



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



Management's Discussion and Analysis (MD&A)
For the Period Ended June 30, 2024

August 6, 2024

Subject Management's Discussion and Analysis for the Period Ended June 30, 2024

To Directors and Managers
Thailand Stock Exchange

TPC Power Holding Public Company Limited would like to clarify the financial performance of the company and its subsidiaries for the period ended June 30, 2024, with details as follows:

TPC Power Holding Public Company Limited is an investment company that primarily invests in other companies engaged in renewable energy power plants, both domestically and internationally. The company has expanded its international investments in solar energy, while domestic investments focus on renewable energy and waste-to-energy power plants.

Events in the 2nd Quarter of 2024 of the Company

- Issuance of Debentures Worth 1,000 Million Baht

On May 28-30, 2024, the company issued and offered debentures (Series 1/2024) worth 1,000 million baht with an interest rate of 5.5% per annum, a tenure of 1 year and 6 months, maturing on November 30, 2025. The debentures can be redeemed before the maturity date, starting from 9 months after the issuance date.

- Redemption and Repayment of Debentures Worth 1,500 Million Baht

The company redeemed and repaid the debentures (Series 1/2021) worth 1,500 million baht on June 30, 2024, including the full principal amount and interest.

WASTE TO ENERGY

The company holds a 50% stake in the development of a waste-to-energy power plant project, with the following details:

On March 18, 2024, Siam Power Nongsarai Co., Ltd. (SPNS) signed a Power Purchase Agreement for the Municipal Waste Power Generation Project 2022 (Round 2/2024). Additionally, on July 10, 2024, Siam Power Naklang Co., Ltd. (SPNK) signed a Power Purchase Agreement for the Municipal Waste Power Generation Project 2022 (Round 2/2024). The agreed amount of electricity for sale is 8.0 megawatts with a purchase rate of 5.78 baht per unit (comprising FiT fix 2.39 + FiT variable 2.69 + FiT premium 0.7 for the first 8 years).

Moreover, SP plans to file for an initial public offering (IPO) on the Market for Alternative Investment (mai) to raise funds for expanding its waste-to-energy power plant business, including the development of the SPNS, SPNK, and other projects within Q4/2024.

Solar Project

Mekong Power Co., Ltd. ("MKP")

The company holds a 40% stake in the business of producing and selling electricity generated from solar energy in the Lao People's Democratic Republic (Lao PDR). MKP signed a Power Purchase Agreement (PPA) for 100 megawatts with Electricité du Laos (EDL) in May 2020, with a contract duration of 25 years from the Commercial Operation Date ("COD").

As of now, the land preparation for construction has been completed, and work on the structure and the fence for the substation installation zone has begun. Additionally, an Engineering, Procurement, and Construction (EPC) contract has been signed with a Chinese contractor. The subcontractor procurement process is currently underway, and official construction is expected to commence in Q1/2025.

Carbon Footprint, Carbon Credit, I-RECs

- **Carbon Footprint** refers to the calculation of carbon dioxide emissions released into the atmosphere from a particular activity, measured in tons of carbon dioxide equivalent. In this context, it involves calculating the Carbon Footprint of the company and its subsidiaries. Previously, Carbon Footprint registration and certification were completed for all power plant projects, except for waste-to-energy projects, the TPC headquarter, and the PTG project, which began work in Q2/2024.
- During Q2/2024, the Carbon Footprint (CFO) calculation was carried out for the headquarter and the PTG project. It is expected to receive official certification from the Thailand Greenhouse Gas Management Organization (TGO) in Q4/2024.

The company initiated the Carbon Footprint assessment to understand the amount of carbon dioxide emissions released into the atmosphere during the electricity production process of its projects, as well as the operations at the headquarter. This information is used to plan for carbon offsetting to achieve carbon neutrality and to develop long-term plans for reaching Net Zero emissions. Achieving Net Zero will require the company to become carbon-free on its own, without

using carbon credits for offsetting. This process involves integrating technology to enhance carbon capture, which is part of the company's sustainability plan.

- **Carbon Credit:**

The PTG project is the only one registered for the sale of Carbon Credits, as it meets the selection criteria of having a COD (Commercial Operation Date) within the last 3 years. The project has been registered (Issued) and has generated Carbon Credits amounting to 77,316 tons of carbon dioxide equivalent (TCO₂e) for Q3/2023 and Q4/2023. If these credits were to be used for offsetting, it would be equivalent to the carbon absorption of approximately 3,514,364 trees.

The decision to register for Carbon Credits was made because it involves a comprehensive calculation of all processes, accurately reflecting CO₂ emissions. Additionally, the selling price of Carbon Credits is higher compared to I-RECs, which only account for the calculation of renewable energy production.

During Q2/2024, the company applied for Carbon Credit certification for Q1/2024 and Q2/2024, totaling 78,492 tons of CO₂ equivalent (TCO₂e). If these credits were used for offsetting, it would be equivalent to the carbon absorption of approximately 3,568,727 trees.

