



บริษัท ทีพีซี เพาเวอร์ โฮลดิ้ง จำกัด (มหาชน)
TPC POWER HOLDING PUBLIC COMPANY LIMITED



Management's Discussion and Analysis (MD&A)
For Quarterly Ended June 30, 2023

No. TPCH-SC-001-08/2566

8 August 2023

Subject: Management's Discussion and Analysis of a Quarterly ended June 30, 2023

**To: Managing Director and Manager
Stock Exchange of Thailand**

TPC Power Holding Public Company Limited would like to clarify the operating results from the Company's financial statements and its subsidiaries for the period ended June 30, 2023, with the following details:

TPC Power Holding Public Company Limited is a holding company that invests in other companies that mainly operate power plants from renewable energy both domestically and internationally. Starting from biomass power plants to waste-to-energy power plants domestically to expanding overseas investment for solar energy.

Events in 2nd quarter of 2023

- **The progress of ECO firms investing in the Pracharat power plant project**

Pracharath Mae Lan Biomass power plant (PBM), with a selling capacity of 2.85 megawatts, has completed its construction and began commercial operation on June 1, 2023. Currently, it has an average of 24% capacity factor.

Pracharath Bannang Sata Biomass power plant (PBB), with a selling capacity of 2.85 megawatts, has an average of 32% capacity factor.

The tariff rate for both projects is FiTv of at least 3.88 baht per unit when generating electricity is less than 80% and 5.25 baht per unit when generating more than 80%, (announcement of the rate Purchase of electricity FiTv as of February 1, 2023)

- **Progress of Siam Power Co., Ltd.**

SP project in this quarter operates at an average of 44%. It is in the process of improving various processes in RDF production to obtain quantity and quality at reasonable costs, to generate electricity efficiently with the main consideration of the safety of operators.

- **Overseas Investment**

In April of 2023, the Company jointly invested in and paid for ordinary shares of Mekong Power Co., Ltd. ("MKP") in the proportion of 40% which operates the business of selling electricity from solar energy in Lao PDR. MKP has signed a power purchase agreement of 100 megawatts with Electricite Du Laos ("EDL") in May 2020 for a period of 25 years from the commercial operation date (Commercial Operation Date: "COD") Currently, it is in the process of procuring a contractor and processing related permits by the legal department. Construction is expected to start within the third quarter of 2023.

Overview of Financial Performance of the Company

Unit : Million THB

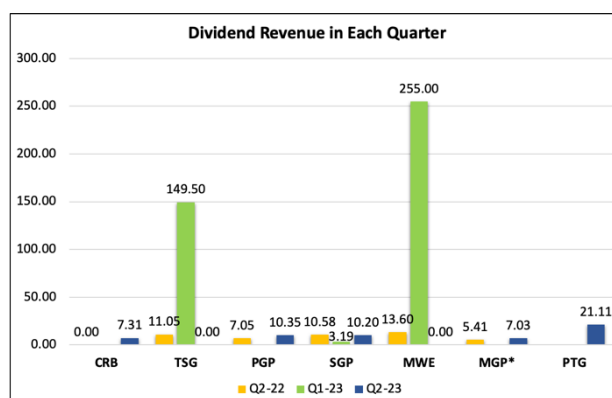
| Separated Financial Statement | Q2-2023 | Q1-2023 | QoQ | Q2-2022 | YoY |
|----------------------------------|----------------|----------------|----------------|----------------|--------------|
| Revenue | | | | | |
| Dividend Revenue | 56.00 | 407.69 | (86.3%) | 47.69 | 17.4% |
| Other revenue | 8.49 | 1.72 | >100.0% | 0.07 | >100% |
| Finance revenue | 16.80 | 16.69 | 0.7% | 15.09 | 11.3% |
| Total Revenue | 81.29 | 426.09 | (80.9%) | 63.48 | 28.1% |
| Expense | | | | | |
| Administrative Expense | (35.45) | (31.78) | 11.6% | (20.55) | 72.6% |
| Finance cost | (18.57) | (18.34) | 1.3% | (18.56) | 0.0% |
| Total Expense | (54.02) | (50.11) | 7.8% | (39.11) | 38.1% |
| Yearly Net profit (loss) | 27.26 | 375.97 | (92.7%) | 24.37 | 11.9% |
| Earnings (loss) per share | 0.07 | 0.94 | | 0.06 | |

Separated Financial Statement

In Q2-2023 Net profit (loss) was 27.26 million baht, a decrease of 348.71 million baht or more than 92.7 percent from the previous quarter and an increase of 2.89 million baht or 11.9 percent from the previous year due to the following reasons:

Dividend Revenue

The company's income from dividend was 56.00 million baht, a decrease of 351.69 million baht or 86.3% from the previous quarter because there was no special dividend payment this quarter. Dividend revenue from CRB project in the amount of 7.31million baht, PGP project in the amount of 10.35 million baht, SGP project in the amount of 10.20 million baht, MGP project in the amount of 7.03 million baht, PTG project in the amount of 21.11 million baht. It increased from the previous year in the amount of 8.31 million baht or 17.4% which is shown in the picture below.



Financial costs

The company has financial costs from paying interest on debentures at the rate of 4.5 percent per year.

