



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



**Management's Discussion and Analysis (MD&A)**  
**For a Year Ended December 31, 2022**

No. TPCH-SC-001-02/2566

17 February 2022

**Subject: Management's Discussion and Analysis of a Year Ended December 31, 2022**

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

TPC Power Holding Public Company Limited and its subsidiaries are pleased to announce our performance regarding the financial statement for a year ended December 31, 2022.

TPC Power Holding Public Company Limited is a company that primarily invests in subsidiaries that operate renewable energy power plants. The company focuses on maximizing cost management by purchasing fuel from agricultural waste materials around power plant areas. We also promote the creation of local careers through the employment system by using personnel in the areas surrounding the power plants to ensure stability at levels appropriate to the electricity demand.

## Events in 2022

### ▪ Dividends Payment of 2022

On February 16, 2023, the Board of Directors' meeting of the Company No. 1/2023, the Board of Directors resolved to propose to the Annual General Meeting of Shareholders to consider and approve the dividend payment for the year 2022 at 0.183 baht per share, amounting to 73.42 million baht. The record date for determining the list of shareholders who are entitled to receive interim dividends (Record Date) is set for April 28, 2023, with the scheduled dividend payment date for shareholders on May 18, 2023. The dividend is calculated from net profits subject to corporate income tax. Individual shareholders can apply for tax credit in full. The company has allocated the reserve fund as required by law. The payment of such dividends is subject to approval from the Annual General Meeting of Shareholders of the Company on April 19, 2023.

### ▪ Dividends Payment from MWE to TPCH in 2022

On February 16, 2023, the Board of Directors' meeting of Maewong Energy Company Limited (MWE) resolved to propose to the 2023 Annual General Meeting of Shareholders on February 24, 2023 to consider certifying the annual financial statements with registered capital and 220 million baht in total legal reserve, 308.78 million baht in retained earnings, and to consider and approve the annual dividend payment from the company's retained earnings.

### ▪ Dividends Payment from PTG to TPCH in 2022

PTG project, installed capacity of 23 megawatts with selling capacity of 21 megawatts, is a small power producer (SPP) which receives electricity tariff under Adder scheme with an additional premium for the 3 southern border provinces. In 2022, the average electricity generating capacity was 88% with the average tariff rate at 4.59 baht per hour-kilowatt. Increased from the average tariff rate in 2021 at 3.99 baht per hour-kWh due to the average wholesale automatic electricity rate (Ft) continuously increasing throughout the year 2022. At present (January 2023), the average wholesale automatic electricity rate (Ft) at 1.29 baht per hour-kilowatt. As a result, PTG's performance in 2022 has increased in profits, resulting in dividends for the company totaling of 67.17 million baht.

### ▪ Register for Carbon Credit trading in the form of I-REC standard

The company has registered all 10 biomass power plants for carbon credits in the form of I-REC Standard. In 2022, the company has registered the renewable electricity produced in the year

and calculated as a credit (REC) of approximately 705,000 units. Some of the credit sales contracts have been signed with various private companies at the market value of carbon credits of between 32-40 baht per unit.

- **Affirms Company Rating at “BBB-” with “Stable” Outlook from Tris Rating**

The company's stand-alone credit profile remains “BBB”, reflecting the predictable cash flows from its long-term PPAs and expectations that the company will resolve technical issues to restore the efficiency of the power plant to return to its original performance. The “stable” outlook also reflects the expectation that the overall operating performance of the company's power plants will improve, which will help reduce leverage and increase cash flow for the company.

- **ESG100**

The company was selected for the ESG100 (Environmental, Social and Governance) in 2021 for sixth consecutive year since 2016. THAIPAT selected 100 companies which have outstanding sustainability performance to construct the ESG100 list as a starting group of the 100 publicly listed companies addressing the growing demand on sustainable investments according to the GISR (Global Initiative for Sustainability Ratings).

- **The project under the process of testing the system for commercial electricity distribution.**

Pracharat Biomass Maelan Power Plant (PBM) located in Mae Lan District, Pattani Province has a project progress of 90.65%. Pracharat Biomass Bannang Sata Power Plant (PBB) located in Bannang Sata District, Yala Province has a project progress of 95.50%. Each project has an offering capacity of 2.85 megawatts and a tariff rate of 5.14 baht per unit of electricity FiT per unit.

## Overview of Financial Performance of the Company

Unit : Million THB

Separated Financial Statement	Q4-2022	Q3-2022	QoQ	2022	2021	YoY
<b>Revenue</b>						
Dividend Revenue	100.75	73.32	39.3%	277.48	480.30	(42.2%)5
Other revenue	1.40	0.91	53.6%	3.62	1.92	87.9%%
Finance revenue	10.37	5.78	6.6%	60.25	23.58	>100.0%
<b>Total Revenue</b>	<b>118.81</b>	<b>88.86</b>	<b>33.7%</b>	<b>341.35</b>	<b>505.80</b>	<b>(32.5%)</b>
<b>Expense</b>						
Administrative Expense	(25.51)	(21.46)	18.9%	(87.58)	(79.33)	10.4%
Finance cost	(18.67)	(18.71)	(0.3%)	(75.11)	(29.74)	>100.0%
<b>Total Expense</b>	<b>(44.18)</b>	<b>(40.17)</b>	<b>10.0%</b>	<b>(162.69)</b>	<b>(109.07)</b>	<b>49.1%</b>
<b>Yearly Net profit (loss)</b>	<b>74.63</b>	<b>48.69</b>	<b>53.3%</b>	<b>178.66</b>	<b>396.73</b>	<b>(55.0%)</b>
Other net profit (loss)	3.92	0.00	-	3.92	0.00	-
Net profit (loss)	78.55	48.69	61.3%	182.58	369.73	(54.0%)
<b>Earnings (loss) per share</b>	<b>0.19</b>	<b>0.12</b>		<b>0.45</b>	<b>0.99</b>	