- **I-RECs (International Renewable Energy Certificates):**

I-RECs are certificates that certify the production of renewable energy as a replacement for energy production from fossil fuels. The company has registered all its projects under I-RECs for sale to buyers. To date, a total of 1,178,540 I-RECs have been issued, and 275,484 I-RECs have been sold, generating a total revenue of 8,580,954 baht. This is equivalent to offsetting approximately 137,742 tons of CO₂ equivalent (TCO₂e) emissions, or replacing 31.44 MW of electricity generated from fossil fuels.

During Q2/2024, the company applied for certification of 107,410 I-RECs, which is equivalent to offsetting approximately 53,570 TCO₂e of CO₂ emissions, or replacing 12.23 MW of electricity generated from fossil fuels.

Company's Financial Performance

Unit: MTHB

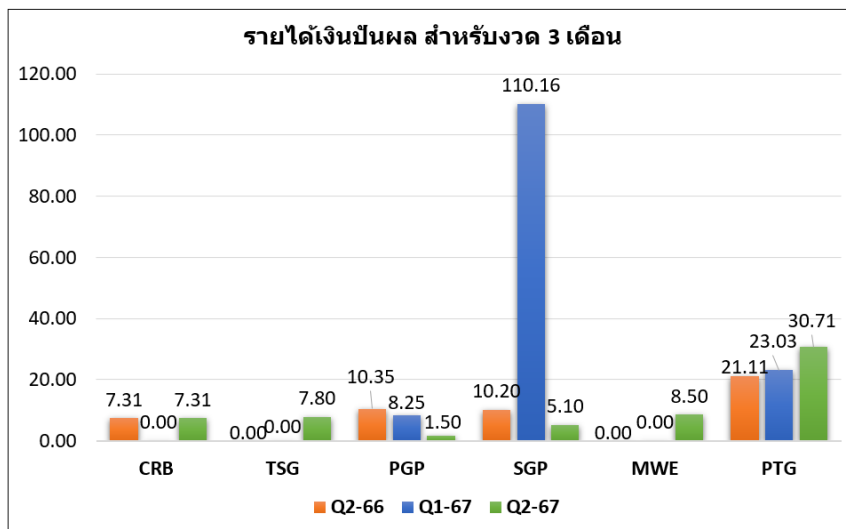
Financial Statement	Q2-2567	Q1-2567	QoQ	Q2-2566	YoY
Revenue					
Dividend revenue	60.92	141.44	(56.9%)	56.00	8.8%
Other revenue	3.32	4.73	(29.9%)	8.49	(60.9%)
Financial revenue	20.53	16.01	28.2%	16.80	22.2%
Total revenue	84.77	162.19	(47.7%)	81.29	4.3%
Cost					
Administration cost	(28.09)	(21.70)	29.4%	(35.45)	(20.8%)
Financial cost	(24.28)	(18.72)	29.7%	(18.57)	30.7%
Total Cost	(52.37)	(40.42)	29.6%	(54.02)	(3.1%)
Net Profit (Loss) for the period	32.40	121.77	(73.4%)	27.26	18.9%
Basic Earnings (Loss) per Share. (THB)	0.08	0.30		0.07	

Financial Statement

For Q2-2024, the company reported a net profit (loss) of 32.40 million baht, a decrease of 89.36 million baht or 73.4% from the previous quarter, and an increase of 5.14 million baht or 18.9% from the previous year. The changes are due to the following reasons:

- **Dividend Revenue**

For Q2-2024, the company reported dividend income of 60.92 million baht, a decrease of 80.52 million baht or 56.9% from the previous quarter due to the absence of special dividends. However, it increased by 4.92 million baht or 8.8% from the previous year, as dividends were received from six projects, including CRB (7.31 million baht), TSG (7.80 million baht), PGP (1.50 million baht), SGP (5.10 million baht), MWE (8.50 million baht), and PTG (30.71 million baht), as shown in the image below.



■ **Administration Cost**

For Q2-2024, the company incurred administrative expenses of 28.09 million baht, an increase of 6.39 million baht or 29.4% from the previous quarter, mainly due to expenses related to salaries and compensation for directors, executives, and employees. However, this represents a decrease of 7.37 million baht or 20.8% from the previous year. The expenses include salaries and compensation for directors, executives, and employees, utility expenses, other operational expenses, administrative costs, consultancy fees, promotional and public relations expenses, expenses related to I-REC, and various operational expenses for international projects.

■ **Financial Cost**

For Q2-2024, the company incurred financial costs of 24.28 million baht, an increase of 5.56 million baht or 29.7% from the previous quarter, and an increase of 5.71 million baht or 30.7% from the previous year. These costs include interest payments on debentures with an interest rate of 4.5% per annum, which matured on June 30, 2024, and interest payments on loans from financial institutions, as well as interest payments on the 1,000-million-baht debentures with an interest rate of 5.5% per annum for a period of 1 month.