Consolidated Company Performance

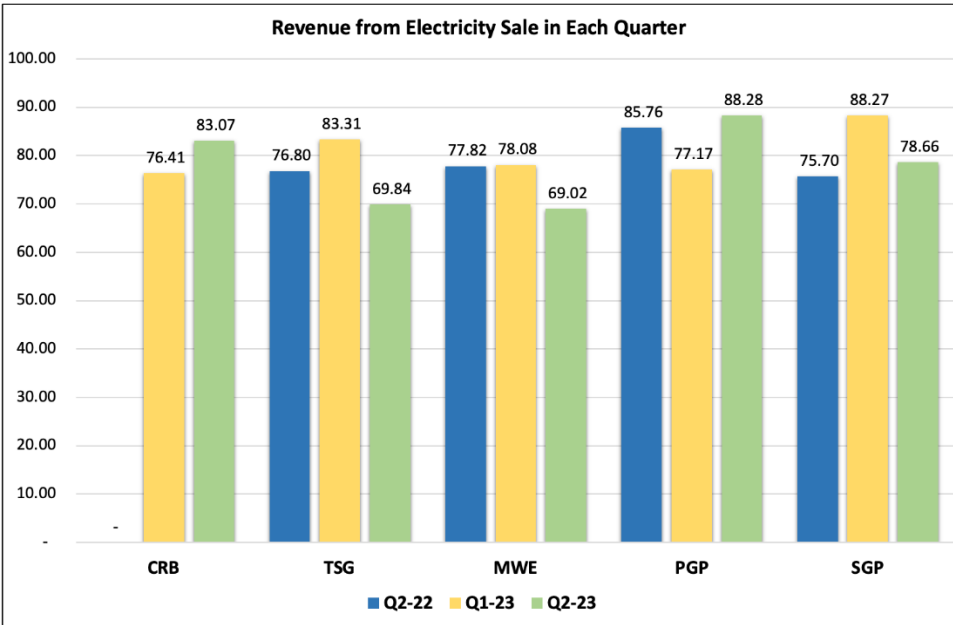
| Consolidated Financial Statement | Q2-2023 | Q1-2023 | QoQ | Q2-2022 | YoY |
|---|----------|----------|---------|----------|-----------|
| Revenue from electricity sales | 659.39 | 786.51 | (16.2%) | 613.60 | 7.5% |
| Cost of electricity sales | (494.94) | (522.62) | (5.3%) | (506.62) | (2.3%) |
| Gross profit | 164.46 | 263.89 | (37.7%) | 106.98 | 53.7% |
| Other revenue | 8.76 | 1.15 | >100% | 0.10 | >100% |
| Profit before expense | 173.21 | 265.05 | (34.6%) | 107.08 | 61.8% |
| Administrative expense | (46.52) | (51.87) | (10.3%) | (31.14) | 49.4% |
| Profit (loss) from operation | 126.69 | 213.17 | (40.6%) | 75.94 | 66.8% |
| Finance revenue | 6.05 | 5.72 | 5.7% | 5.00 | 21.1% |
| Financial cost | (63.19) | (54.54) | 15.9% | (49.02) | 28.9% |
| Profit (loss) from investment in associates | (4.32) | (6.39) | (32.4%) | (17.09) | (74.8%) |
| total | (61.47) | (55.21) | 11.3% | (61.11) | (0.6%) |
| Profit (loss) before tax | 65.22 | 157.97 | (58.7%) | 14.83 | >100.0% |
| Income tax expense | (2.92) | (2.64) | 10.9% | 1.55 | (>100.0%) |
| Net profit (loss) | 62.30 | 155.33 | (59.9%) | 16.38 | >100.0% |
| Profit (loss) per standard share | 0.073 | 0.28 | | (0.004) | |
| Profit attribution | | | | | |
| Owner of the company | 29.32 | 110.77 | (73.5%) | (1.63) | (>100.0%) |
| Non-controlling interests | 32.98 | 44.56 | (26.0%) | 18.01 | 83.1% |
| Total net profit (loss) | 62.30 | 155.33 | (59.9%) | 16.38 | >100.0% |

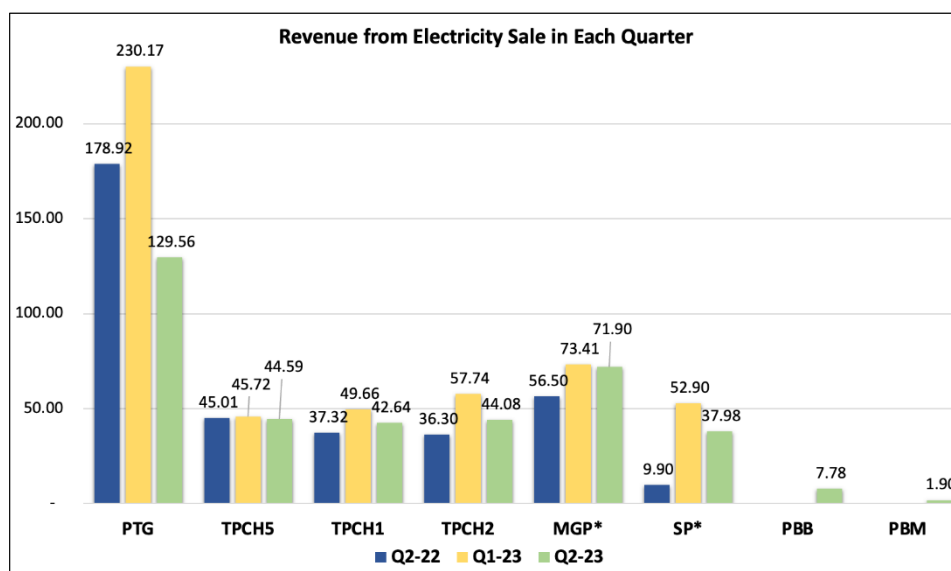
Consolidated Financial Statement

- **Revenue from Electricity Sale**

For Q2/2023, the company had electricity sales of 659.39 million baht, decreased by 127.12 million baht or 16.2% from the previous quarter due to the SGP having annual maintenance shutdown, the MWE MGP PTG TPCH1 TPCH2 TPCH5 SP having maintenance and repair of machine problems, and PBB PBM project is in the tuning phase for machinery to be able to operate continuously.

An increase of 45.79 million baht or 7.5% from the previous year due to the PTG project operating more efficiently and the average wholesale automatic electricity tariff (Ft) of PTG project increased. CRB project repaired generators completed. The TSG project was able to operate the electricity generation more efficiently. After the maintenance shutdown and the TPCH1, TPCH2, TPCH5 projects were able to generate electricity more than last year.





MGP,SP* is a joint venture business. It shows only the income from current shareholding.

- **Cost of Electricity Sales**

The Company's cost of selling electricity amounted to 494.94 million baht, decreased by 27.68 million baht or 5.3 percent from the previous quarter and decreased by 11.69 million baht or 2.3 percent from the previous year. The main cost is operation management fee, fuel cost, electricity cost in the project, Insurance premium, ash transportation, depreciation, and cost of equipment to strengthen the main assets of the machine to increase efficiency with own fuel management in every project (except CRB and TSG projects) which are shown in the picture below.