### Separated Financial Statement

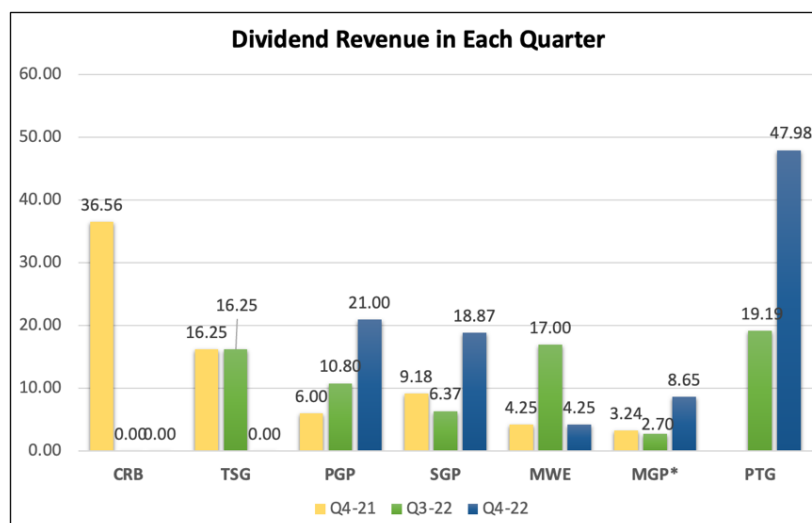
In Q4-2022, the company had a total net profit of 74.63 million THB, increased 25.95 million THB or 53.3% from previous quarter due to the following reasons:

#### ■ Dividend Revenue

The company had a total dividend revenue of 100.75 million THB, increased 28.43 million THB or 39.3% from previous quarter.

PGP dividend payment had increased by 10.20 million THB, SGP dividend had increased by 12.49 million THB, MGP dividend had increased by 5.95 million THB, and PTG dividend had increased by 28.79 Million THB

which is shown in the picture below.



- **Other Revenue**

The company had other revenue of 1.40million THB, increased by 0.49 million THB or 53.6% from previous quarter, which is an operating income in the subsidiaries and I-RECs trading.

- **Finance Revenue**

The company had finance revenue of 16.67 million THB, increased by 1.03 million THB or 6.6% from previous quarter, which is from a short-term loan interest of subsidiaries and related parties with an interest rate is following the rate of loan agreement the company has received with the bank.

- **Administrative Expense**

The company had the expense of 25.51 million THB increased by 4.05 million THB or 18.9%, from the previous quarter, which most of the expenses goes to employees' wages/salaries, Board, Manager, Utilities, other administrative expense and managing expense, consultant, public relations.

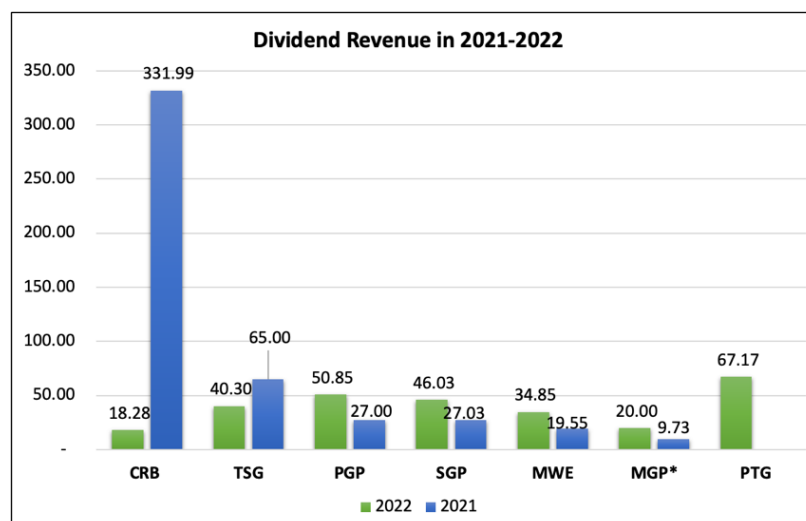
- **Financial Cost**

The Company had a finance cost of 18.67 million THB, increased by 1.05 million THB or 0,3% from previous quarter which is from interest of the debenture received at 4.5% interest rate and interest from bank loan.

**For year 2022 compared to 2021** The company had net profit (loss) of 178.66 million THB, decreased 218.07 million THB or 55% due to the following reasons:

- **Dividend income**

The company had a dividend income of 277.48 million THB, decreased 202.82 million THB or 42.2% from the previous year due to the year 2022, because in 2021 a special dividend was paid from the CRB project in the amount of 263.25 million baht. The interim dividend income of CRB TSG PGP SGP MWE MGP\* and PTG projects as shown in the picture below.



- **Other income**

The company had 3.62 million THB of other income, increased 1.69 million THB or 87.9% from previous year which is from managing its subsidiaries and from return on investment and I-RECs trading.

- **Finance income**

The company had finance income of 60.25 million THB, increased 36.66 million THB or more than 100% from previous year which is interest income from short-term loans in subsidiaries and related parties as working capitals. The short-term loan for projects under construction during the reviewing period for the credit line at an interest rate of loan agreement the company has received with the bank.