Overall Performance of the Company

Unit: MTHB

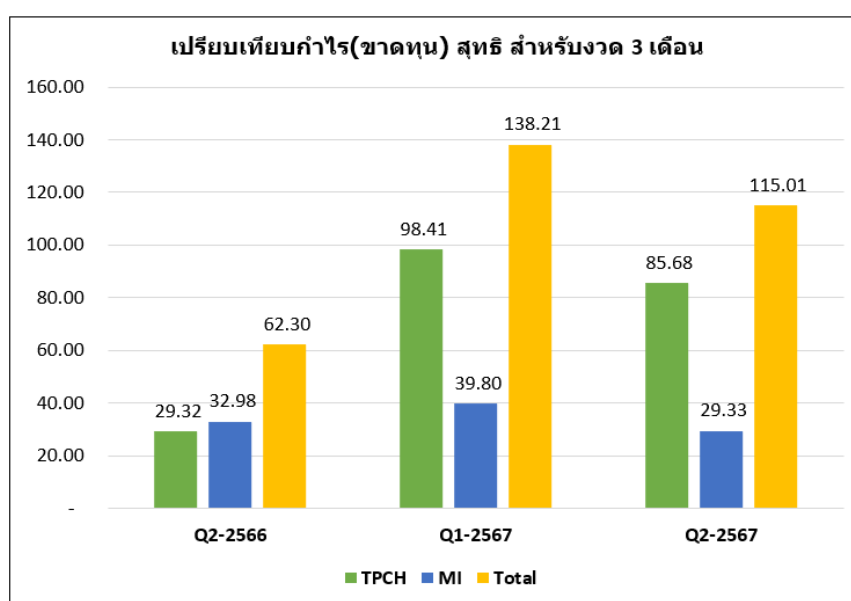
Overall Performance of the Company	Q2-2567	Q1-2567	QoQ	Q2-2566	YoY
Revenue from Electricity Sales	583.04	602.44	(3.2%)	659.39	(11.6%)
Cost of Electricity Sales	(378.79)	(399.17)	(5.1%)	(494.94)	(23.5%)
Gross Profit	204.25	203.27	0.5%	164.46	24.2%
Other Income	3.79	5.51	(31.2%)	8.76	(56.8%)
Profit Before Expenses	208.03	208.78	(0.4%)	173.21	20.1%
Administrative Expenses	(52.26)	(36.29)	44.0%	(46.52)	12.3%
Profit (Loss) from Operating Activities	155.78	172.49	(9.7%)	126.69	23.0%
Financial Income	18.54	13.74	34.9%	6.05	>100.0%
Financial Costs	(51.24)	(46.27)	10.7%	(63.19)	(18.9%)
Share of Profit (Loss) from Investment in Joint Ventures	(3.49)	5.71	(>100.0%)	(4.32)	(19.2%)
Total	(36.19)	(27.36)	32.3%	(61.47)	(41.1%)
Profit (Loss) Before Income Tax	119.59	145.13	(17.6%)	65.22	83.3%
Income Tax Expense (Income)	(4.58)	(4.13)	10.9%	(2.92)	56.7%
Profit (Loss) for the Period	115.01	141.00	(18.4%)	62.30	84.6%
Profit Allocation					
Attributable to Owners of the Parent	85.68	101.20	(15.3%)	29.32	>100.0%
Attributable to Non-Controlling Interests	29.33	39.80	(26.3%)	32.98	(11.1%)
Total Profit (Loss)	115.01	141.00	(18.4%)	62.30	84.6%
Basic Earnings (Loss) per Share (Baht)	0.21	0.25		0.073	

Consolidated Financial Statement

For Q2-2024, the company reported a net profit (loss) of 115.01 million baht, a decrease of 25.99 million baht or 18.4% from the previous quarter, and an increase of 52.71 million baht or 84.6% from the previous year.

The profit attributable to the company was 85.68 million baht, a decrease of 15.53 million baht or 15.3% from the previous quarter, and an increase of 56.36 million baht or more than 100.0% from the previous year. This performance is due to the following factors:

