer date. The contract's renewal period must comply with the agreement.

### d) Operation and maintenance service agreement

The Group entered into an operation and maintenance service agreement to engage TOP for providing operation and maintenance services for all ERU Project units. The agreement term is 25 years from the Project's ownership transfer date. The contract renewal period must comply with the agreement.

### 41.3.9 Letter of guarantee

The Company entered into two loan guarantee agreements with financial institutions to guarantee the loan agreements of a subsidiary for facilities of Baht 5,000 million and Baht 2,000 million which are obliged to guarantee limit at Baht 6,000 million and Baht 2,400 million, respectively.

### 41.3.10 Power plant construction agreements

A subsidiary entered into power plant construction and installation of machinery and equipment agreements with domestics and overseas vendors for a purpose of CHP-III construction project. The scope of work performed, its condition and its price must comply with the agreements. The project is expected to be completed within 2024.

### 41.3.11 Operation and management services agreements

The Group entered into Operation and Management Services Agreements with two overseas companies to use its facilities between 1 July 2016 and 31 December 2023. The fees must be received as stated in the agreements.

## 42 Promotional privileges

The BOI has granted the Group some privileges relating to its production of electricity, steam, water, chilled water and refuse-derived fuel. The privileges include income tax exemption for certain operations for four or eight years from the date on which the income is first derived from those operations. As promoted companies, the Group must comply with certain terms and conditions prescribed in the promotional certificates.

## 43 Significant event during the year

On 14 June 2023, GHECO-One Company Limited ("GHECO-One"), a subsidiary in the Group, received a Request for Arbitration from the ICC International Court of Arbitration (the "Arbitration"). The Claimant that submitted the Request for Arbitration is a coal supplier under two Coal Supply and Transportation Agreements ("CSTAs") with GHECO-One. The Claimant alleged that GHECO-One had breached the CSTAs by cancelling shipments of coal under the CSTAs and sought damages of approximately USD 309 million. GHECO-One denied the Claimant's allegations on the basis that it was entitled under the CSTAs to cancel shipments of coal where there is a reduction in dispatch of its power plant by the Electricity Generating Authority of Thailand. The Arbitration was terminated in November 2023. GHECO-One was released from all of the claims against it in the Arbitration with no admission of liability.

## 44 Events after the reporting date

### Called for additional paid-up share capital of Global Renewable Synergy Company Limited

On 28 December 2023, Global Renewable Synergy Company Limited called for the additional paid-up share capital for 58,464,397 ordinary shares at Baht 2.91, totalling Baht 170 million. The Company has approved for increase in additional paid-up shares, as requested on 8 January 2024 for the purpose of additional investment in offshore wind farm project of CI Changfang Limited and CI Xidao Limited. The Company already paid for such additional paid-up share capital on 10 January 2024.



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