- **Administrative expense**

The company had administrative expense of 87.58 million THB, increased 8.24 million THB or 10.4% from previous year due to the board of director, salary and employee payroll expenses, Management, consultant, representative, I-RECs registration cost and other activities

- **Finance cost**

The company had finance cost of 75.11 million THB, increased 45.37 million THB or more than 100% from previous year which were from a short-term loan interest with the rate of 4.5% per annual and interest from bank loan

## Consolidated Company Performance

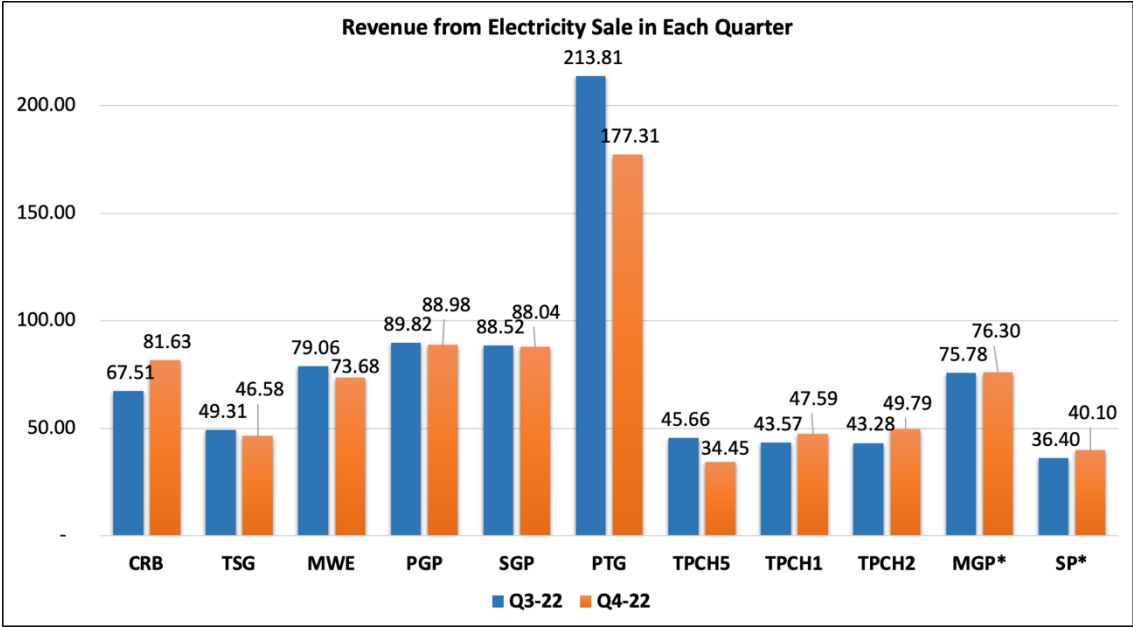
Consolidated Financial Statement	Q4-2022	Q3-2022	QoQ	2022	2021	YoY
Revenue from electricity sales	688.05	720.54	(4.5%)	2,674.71	2,470.39	7.2%
Cost of electricity sales	(525.99)	(548.57)	(4.1%)	(2,073.46)	(1,886.30)	9.9%
<b>Gross profit</b>	162.06	171.97	(5.8%)	574.25	584.09	(1.7%)
Other revenue	2.26	56.47	(96.0%)	91.96	1.94	>100.0%
<b>Profit before expense</b>	164.32	228.43	(28.1%)	666.21	586.03	13.7%
Administrative expense	(40.26)	(37.83)	6.4%	(140.86)	(132.95)	5.9%
Profit (loss) from operation	124.70	190.60	(34.9%)	525.35	453.08	16.0%
Finance revenue	5.70	4.59	24.2%	18.60	5.55	>100%
Financial cost	(51.52)	(48.79)	5.6%	(199.82)	(162.25)	23.2
Profit (loss) from investment in associates	(10.90)	(0.55)	>100.0%	(37.82)	1.47	(>100%)
total	(56.72)	(44.76)	26.7%	(219.04)	(155.23)	41.1%
<b>Profit (loss) before tax</b>	67.35	145.84	(53.8%)	306.31	297.84	2.8%
Income tax expense	(5.42)	(2.08)	>100%	(13.61)	(10.72)	26.9%
<b>Net profit (loss)</b>	61.93	143.76	(56.9%)	292.70	285.12	1.9%
<b>Other net profit (loss)</b>	6.46	0.00	-	6.46	0.00	-
<b>Total net profit (loss)</b>	68.40	143.76	(52.4%)	299.16	285.12	4.2%
<b>Profit (loss) per standard share</b>	0.08	0.26		0.43	0.34	
<b>Profit attribution</b>						
Owner of the company	33.61	104.16	(67.7%)	173.13	135.40	27.9%
Non-controlling interests	28.32	39.60	(28.5%)	119.57	151.72	(21.2%)
<b>Total net profit (loss)</b>	61.93	39.60	(56.9%)	292.70	287.12	1.9%
<b>Profit attributable to</b>						
Company's owner	39.82	104.16	61.8%)	179.34	135.40	32.4%
Non-controlling interests	28.58	39.60	(27.8%)	119.82	151.72	(21.0%)
<b>Total net profit (loss)</b>	68.40	143.76	(52.4%)	299.16	287.12	4.2%



**Consolidated Financial Statement**

■ **Revenue from Electricity Sale**

For 3 months of Q4-2022, The company had a total revenue of 688.05 million THB, decreased by 32.49 million THB from previous quarter due to planned shutdown of PTG for 19 days, TSG had planned shutdown for 26 days which made the overall generation decreased from the previous quarter. TPCH5 had 10 days of maintenance shutdown. Details as followed:



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

■ **Cost of Electricity Sales**

The cost of electricity Sales was 525.99 million THB, decreased by 22.59 million THB or 4.1% from the previous quarter. The cost consists of operation management fees, fuel costs, electricity costs, insurance premiums, ash handling costs, and equipment costs to strengthen the power plants and fuel management for the project is self-managed except CRB and TSG, details as followed:

Cost of Electricity Sales (MTHB)	Q4-2022										
	CRB	TSG	MWE	PGP	SGP	PTG	TPCH1	TPCH2	TPCH5	Total	%
Operation and Fuel cost	37.51	19.28	45.07	49.51	48.54	71.87	35.74	34.67	23.97	366.16	69.61
Depreciation and Amortization	7.85	7.41	6.94	7.80	8.40	22.48	9.03	9.09	7.52	86.52	16.45
Maintenance Cost	2.47	26.97	5.00	0.73	0.77	9.54	2.20	1.97	4.09	53.74	10.22
Electricity Cost	0.26	1.00	1.02	0.97	1.15	1.39	0.86	0.66	1.30	8.61	1.64
Others (Insurance and ash handling)	1.54	0.61	1.24	0.56	0.55	3.64	0.95	0.94	0.91	10.95	2.08
<b>Total Cost</b>	<b>49.62</b>	<b>55.27</b>	<b>59.27</b>	<b>59.57</b>	<b>59.42</b>	<b>108.92</b>	<b>48.78</b>	<b>47.33</b>	<b>37.80</b>	<b>525.99</b>	<b>100.00</b>
<b>Margin of COGS</b>											<b>76.45</b>