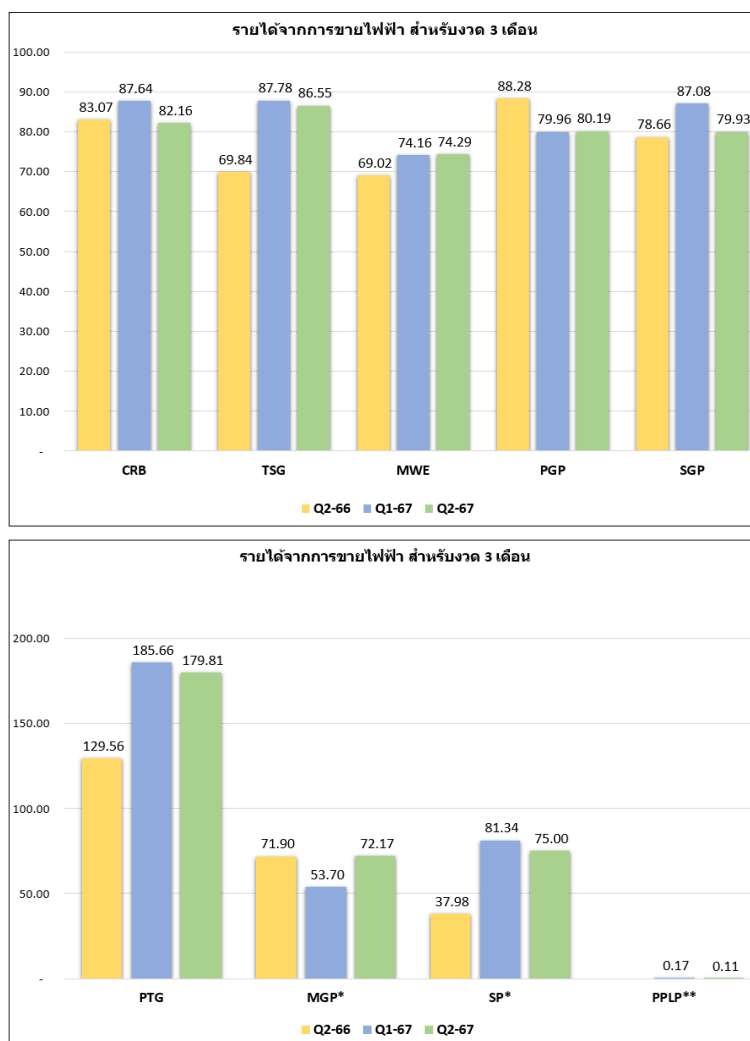
1. **Biomass Power Plants (CRB, TSG, MWE, PGP, SGP, PTG, MGP):** This group has relatively stable operational performance. The overall decline in profit was due to scheduled annual shutdowns and fuel costs. However, there was efficient electricity generation, resulting in higher sales compared to the previous quarter, particularly from the PTG projects. The PTG project managed to control fuel costs effectively, leading to increased profitability. On the other hand, the PGP and SGP projects underwent maintenance shutdowns, incurring machinery repair and maintenance costs, as well as upgrades to the electricity production control systems, which caused a decline in profit from the previous quarter.
2. **Waste-to-Energy Power Plant (SPNT):** The plant operated at an average capacity of 72%, with an unplanned shutdown lasting 19 days and 12 hours. The issues with machinery were addressed and improved to ensure continuous operation.
3. **Solar Power Projects (MKP):** Land preparation for construction has been completed, and structural work and fencing for the substation installation zone have commenced. An Engineering, Procurement, and Construction (EPC) contract has been signed with a Chinese contractor, but as the project is still in the early construction phase, no profit has been recorded yet.



Unit: MTHB

■ **Revenue from Energy Sales**

For Q2-2024, the company reported revenue from electricity sales of 583.04 million baht, a decrease of 19.40 million baht or 3.2% from the previous quarter. This decline was due to lower electricity production compared to the previous quarter. Specifically, the SGP project had a planned machinery maintenance shutdown lasting 10 days and 2 hours, the PGP project had an unplanned machinery maintenance shutdown lasting 8 days and 23 hours, and the PTG project had an unplanned machinery maintenance shutdown lasting 9 days and 6 hours. Additionally, revenue decreased by 76.36 million baht or 11.6% from the previous year due to the sale of investments in a subsidiary in October 2023, which affected electricity sales revenue, as shown in the image below.



Unit: MTHB

Notes * Recognized revenue from electricity sales based on the shareholding proportion as a joint venture.

** Recognized revenue from biogas sales as a subsidiary.

■ **Cost of Energy sales**

For Q2-2024, the company reported a cost of electricity sales amounting to 378.79 million baht, a decrease of 20.38 million baht or 5.1% from the previous quarter, due to reduced repair costs and better control over fuel prices compared to the previous quarter. This cost also decreased by 116.51 million baht or 23.5% from the previous year, following the sale of investments in a subsidiary in October 2023.

The cost of electricity sales consists of key expenses, including operation costs, management fees for operation, fuel costs, electricity costs within projects, insurance premiums, ash handling costs, depreciation, and materials and equipment expenses to enhance the efficiency of the main machinery assets. Fuel management is handled internally for all projects, except for the CRB and TSG projects.

Administration Cost

For Q2-2024, the company incurred administrative expenses of 52.26 million baht, an increase of 15.97 million baht or 44.0% from the previous quarter. This increase was primarily due to the PGP and SGP projects upgrading their electricity production control systems to improve operational efficiency, amounting to 10.41 million baht, as well as higher refinancing fees. Additionally, administrative expenses increased by 5.73 million baht or 12.3% compared to the previous year.