| Cost of Electricity Sales (MTHB) | Q2-2023 | | | | | | | | | | | | รวม | ร้อยละ |
|-------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|---------------|---------------|--------|
| | CRB | TSG | MWE | PGP | SGP | PTG | TPCH1 | TPCH2 | TPCH5 | PBB | PBM | | | |
| Operation and Fuel cost | 38.40 | 28.03 | 42.49 | 45.25 | 38.83 | 51.14 | 31.14 | 33.50 | 26.87 | 8.43 | 2.49 | 346.57 | 70.02 | |
| Depreciation and Amortization | 7.82 | 7.86 | 6.89 | 7.65 | 7.86 | 21.97 | 7.76 | 7.94 | 7.44 | 2.47 | 0.12 | 85.79 | 17.33 | |
| Maintenance Cost | 2.68 | 0.59 | 8.92 | 2.47 | 8.29 | 9.38 | 2.11 | 1.50 | 1.49 | 1.06 | 0.30 | 38.80 | 7.84 | |
| Electricity Cost | 0.27 | 0.71 | 1.05 | 1.01 | 1.23 | 2.86 | 1.05 | 0.46 | 0.94 | 0.84 | 0.24 | 10.66 | 2.15 | |
| Others (Insurance and ash handling) | 2.15 | 1.24 | 1.45 | 1.45 | 0.99 | 2.86 | 0.90 | 0.91 | 0.84 | 0.32 | - | 13.12 | 2.65 | |
| Total Cost | 51.32 | 38.44 | 60.80 | 57.84 | 57.20 | 88.21 | 42.96 | 44.31 | 37.57 | 13.12 | 3.16 | 494.94 | 100.00 | |
| Margin of COGS | | | | | | | | | | | | | 75.06 | |

| Cost of Electricity Sales (MTHB) | Q1-2023 | | | | | | | | | | |
|-------------------------------------|--------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|---------------|---------------|
| | CRB | TSG | MWE | PGP | SGP | PTG | TPCH1 | TPCH2 | TPCH5 | Total | % |
| Operation and Fuel cost | 34.72 | 34.53 | 45.83 | 42.70 | 46.14 | 85.34 | 37.15 | 41.50 | 29.55 | 397.45 | 76.07 |
| Depreciation and Amortization | 7.69 | 7.30 | 6.81 | 7.58 | 8.00 | 21.98 | 8.86 | 8.92 | 7.36 | 84.50 | 16.17 |
| Maintenance Cost | 1.75 | 0.94 | 3.19 | 4.76 | 0.30 | 4.85 | 2.16 | 2.09 | 2.02 | 22.05 | 4.22 |
| Electricity Cost | 0.23 | 0.76 | 0.77 | 1.27 | 1.14 | 1.05 | 0.73 | 0.43 | 0.85 | 7.23 | 1.38 |
| Others (Insurance and ash handling) | 1.38 | 0.90 | 1.14 | 1.05 | 0.87 | 3.53 | 0.87 | 0.85 | 0.63 | 11.24 | 2.15 |
| Total Cost | 45.78 | 44.43 | 57.73 | 57.35 | 56.46 | 116.75 | 49.78 | 53.77 | 40.41 | 522.48 | 100.00 |
| Margin of COGS | | | | | | | | | | | 66.44 |

The CRB project in Q2/2023 has more electricity generation than the previous quarter. Therefore, the cost of electricity sales has increased because the cost of electricity production varies according to the electricity sales unit that can be produced.

PTG project Q2/2023, fuel costs decreased due to plant shutdown.

Project TPCH1, TPCH2, TPCH5, the total cost of electricity sales decreased. Due to the shutdown of the power generation machine maintenance.

- **Administrative expenses**

The Company had administrative expenses of 46.52 million baht, a decrease of 5.35 million baht or 10.3% from the previous quarter and an increase of 15.38 million baht or 49.4% from the previous year due to increasing manpower, accumulated depreciation of assets of PPLP project increases, and expenses for development of foreign projects.

- **Profit (loss) from investments in joint ventures**

The Company had profit (loss) from investments in joint ventures, a loss of 4.32 million baht, a decrease of 2.07 million baht or 32.4 percent from the previous quarter and a decrease of 12.78 million baht or 74.8 percent from the previous year, as detailed below.

- MGP Power Plant, with a stake of 46 percent, had a share of profit of 10.40 million baht, a decrease of 0.01 million baht or 0.1 percent from the previous quarter.
- PA West and Energy Co., Ltd. (PA), holding 33 percent, shared profits of 0.09 million baht, unchanged from the previous quarter.
- Siam Power Co., Ltd. (SP), holding 50% of its share and has loss amounted to 14.54 million baht, decrease by 2.27 million baht from the previous quarter due to being able to generate electricity more efficiently with a lower cost of fuel.

- Mekong Power Co., Ltd. (MKP), holding 40% stake, has a share of loss of 0.01 million baht because the project is in the process of selecting a contractor for the construction of the project.

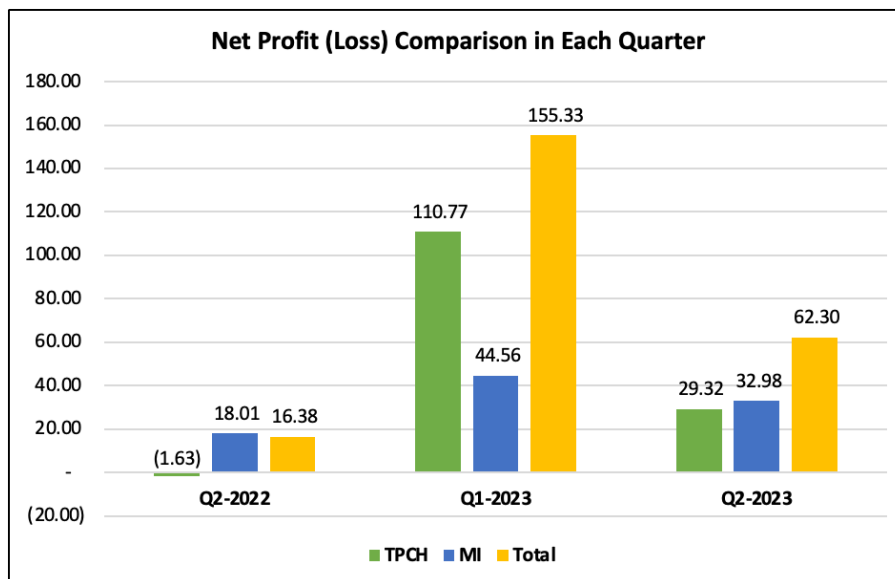
- **Net profit (loss) for the period**

The Company had a net profit (loss) of 62.30 million baht, decreased by 93.03 million baht or 59.9 percent from the previous quarter, and increased by 45.92 million baht or more than 100% the previous year, divided into the company's profit of 29.32 million baht, decreased by 81.45 million baht or 73.5 percent from the previous quarter and an increase of 30.95 million baht or more than 100.0 percent from the previous year due to

- Group of 5 projects (CRB, TSG, MWE, PGP, SGP) will have relatively stable performance. The overall lower profit will be caused by annual shutdowns. and the price of fuel used.
 - CRB operates electricity generation efficiently resulting in more profit than the previous quarter with 94% average power generation.
 - TSG produced less electricity than the previous quarter due to a problem with the machine, it causes the machine to produce less electricity at 84% average power generation.
 - MWE started producing less electricity than the previous quarter due to the shutdown for maintenance of 10 days, resulting in a decrease in operating results from the previous quarter with 93% average power generation.
 - PGP operates electricity generation efficiently resulting in an increase in operating results from the previous quarter at 91% average power generation.
 - SGP started producing electricity less than the previous quarter due to the annual shutdown of 10 days, the turnover was lower than the previous quarter with 92% average power generation.
- Group of 3 southern provinces (PTG, TPCH5, TPCH1, TPCH2) In Q2/2023, the PTG project produced less electricity than the previous quarter due to the maintenance shutdown of 38 days 22 hours, therefore the operating results decreased from the

previous quarter. However, it was able to pay dividends in the amount of 30.33 million baht.