Cost of Electricity Sales (MTHB)	Q3-2022										
	CRB	TSG	MWE	PGP	SGP	PTG	TPCH1	TPCH2	TPCH5	Total	%
Operation and Fuel cost	30.94	20.31	46.39	49.01	49.37	85.27	34.11	31.70	33.20	380.31	69.33
Depreciation and Amortization	7.86	7.42	6.89	7.78	8.74	22.12	9.02	8.99	7.52	86.36	15.74
Maintenance Cost	29.69	19.52	3.20	0.81	1.56	3.58	2.18	2.36	1.87	64.77	11.81
Electricity Cost	0.29	0.96	0.79	0.94	1.09	0.21	0.86	0.81	0.87	6.83	1.24
Others (Insurance and ash handling)	1.09	0.89	1.23	0.63	0.70	3.68	0.78	0.69	0.61	10.30	1.88
<b>Total Cost</b>	<b>69.88</b>	<b>49.10</b>	<b>58.49</b>	<b>59.18</b>	<b>61.47</b>	<b>114.87</b>	<b>46.95</b>	<b>44.55</b>	<b>44.08</b>	<b>548.57</b>	<b>100.00</b>
<b>Margin of COGS</b>											<b>76.13</b>

### Other revenue

The company had other revenue of 2.26 million THB, decreased 54.21 million THB or 96.0% from the previous quarter which were from company management cost, revenue from subsidiaries and metal scraps sales.

#### ■ Administrative Expenses

The company and its subsidiaries had a total of administrative expenses of 40.26 million THB, decreased by 2.42 million THB or 6.4% from previous quarter. The main cost are employees' wages and salaries, Board, Utilities, Power plant Capital contribution, depreciation, and interest.

#### ■ Finance Revenue

The company had finance revenue of 5.70 million THB, increased by 1.11 million THB or 24.2% from previous quarter due to a short-term loan for subsidiaries and related parties with an interest rate per annual following the rate of loan agreement the company has received with the bank.

#### ■ Finance Cost

The company has finance cost of 51.52 million THB, increased by 2.72 million THB or 5.6% from the previous quarter which were from the back interest increased.

#### ■ Profit (loss) from investments in joint ventures

A total loss from investments in joint ventures was 10.90 million THB, increased by 10.35 million THB or more than 100% from the previous quarter. Details as follows:

- The share of profit from 46 percent in **MGP** was 10.53 million THB, decreased 1.50 million THB. In Q4-2022, it had a maintenance shutdown for 1 day 18 hours.
- The share of loss from 33 percent in **PA Waste and Energy Company Limited (PA)** from this period was 0.01 million THB.
- The share of loss from 50 percent in **SP** was 21.44 million THB increased by 5.56 million THB from the previous quarter, due to test-run and generator configuration that has made SP can generate more energy than the previous quarter. Alternative fuels were purchased for system testing which cost higher fuel consumption than normal. Other costs consist of employee salaries, depreciation, insurance premiums, electricity, the cost of materials and equipment.

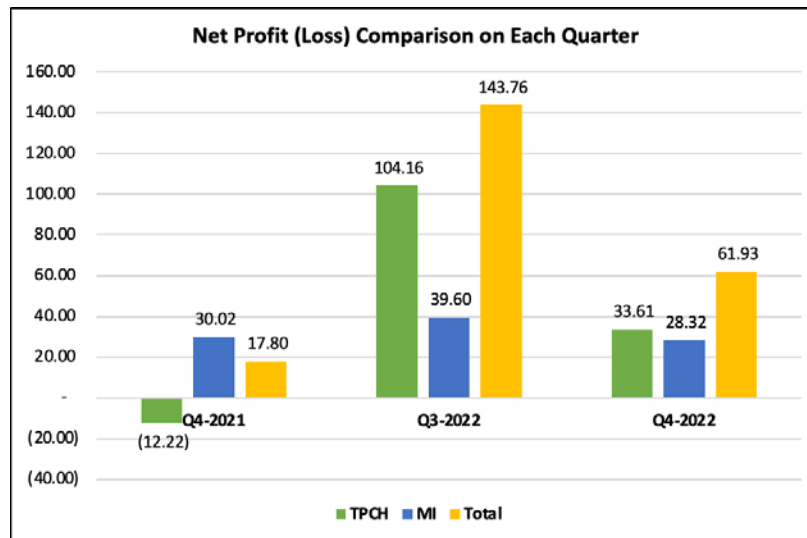
■ **Total Net Profit (Loss)**

The Company had total net profit of 61.93 million THB, decreased by 81.83 million THB or 56.9% from the previous quarter, which attributed to the company of 33.61 million THB net loss due to following reason.

- **5 Projects (CRB, TSG, MWE, PGP, SGP) Stable Performance** The overall stable in profits was due to a higher maintenance shutdown and fluctuation of fuel price, which the company has continually managed the fuel costs utmost.
  - CRB has generated energy more than the previous year due to the year 2021 had maintenance shutdown.
  - TSG had planned maintenance shutdown 24 days and unplanned shutdown 5 days 6 which made TSG have no profit compared to the previous quarter.
  - MWE had 5 days 5 hours of planned shutdown and 1 day 14 hours of unplanned shutdown which had made lower generation than the previous quarter.
- **3 border provinces (PTG, TPCH5, TPCH1, TPCH2)**
  - PTG has a scheduled maintenance shutdown of 19 days and an unplanned Shutdown of 2 days and 17 hours in Q4-2022, with an average electricity

generating rate of 88%. Even though the profit was less than the previous quarter, it was still profitable to pay interim dividends.