■ **Profit (Loss) from Investments in Joint Ventures**

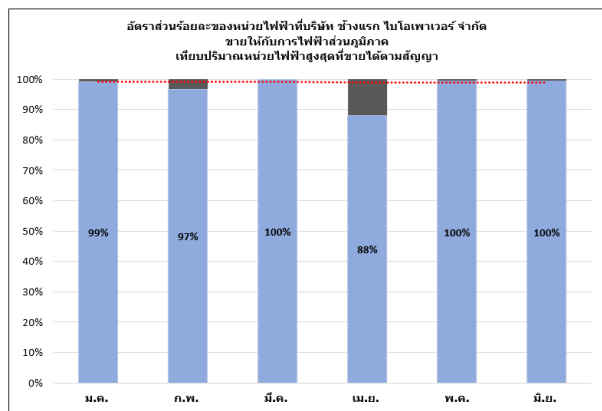
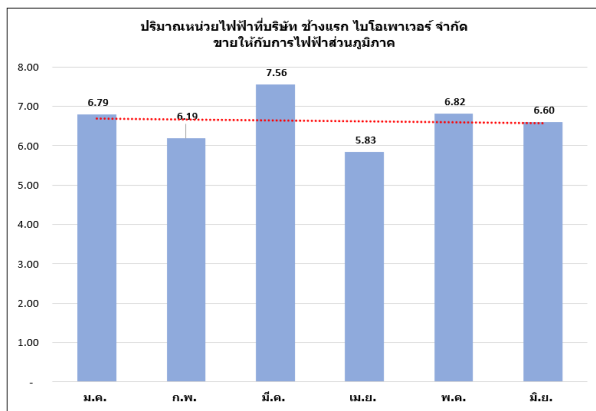
For Q2-2024, the company reported a loss from investments in joint ventures amounting to 3.49 million baht, a decrease of 8.66 million baht or more than 100.0% from the previous quarter, and a decrease of 0.83 million baht or 19.2% from the previous year.

This loss was due to the SPNT project operating at an average capacity of 72% during Q2/2024, with an unplanned shutdown lasting 19 days and 12 hours. The standalone performance of this project resulted in a loss compared to the previous quarter. However, ongoing development of the SPNS, SPNK, and several other waste-to-energy power plant projects led to losses in the consolidated financial statements. On the other hand, the MGP project operated at an average capacity of 94% and effectively controlled fuel costs, leading to increased profitability.

Performance of Electricity Sales for 8 Projects

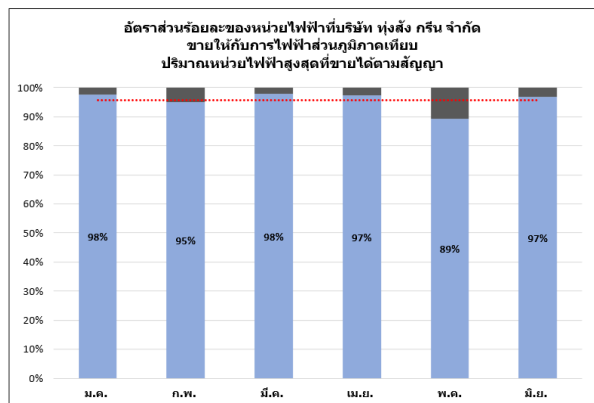
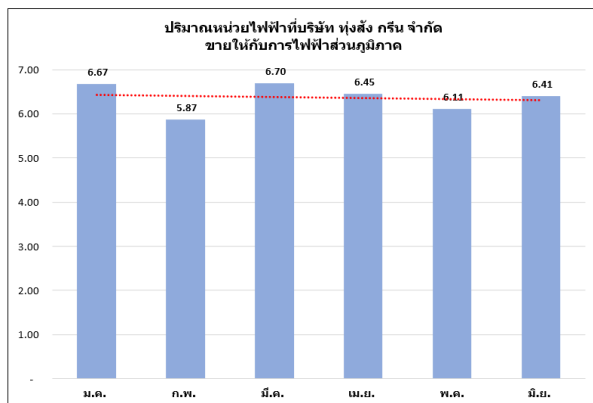
The CRB Power Plant has a contracted electricity sales volume of 9.2 megawatts under a Power Purchase Agreement. Revenue from electricity sales under the Feed-in Tariff (FiT) system is based on a net purchase price of 4.27 baht per unit sold.

In Q2-2024, the plant generated and sold 19,249,877 units of electricity. During this quarter, there was an unplanned shutdown lasting 1 hour, with an average electricity generation capacity of 96%.



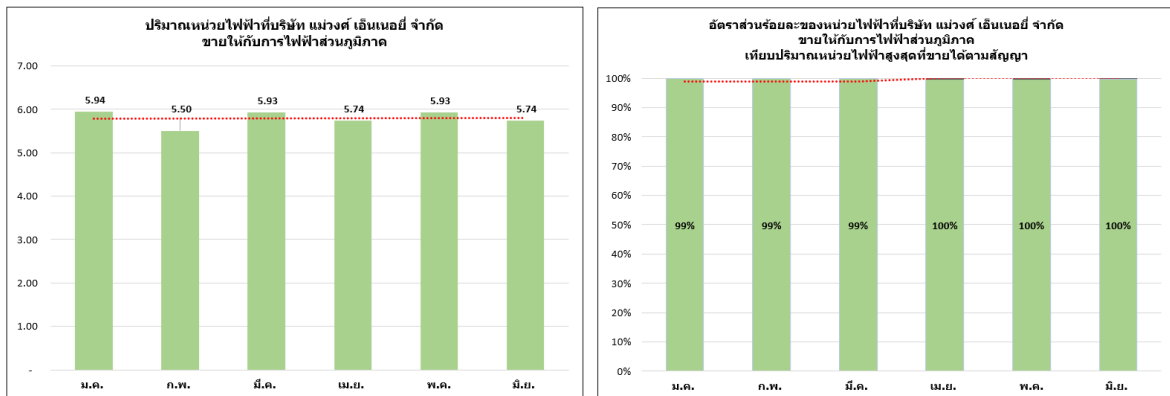
TSG Power Plant has a contracted electricity sales volume of 9.2 megawatts under a Power Purchase Agreement. Revenue from electricity sales under the Feed-in Tariff (FiT) system is based on a net purchase price of 4.56 baht per unit sold.