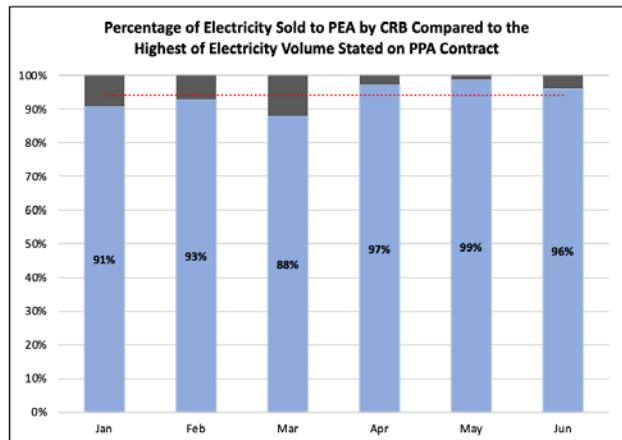
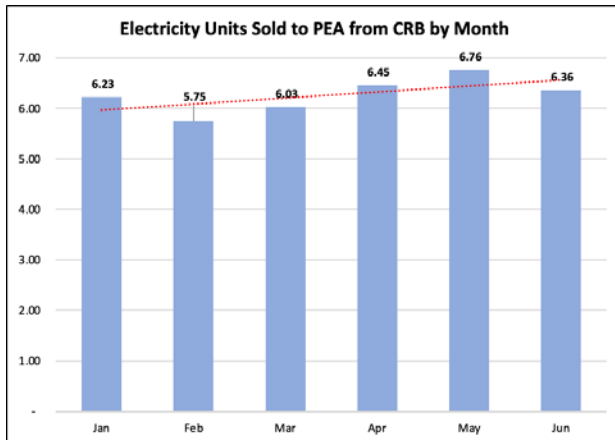
- TPCH1, TPCH2, and TPCH5 were able to produce less electricity than the previous quarter. due to maintenance and repair of machinery. Moreover, the fuel consumption rate is controlled to be lower as well, with the TPCH1 project generating an average of 72% of electricity, the TPCH2 project 80% of the electricity generating on average, and the TPCH5 project 86% of the electricity generating on average.
- ECO Group (Pracharat Power Plant: PBB PBM) PBB project has an average electricity generation of 32% and the PBM project has an average of 24% of electricity generation during tuning of the machine to operate efficiently.
- Joint Venture Group (MGP, SP, PA, MKP)
 - MGP started to generate less electricity than the previous quarter due to a shutdown for maintenance of the machines for 6 days and 19 hours, the profit was slightly lower than the previous quarter. SP is undergoing process improvements in producing RDF fuel to obtain quantity and quality. In Q2-2023, an average power generation capacity was 44% which yields no profit.
 - MKP is in the process of selecting a contractor for the construction of the project.



Performance of Power plants under operations (13 plants in total)

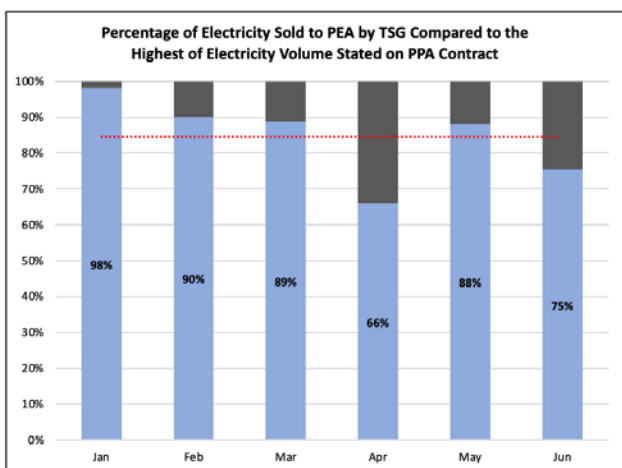
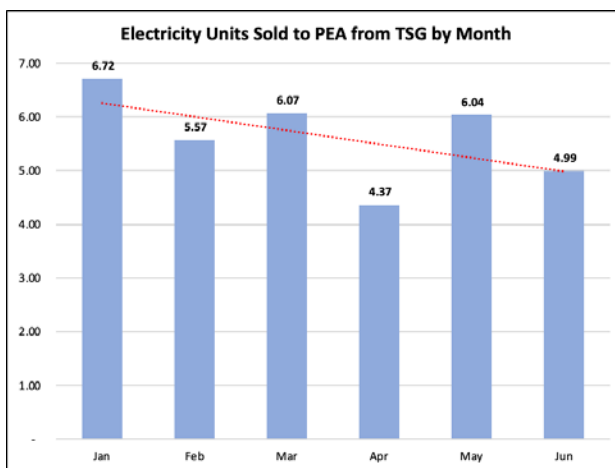
CRB power plant has electricity sales volume under the Feed-in Tariff (FiT) system power purchase agreement of 9.2 megawatts with a net selling price of 4.24 baht per unit.

In Q2-2023, CRB generated and sold 19,572,872 kWh with a capacity factor of 94%.



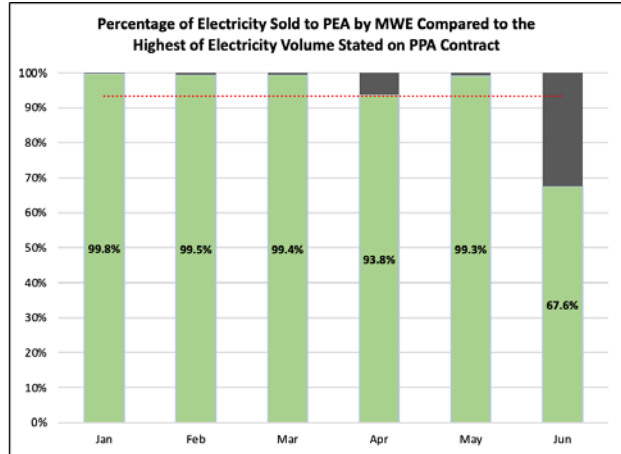
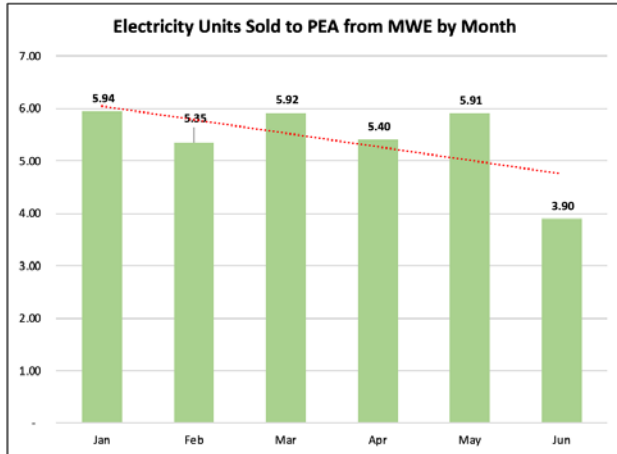
TSG power plant has electricity sales volume under the Feed-in Tariff (FiT) system power purchase agreement of 9.2 megawatts with a net selling price of 4.54 baht per unit.