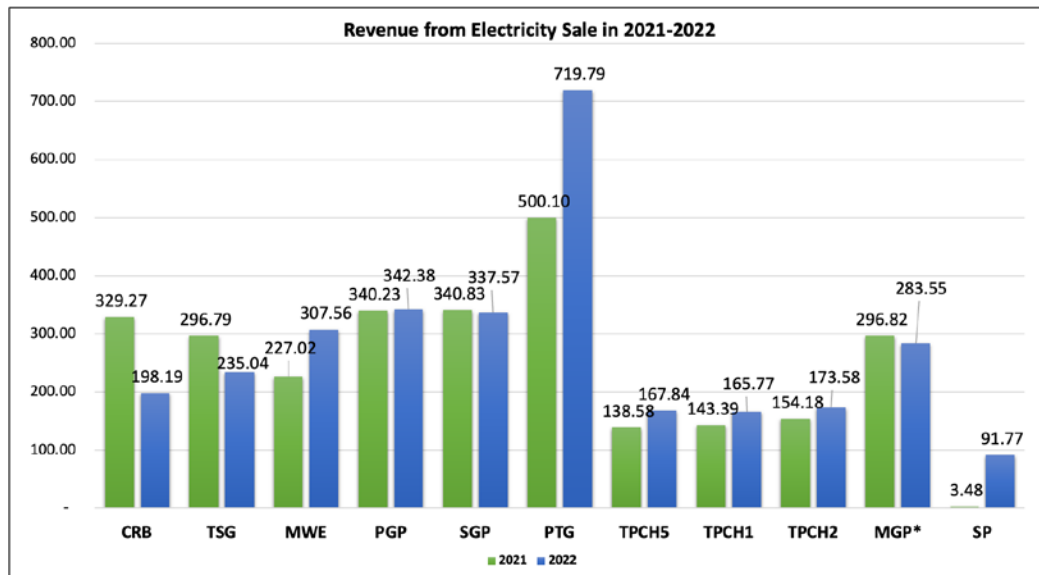
- **ECO (PBM, PBB)** The loss is recognized according to the shareholding proportion because the projects are under construction. PBM has reached 90.31% and PBB of 91.70% of construction.
- **Joint Ventures (MGP, SP, PA)** had similar performance almost every quarter but this quarter lost more than the previous quarter.



**For year 2022 compared to 2021**, The company had net profit(loss) of 292.70 million THB, increased 5.58 million THB or 1.9% with reasons below:

- **Electricity sales income**

The company had an electricity sales income of 2,647.71 million THB, increased 177.31 million THB or 7.2% from last year due to The PTG project can now generate more electricity, and the average wholesale automatic electricity tariff has been raised. The TPCH1, TPCH2, and TPCH5 projects were able to operate more than last year, and the MWE project was able to resume full operation. following the generator failure last year.



■ **Cost from sales of electricity.**

The cost from sales of electricity was 2,073.46 million THB, increased by 187.15 million THB or 9.9% from the previous year. The cost consists of operation management fees, fuel costs, electricity costs, insurance premiums, ash handling costs, and equipment costs in order to strengthen the power plants.

Cost of Electricity Sales (MTHB)	2022										Total	%
	CRB	TSG	MWE	PGP	SGP	PTG	TPCH1	TPCH2	TPCH5			
Operation and Fuel cost	96.05	96.90	179.51	195.34	186.04	328.05	133.50	135.16	114.60	1,465.16	70.66	
Depreciation and Amortization	30.80	29.28	27.59	31.54	34.37	87.57	35.61	35.63	29.81	342.20	16.50	
Maintenance Cost	63.95	50.11	12.01	11.76	12.51	20.89	7.27	8.18	9.08	195.75	9.44	
Electricity Cost	1.64	3.69	3.28	4.11	4.60	3.20	3.36	2.73	3.92	30.54	1.47	
Others (Insurance and ash handling)	3.85	3.15	4.80	2.17	2.30	14.07	3.39	3.27	2.81	39.80	1.92	
<b>Total Cost</b>	<b>196.29</b>	<b>183.13</b>	<b>227.19</b>	<b>244.92</b>	<b>239.82</b>	<b>453.78</b>	<b>183.12</b>	<b>184.98</b>	<b>160.22</b>	<b>2,073.45</b>	<b>100.00</b>	
<b>Margin of COGS</b>											<b>78.31</b>	

Cost of Electricity Sales (MTHB)	2021										Total	%
	CRB	TSG	MWE	PGP	SGP	PTG	TPCH1	TPCH2	TPCH5			
Operation and Fuel cost	145.93	115.15	121.72	191.50	198.10	287.34	126.61	123.17	96.70	1,406.21	74.55	
Depreciation and Amortization	28.69	29.57	28.21	32.93	34.06	83.61	34.77	29.91	28.38	330.13	17.50	
Maintenance Cost	4.87	7.78	20.12	9.38	9.43	14.70	7.49	5.92	5.81	85.49	4.53	
Electricity Cost	0.61	3.11	3.03	3.80	4.35	6.07	3.78	3.24	4.77	32.75	1.74	
Others (Insurance and ash handling)	4.19	3.40	1.86	3.64	2.66	11.34	1.62	1.61	1.41	31.72	1.68	
<b>Total Cost</b>	<b>184.29</b>	<b>159.00</b>	<b>174.94</b>	<b>241.25</b>	<b>248.60</b>	<b>403.05</b>	<b>174.27</b>	<b>163.85</b>	<b>137.06</b>	<b>1,886.30</b>	<b>100.00</b>	
<b>Margin of COGS</b>											<b>76.36</b>	

- CRB repairing costs have risen due to the need to repair generator malfunctions in order to resume normal operation, the TSG project has ceased repairing the machines and improve the wood chipping machine so that it can be used more efficiently As a result, the cost of repairs increases.
- The MWE and PTG projects have higher electricity sales costs because the electricity generating capacity in 2022 is more efficient than in 2021.
- **Other income**

The company has other income of 91.96 million THB, increased by 90.02 million THB or more than 100% from the previous year due to due to receiving compensation for CRB and MWE project business interruption damages and machinery interruption.