In Q2-2024, the plant generated and sold 18,970,930 units of electricity. During this quarter, there was an unplanned shutdown lasting 2 days and 16 hours, with an average electricity generation capacity of 94%.



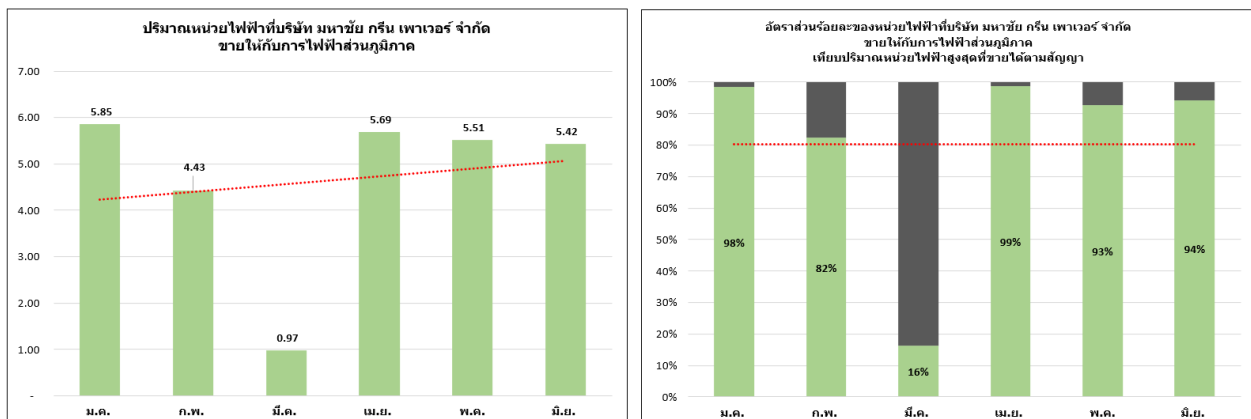
MWE Power Plant has a contracted electricity sales volume of 8.0 megawatts under a Power Purchase Agreement. Revenue from electricity sales under the Feed-in Tariff (FiT) system is based on a net purchase price of 4.27 baht per unit sold.

In Q2-2024, the plant generated and sold 17,405,634 units of electricity. During this quarter, there was an unplanned shutdown lasting 4 hours, with an average electricity generation capacity of 100%.



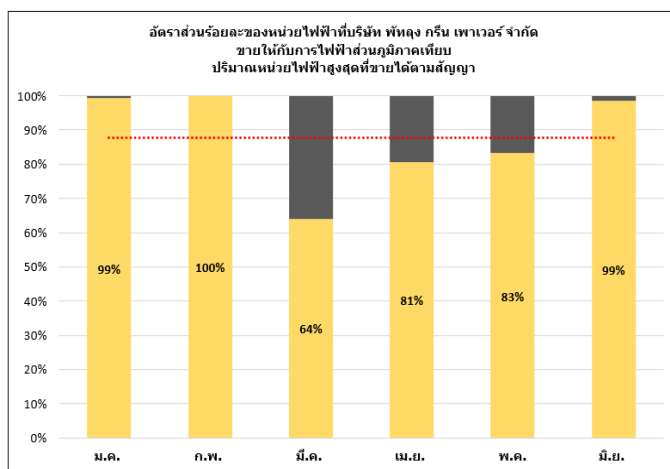
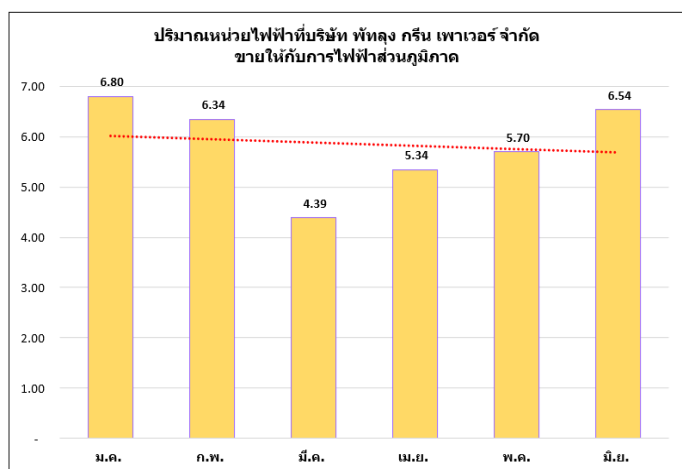
The MGP Power Plant has a contracted electricity sales volume of 8.0 megawatts under a Power Purchase Agreement. Revenue from electricity sales under the Feed-in Tariff (FiT) system is based on a net purchase price of 4.34 baht per unit sold.

In Q2-2024, the plant generated and sold 16,623,046 units of electricity. During this quarter, there was an unplanned shutdown lasting 3 days and 23 hours, with an average electricity generation capacity of 94%.