In Q2-2023, TSG generated and sold 15,389,745 kWh with a capacity factor of 84%.



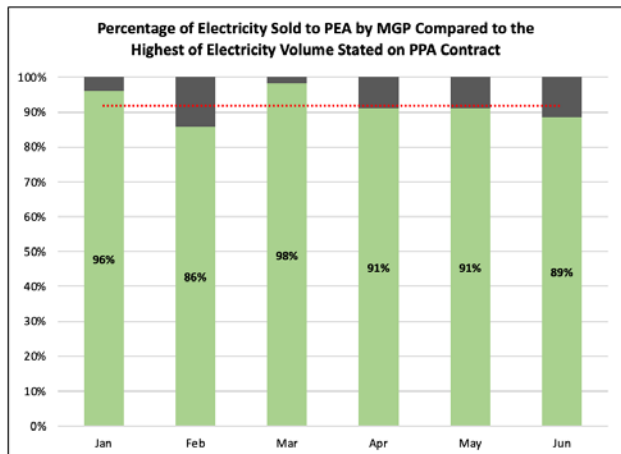
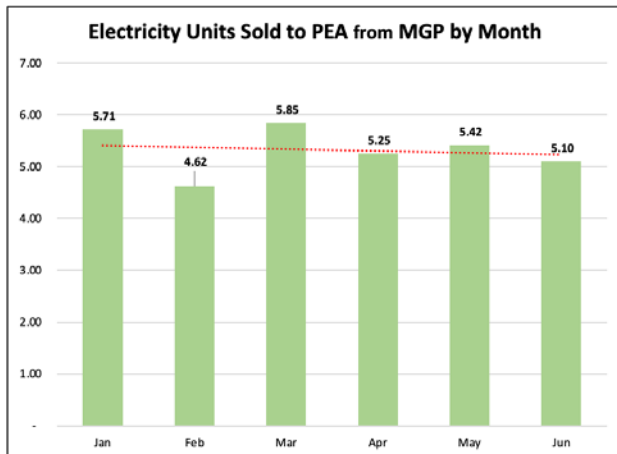
MWE power plant has electricity sales volume under the Feed-in Tariff (FiT) system power purchase agreement of 8.0 megawatts with a net selling price of 4.54 baht per unit.

In Q2-2023, MWE generated and sold 15,207,482 kWh with a capacity factor of 93%.



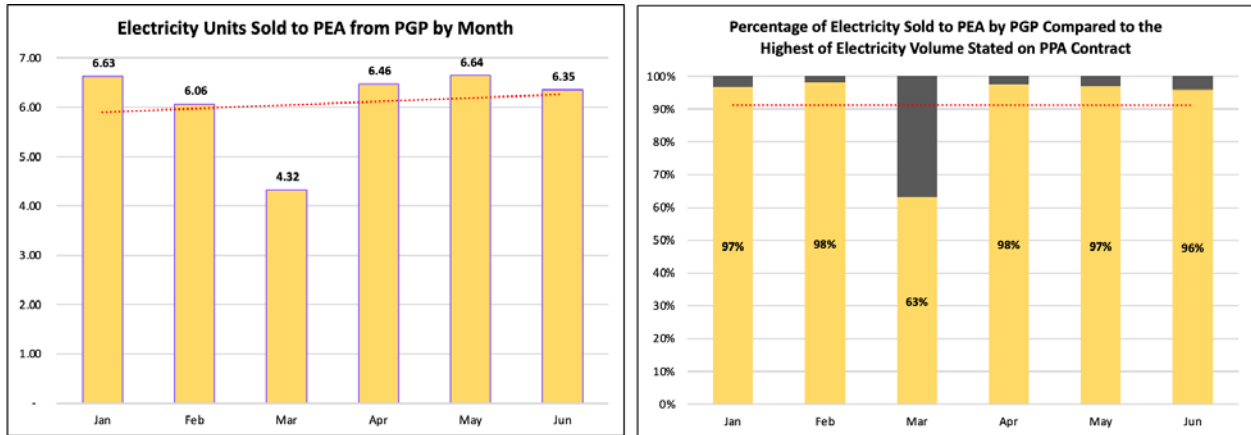
MGP power plant has electricity sales volume under the Feed-in Tariff (FiT) system power purchase agreement of 8.0 megawatts with a net selling price of 4.54 baht per unit.

In Q2-2023, MGP generated and sold 15,769,809 kWh with a capacity factor of 92%



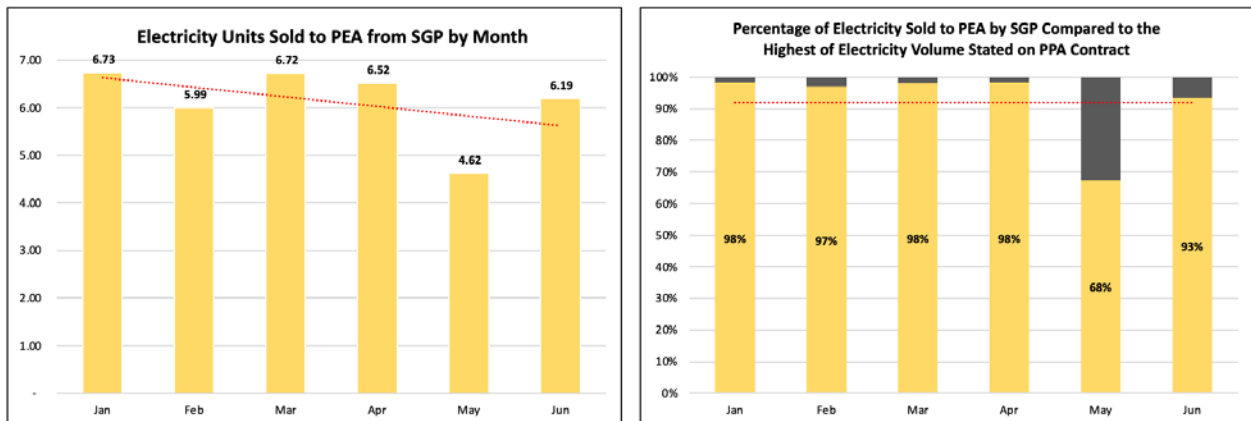
PGP power plant has electricity sales volume under the Feed-in Tariff (FiT) system power purchase agreement of 9.2 megawatts with a net selling price of 4.54 baht per unit.