- **Administrative expense**

The company had administrative expense of 140.86 million THB, increased by 7.91 million THB or 5.9% from previous year due to having the operating expenses such as salary for employees, utility expenses, contribution to the fund around the power plant, depreciation, other operating expenses, administrative expenses, and expenses related to the issuance of debenture.

- **Finance income**

The company had finance income of 18.60 million THB, increased 13.05 million THB or more than 100% from previous quarter due to the interest income from short-term loans in subsidiaries and related parties that is used for business working capital. and the interest rate does not exceed the loan agreement with the receiving company's bank.

- **Financial cost**

The company had financial cost of 199.82 million THB, increased 37.57 million THB or 23.2% from previous year due to the financial cost of debenture interest payments that must be made every three months, as well as interest payments on bank loan agreements.

- **Profit (loss) from joint ventures investment**

The company has profit (loss) from joint venture investment of 37.82 million THB, increased by 30.29 million THB, or more than 100% from previous year, details as follows:

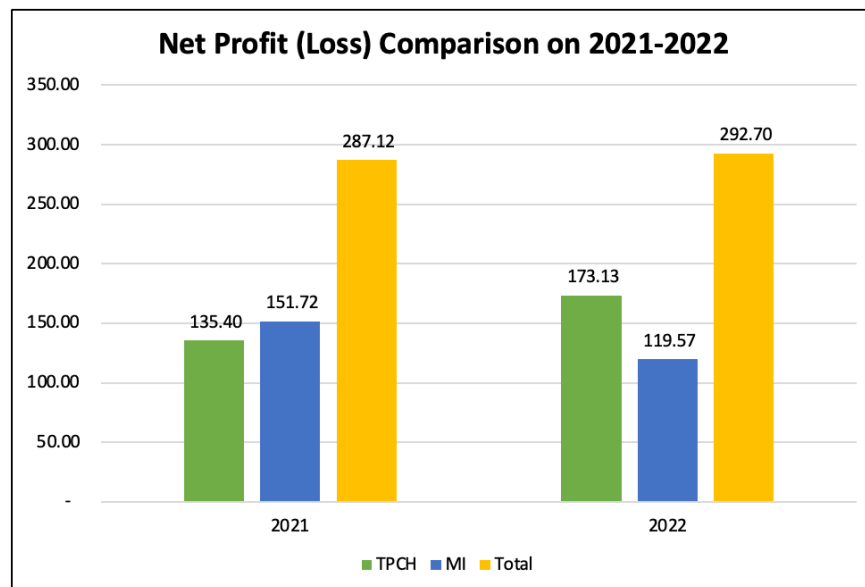
- MGP with 46% shareholding has profit of 31.89 million THB, decreased by 2.65 million THB from the previous year due to the maintenance shutdown this year of 21 days 15 hours of planned shutdown and 6 days 10 hours unplanned shutdown.
- PA waste and Energy (SP) with 33% shareholding has income of 0.03 million THB increased by 0.05 million THB from the previous year due to the machine renting income.
- Siam Power (SP) with 50% of shareholding has loss of 69.74 million THB, increased by 3.65 million THB from the previous year due to currently being tuned in order to operate the power generation efficiently, and there are numerous projects in the works.

■ **Net profit(loss)**

The company has net profit of 292.70 million THB increased by 5.58 million THB or 1.9% with profit attributed to the company of 173.13 million THB increased by 37.73 million THB or 27.9% from last year, details as follows:

- **CRB TSG MWE PGP SGP**, these projects have stable operation the loss of profit is from annual maintenance shutdown and an increase on fuel cost. **CRB** had 124 days 7 hours of a generator breakdown and 5 days unplanned shutdown. It had received compensation for business interruption and machinery disruption; therefore, the operating result was less than the previous year.
- **TSG** had maintenance shutdown to improve the wood chopping machine so that it could be used effectively. A planned shutdown of 41 days and an unplanned shutdown of 14 days and 11 hours occurred in 2022, resulting in a lower turnover than the previous year.
- **MWE PGP and SGP** managed to run more efficiently than the previous year, and MWE was compensated for business interruption by an insurance.
- **PTG TPCH1 TPCH 2 TPCH5** The PTG project had increased electricity generation by an average of 88% throughout the year, including an increase in the average wholesale automatic electricity rate (Ft) to 0.7996 baht/kWh during October-December. And capable of paying a continuous dividend of 67.17 million baht.

- **TPCH1, TPCH2, and TPCH5** projects had maintenance shutdown to improve the machine's efficiency. The fuel consumption rate is lower, with the TPCH1 project averaging 61%, the TPCH2 project averaging 65%, and the TPCH5 project averaging 93%.
- **ECO group (PBM PBB)** is currently under construction. The PBM PBB project is 90.31% and 91.70% complete, respectively, and is in the system testing phase in order to COD
- **MGP SP PA** Due to the annual maintenance shutdown, the MGP project's profit in 2022 decreased from the previous year. as a result of which repair costs and the number of operation days required to produce electricity is reduced However, when compared to the cost of fuel, Fuel costs can be kept under control better than the previous year. The SP project is being renovated and repair the machine so that the power generation machine can be continuously generate power. The average operating rate from October to December 2022 is 39%. Furthermore, many waste-to-energy projects are being developed at no profit.