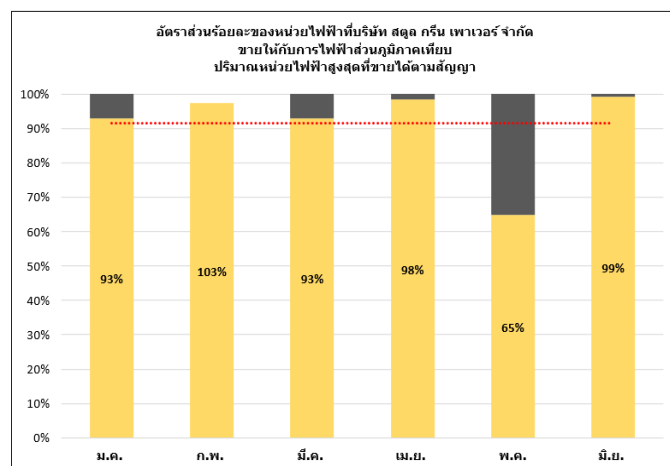
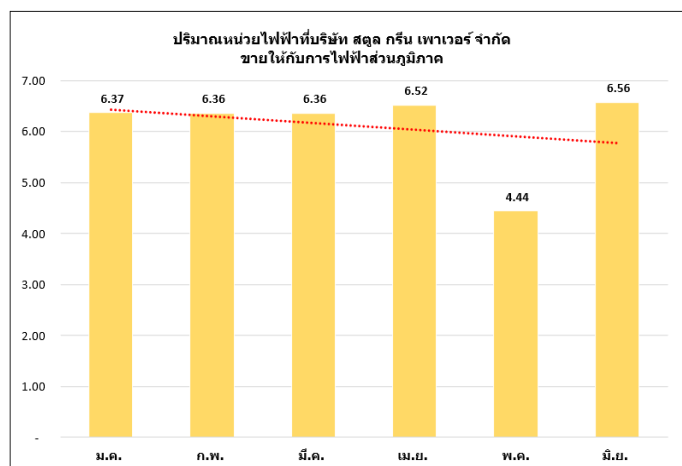
PGP Power Plant has a contracted electricity sales volume of 9.2 megawatts under a Power Purchase Agreement. Revenue from electricity sales under the Feed-in Tariff (FiT) system is based on a net purchase price of 4.56 baht per unit sold.

In Q2-2024, the plant generated and sold 17,577,288 units of electricity. During this quarter, there was a planned shutdown lasting 3 days and an unplanned shutdown lasting 5 days and 23 hours, with an average electricity generation capacity of 86%.



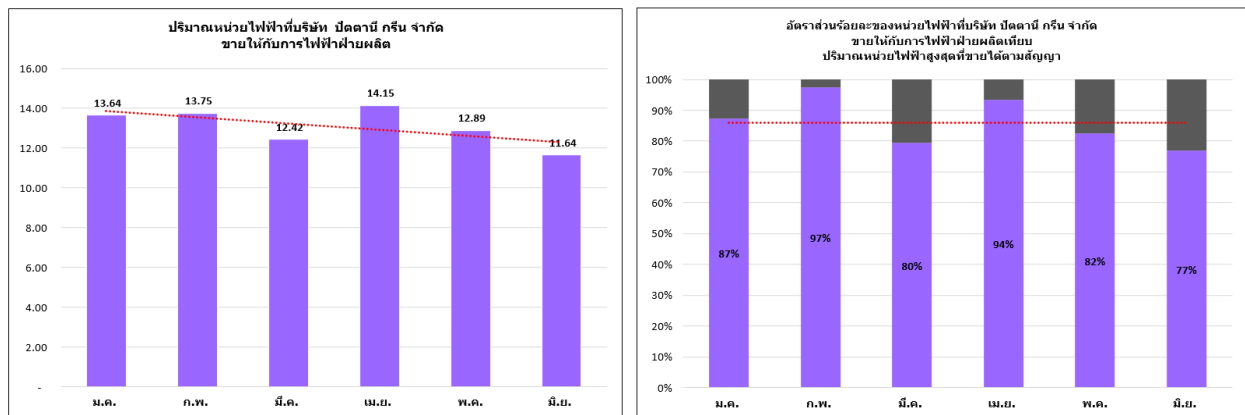
The SGP Power Plant has a contracted electricity sales volume of 9.2 megawatts under a Power Purchase Agreement. Revenue from electricity sales under the Feed-in Tariff (FiT) system is based on a net purchase price of 4.56 baht per unit sold.

In Q2-2024, the plant generated and sold 17,519,888 units of electricity. During this quarter, there was a planned shutdown lasting 10 days and 2 hours, and an unplanned shutdown lasting 3 hours, with an average electricity generation capacity of 86%.