In Q2-2023, PGP generated and sold 19,453,800 kWh with a capacity factor of 91%



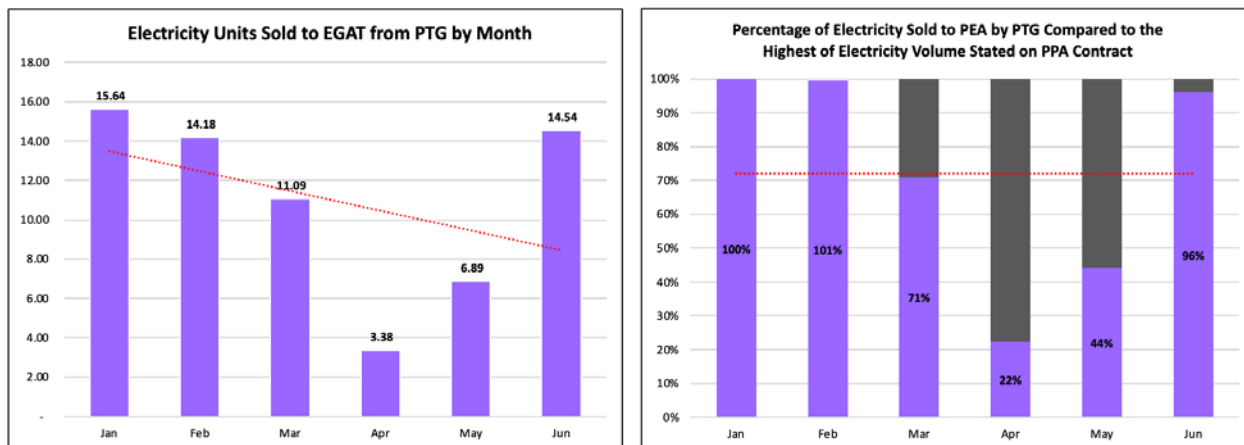
SGP power plant has electricity sales volume under the Feed-in Tariff (FiT) system power purchase agreement of 9.2 megawatts with a net selling price of 4.54 baht per unit.

In Q1-2023, SGP generated and sold 17,331,908 kWh with a capacity factor of 92%



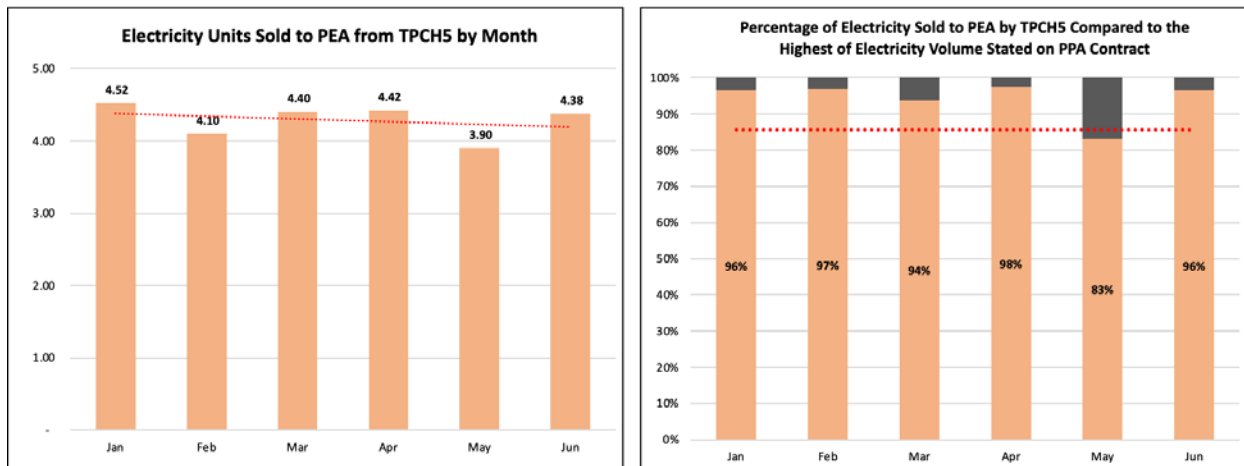
PTG power plant has electricity sales volume under the Adder system power purchase agreement of 21 megawatts with a net selling price of 5.22 baht per unit.

In Q2-2023, PTG generated and sold 24,811,055 kWh with a capacity factor of 72%



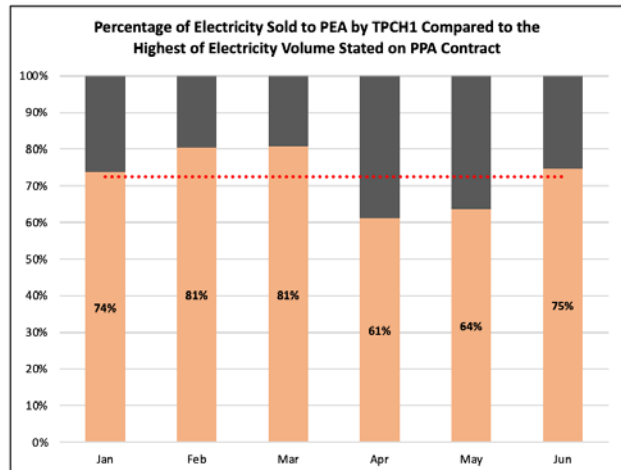
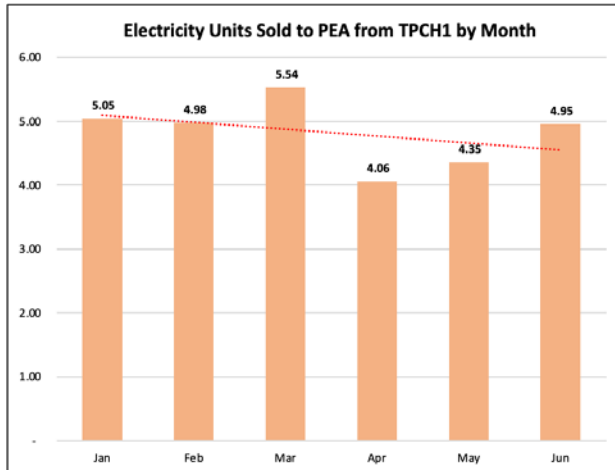
TPCH5 has electricity sales volume under the bidding system power purchase agreement of 6.3 megawatts with a net selling price of 3.51 baht per unit.

In Q2-2023, TPCH5 generated and sold 12,700,225 kWh with a capacity factor of 86%.



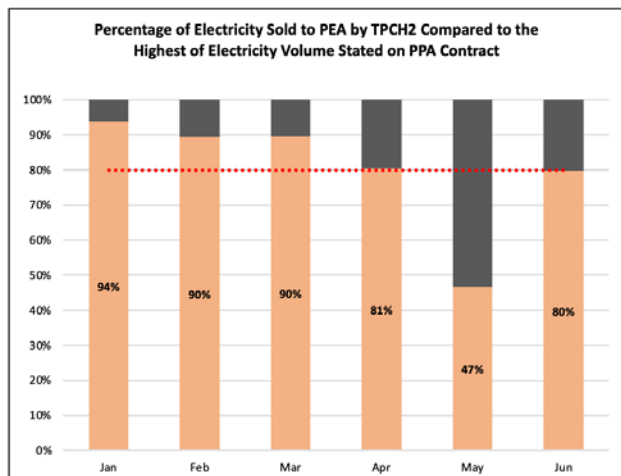
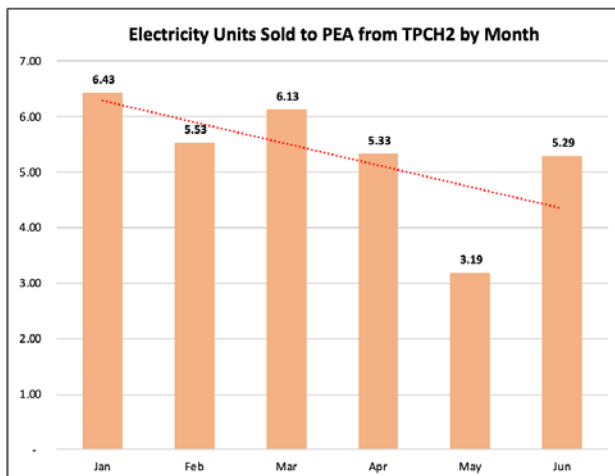
TPCH1 has electricity sales volume under the bidding system power purchase agreement of 6.3 megawatts with a net selling price of 3.19 baht per unit.

In Q2-2023, TPCH5 generated and sold 13,362,807 kWh with a capacity factor of 72%.



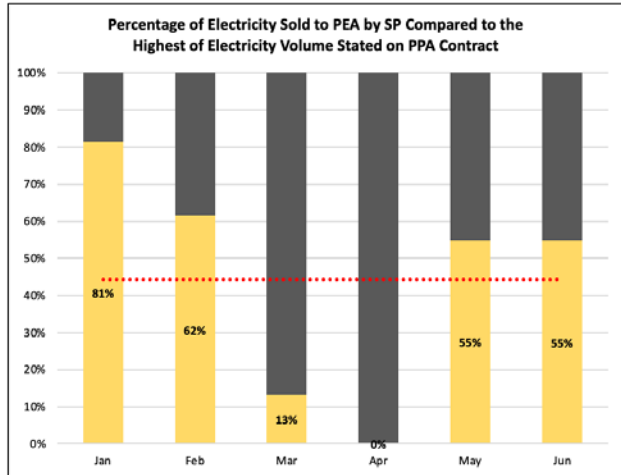
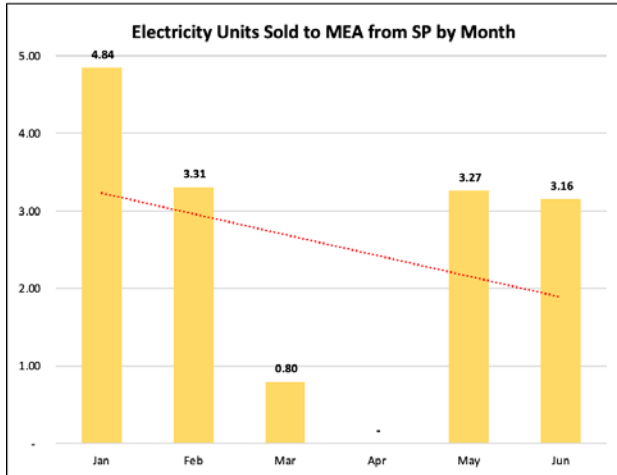
TPCH2 has electricity sales volume under the bidding system power purchase agreement of 6.3 megawatts with a net selling price of 3.19 baht per unit.

In Q2-2023, TPCH2 generated and sold 13,814,280 kWh with a capacity factor of 80%.



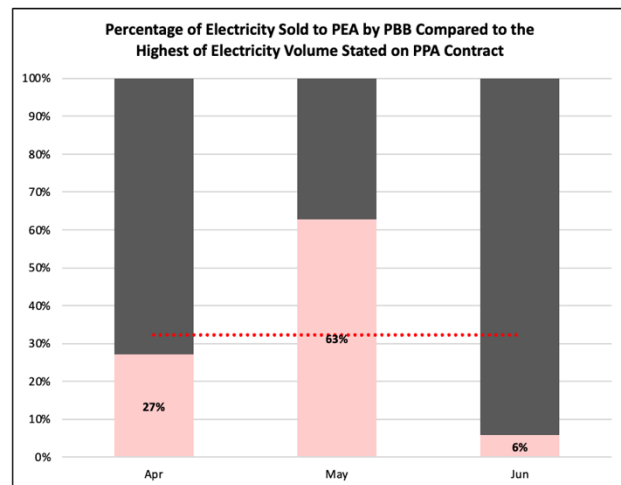
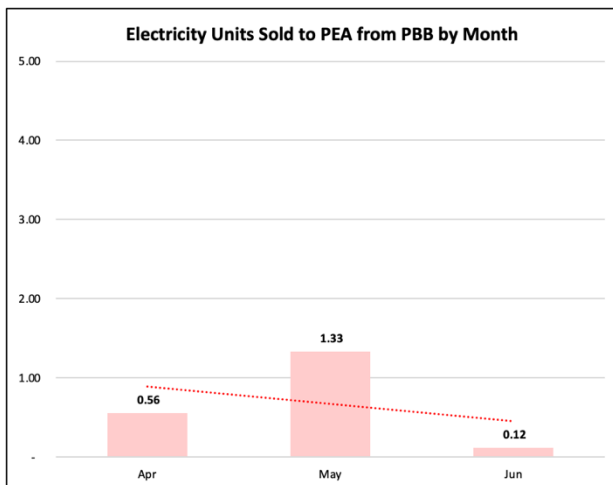
SP has started selling electricity commercially on 30 December 2021 with has electricity sales volume under the Feed-in Tariff (FiT) system power purchase agreement of 8.0 megawatts with a net selling price of 5.91 baht per unit.