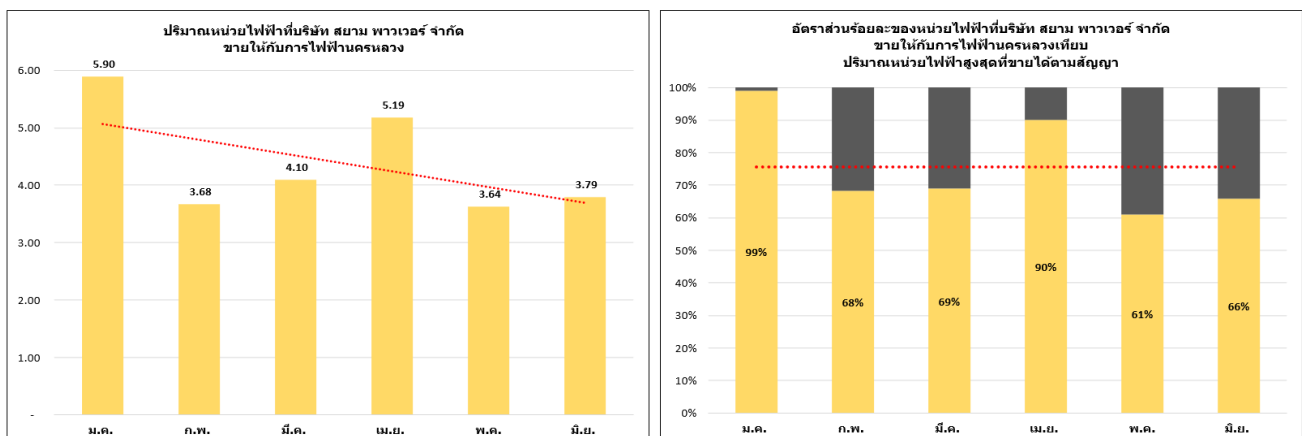
PTG Power Plant began commercial electricity sales on May 19, 2020, with a contracted electricity sales volume of 21 megawatts under a Power Purchase Agreement. Revenue from electricity sales under the Adder system is based on an average net purchase price of 4.65 baht per unit sold.

In Q2-2024, the plant generated and sold 38,678,825 units of electricity. During this quarter, there was an unplanned shutdown lasting 9 days and 6 hours, with an average electricity generation capacity of 84%.



The SP Power Plant began commercial electricity sales on December 30, 2021, with a contracted electricity sales volume of 8.0 megawatts under a Power Purchase Agreement. Revenue from electricity sales under the Feed-in Tariff (FiT) system is based on a net purchase price of 5.95 baht per unit sold.

In Q2-2024, the plant generated and sold 12,609,374 units of electricity. During this quarter, there was an unplanned shutdown lasting 22 days and 9 hours, with an average electricity generation capacity of 72%.



Business Outlook For 2024

The company continues to work diligently, focusing on the development, fuel management, and ongoing control of electricity production costs for power plants that are already selling electricity commercially. The company is also adjusting and changing strategies in response to current events to ensure flexibility in problem-solving, as well as ensuring sufficient fuel, managing administrative expenses, maintaining the efficiency of machinery, and monitoring pollution levels to comply with legal requirements.

Regarding projects under development, the company is investing in international projects, starting with countries like Laos, Cambodia, and Vietnam. In Laos, the company is developing a 100 MW solar power plant project, in which it holds a 40% stake, valued at 12.5 million USD. In Cambodia, there are two projects under development: 1) a 180-200 MW solar power plant, and 2) a 50-100 MW wind power plant. For the 100 MW solar power plant in Laos, the company has signed an EPC (Engineering, Procurement, and Construction) contract with a contractor, and land preparation for construction is 100% complete, with structural work beginning in Q1/2025.

For the 100 MW solar power plant, the price of solar panels has decreased, and the efficiency of electricity production has increased based on the project's projections. This will have a positive impact on construction costs and the amount of electricity that can be generated, leading to increased revenue from these benefits. Additionally, the company plans to register the project under international standards for Carbon Credits. Solar energy, as a clean energy source, is in demand in the carbon market, and owning this asset can increase the project's revenue and raise its international profile.

Regarding the development of municipal waste-to-energy projects, the company has invested in Siam Power Co., Ltd. (SP), holding a 50% stake, which is developing several projects. The SPNS project signed an official Power Purchase Agreement in March 2024, and the SPNK project signed an official Power Purchase Agreement in July 2024. These projects are currently in the contractor procurement phase and are expected to begin construction in Q3/2024. Additionally, there are SP4-SP7 waste-to-energy projects under development, all of which are community waste-to-energy projects in the VSPP format.

Furthermore, the company has registered all of its renewable energy projects for Carbon Credits, calculating the number of Carbon Credits earned annually, and has signed agreements to sell Carbon Credits to increase revenue for the company. For projects under development, the company has studied the registration of Carbon Credits under various standards from the beginning of the project evaluation to maximize the project's benefits. The value of Carbon Credit revenue was not considered in investment decisions due to the volatility of the platform and prices. However, the company is confident that Carbon Credits will add value to the company in the future, as global business trends increasingly focus on addressing climate change. For international projects, Carbon Credits will be registered under international standards to build confidence among both domestic and international investors interested in future project investments. These projects are exemplary in helping society while also generating revenue for the company to develop further projects.

Sincerely, for your kind information

TPC Power Holding PLC.

(Cherdsak Wattanavijitkul)

Managing Director