In Q2-2023, SP generated and sold 6,423,980 kWh with a capacity factor of 44%.



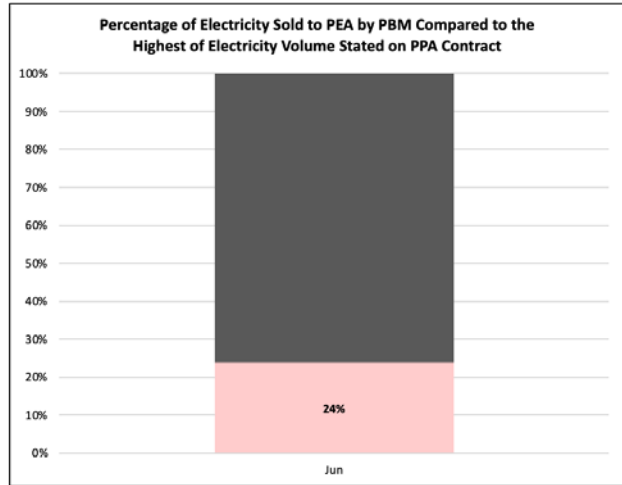
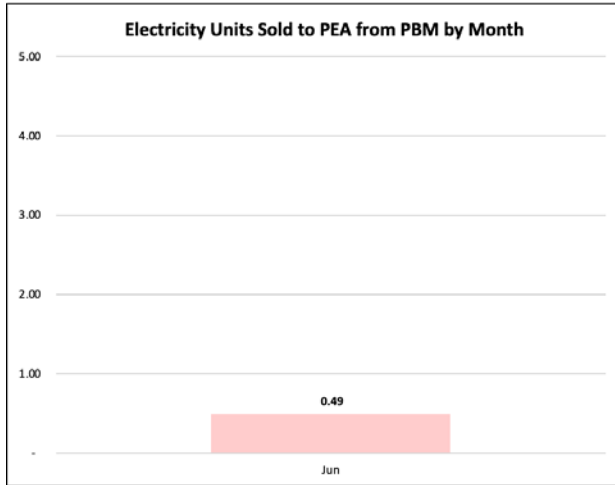
PBB has started selling electricity commercially on 30 March 2023 with has electricity sales volume under the Feed-in Tariff (FiT) system power purchase agreement of 2.85 megawatts with a net selling price of 3.88 baht per unit.

In Q2-2023, PBB generated and sold 2,005,204 kWh with a capacity factor of 32%.



PBM has started selling electricity commercially on 1 June 2023 with has electricity sales volume under the Feed-in Tariff (FiT) system power purchase agreement of 2.85 megawatts with a net selling price of 3.88 baht per unit.

In Q2-2023, PBM generated and sold 489,645 kWh with a capacity factor of 24%.



Industry Overview in 2023

The company continues to focus on developing renewable energy projects, particularly Independent Power Producer (IPP) projects, in neighboring countries in collaboration with business partners who possess expertise in the field. The company has already invested in a 100-megawatt project in Laos and is in the process of selecting contractors. It is anticipated that preliminary revenue from this project will be realized in the year 2024. Simultaneously, the company has also been studying and developing renewable energy projects in other countries such as Cambodia and Vietnam. Extensive research and risk mitigation have been conducted, involving experts in various fields related to those countries, including legal advisors, financial consultants, and tax experts, in order to thoroughly evaluate and minimize risks before making investment decisions. The company's primary consideration is to ensure returns to the company and benefits to stakeholders.

For the domestic projects that have already commercialized electricity generation, the company's primary focus is on cost control. Continuous improvement and maintenance of machinery and equipment are carried out to ensure efficient and profitable electricity generation in each project. The company has adjusted its strategies for cost management, primary and auxiliary fuel quantities, and other operational factors to optimize benefits for each power plant. Additionally, the company seeks supplementary revenue streams, such as the sale of carbon credits, to enhance the project's value in the future.

Regarding the waste-to-energy project, the company has invested through its subsidiary, Siam Power Co., Ltd. (SP), in the development of 5 to 7 projects. It is expected that clarity on power purchase agreements will be achieved for 2 projects by the year 2023. These projects are specified in the Alternative Energy Development Plan (AEDP) and involve various community waste-to-energy facilities categorized as Very Small Power Producers (VSPP).

For your information,

TPC Power Holding Public Company Limited



(Mr. Cherdsak Wattanavijitkul)

President

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| | |
|---------------|---|
| TPCH | : TPC Power Holding Public Company Limited |
| CRB | : Chang Rak Biopower Company Limited |
| MWE | : Maewong Energy Company Limited |
| MGP | : Mahachai Green Power Company Limited |
| TSG | : Thungsung Green Company Limited |
| PGP | : Phatthalung Green Power Company Limited |
| SGP | : Satun Green Power Company Limited |
| PTG | : Pattani Green Company Limited |
| TPCH1 | : TPCH Power 1 Company Limited |
| TPCH2 | : TPCH Power 2 Company Limited |
| TPCH5 | : TPCH Power 5 Company Limited |
| PA | : PA Waste and Energy Company Limited |
| SP | : Siam Power Company Limited |
| ECO | : ECO Energy Group Corporation Company Limited |
| PBM | : Pracharat Biomass Mae Lan Company Limited |
| PBB | : Pracharat Biomass Bannang Sata Company Limited |
| MKP | : Mekong Power Co., Ltd. |
| TPCH9 | : TPCH Power 9 Company Limited |
| TPCH10 | : TPCH Power 10 Company Limited |
| TPCH11 | : TPCH Power 11 Company Limited |
| TPCH14 | : TPCH Power 14 Company Limited |
| TPCH15 | : TPCH Power 15 Company Limited |
| TPCH17 | : TPCH Power 17 Company Limited |
| TPCH18 | : TPCH Power 18 Company Limited |
| TPCH19 | : TPCH Power 19 Company Limited |
| PEA | : Provincial Electricity Authority |
| MEA | : Metropolitan Electricity Authority |
| COD | : Commercial Operation Date |
| SCOD | : Scheduled Commercial Operation Date |
| RDF | : Refuse Derived Fuel which is the product of processing municipal solid waste to separate the noncombustible from the combustible portion, and preparing the combustible portion into a form that can be effectively fired in an existing or new boiler. |