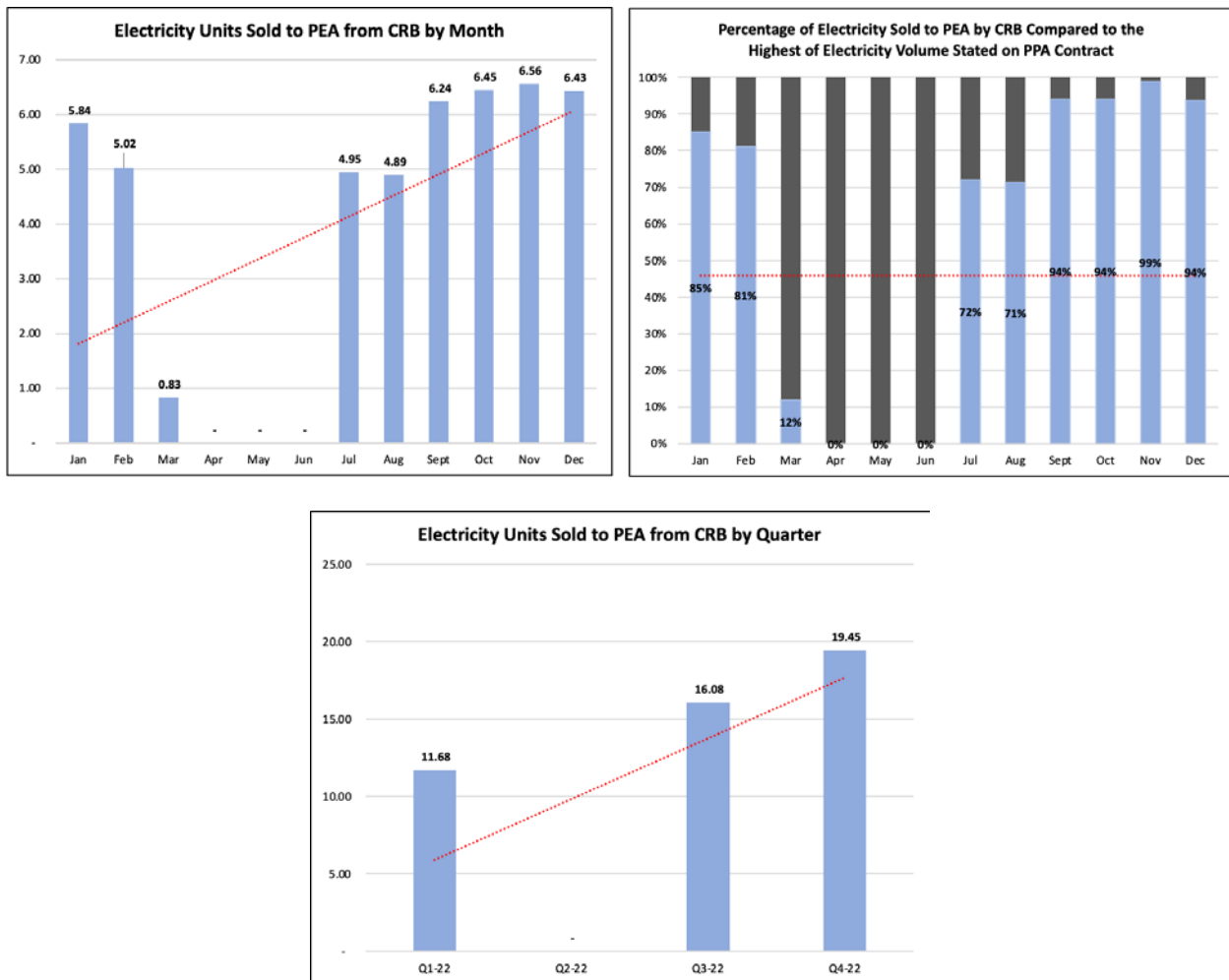


## Performance of Power plants under operations (11 plants in total)

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 4.20 baht per unit.

In Q4-2022, CRB generated and sold 19,446,499 units with 14 hours of unplanned shutdown.

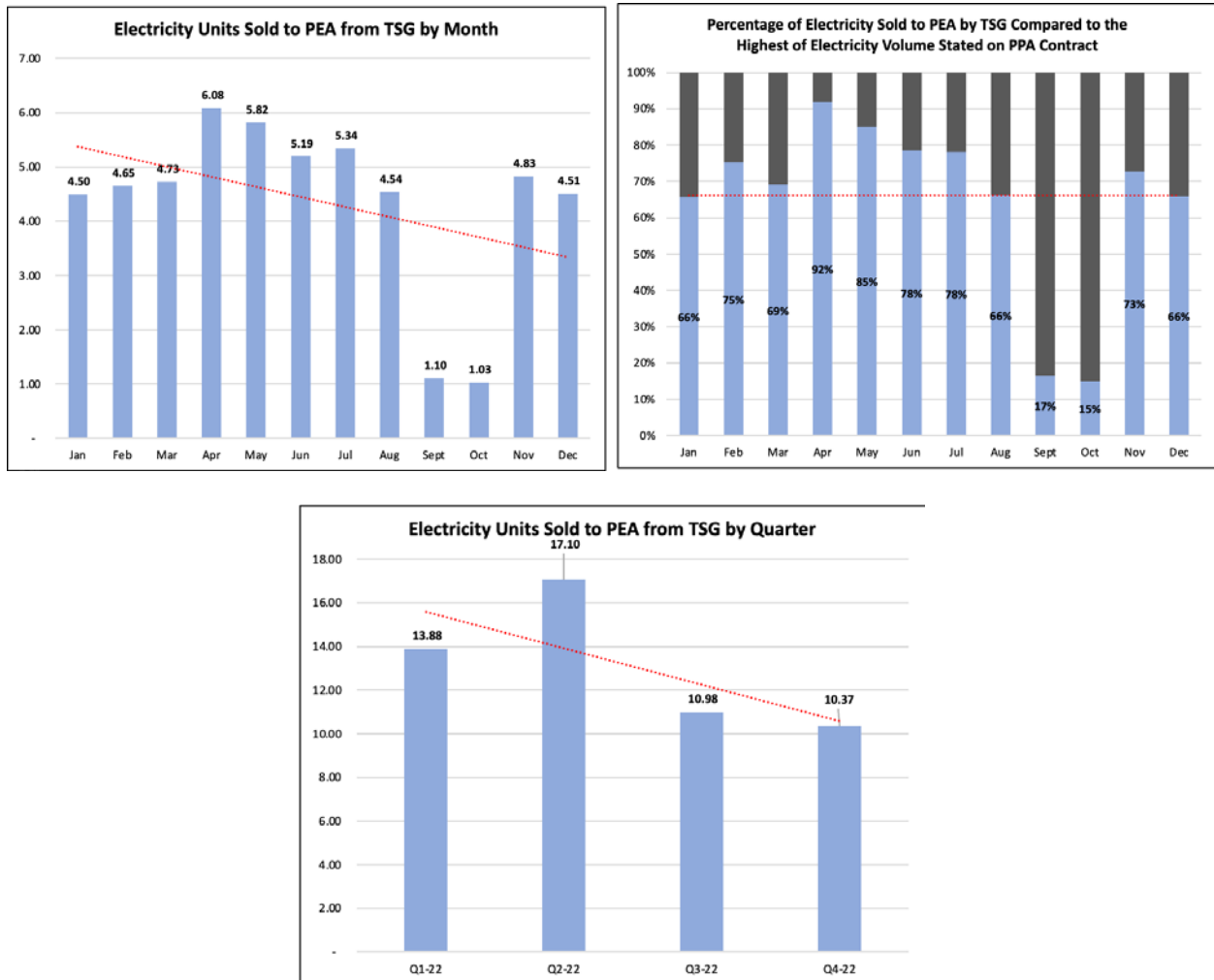
In 2022, CRB has generated 47,213,293 units with 3 days 3 hours of unplanned shutdown and 124 days 7 hours of planned shutdown. Details as follows:



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 4.49 baht per unit.

In Q4-2022, TSG generated and sold 10,368,869 units with 4 days 5 days 6 hours of unplanned shutdown and 24 days of planned shutdown.

In 2022, TSG has generated 52,327,946 units with 14 days 11 hours of unplanned shutdown and 41 days of unplanned shutdown. Details as follows:



**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 4.49 baht per unit.

In Q4-2022, MWE generated and sold 16,403,920 units with 1 day 14 hours of unplanned shutdown and 5 days 5 hours of planned shutdown.

In 2022, MWE has generated 68,476,521 units with 3 days 2 hours of unplanned shutdown and 5 days 5 hours of planned shutdown. Details as follows:



**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 4.49 baht per unit.

In Q4-2022, MGP generated and sold 16,986,263 units with 21 hours of unplanned shutdown and 15 hours of planned shutdown.

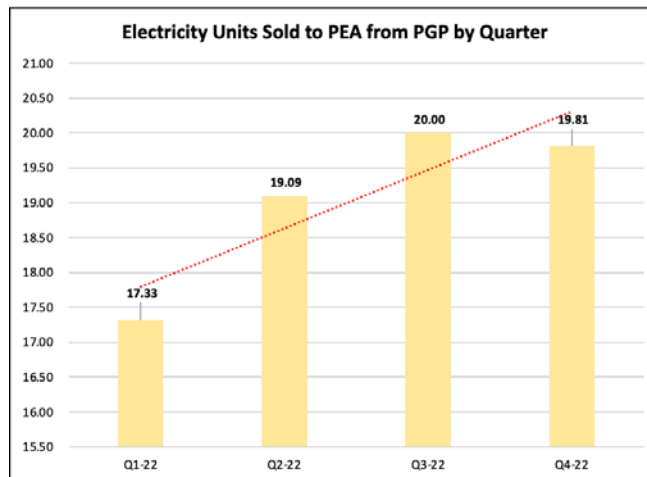
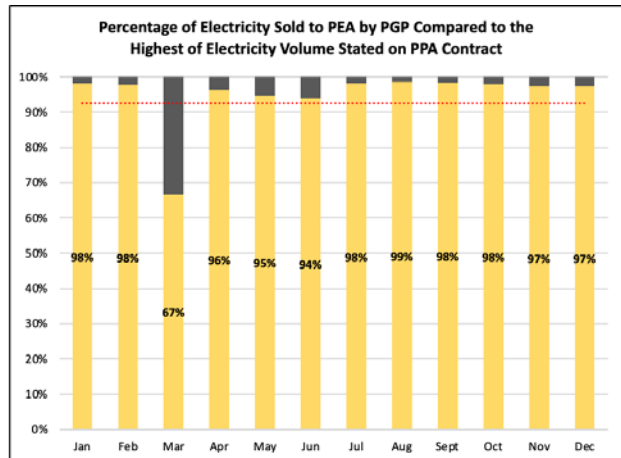
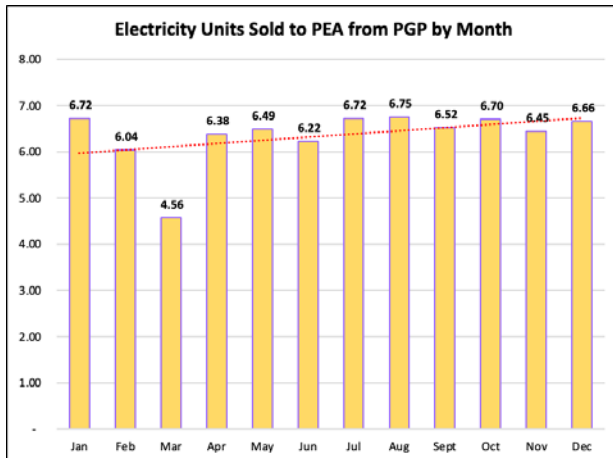
In 2022, MGP has generated 63,126,015 units with 6 days 10 hours of unplanned shutdown and 21 days of planned shutdown. Details as follows:



**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 4.49 baht per unit.

In Q4-2022, PGP generated and sold 19,810,974 units with 12 hours of unplanned shutdown

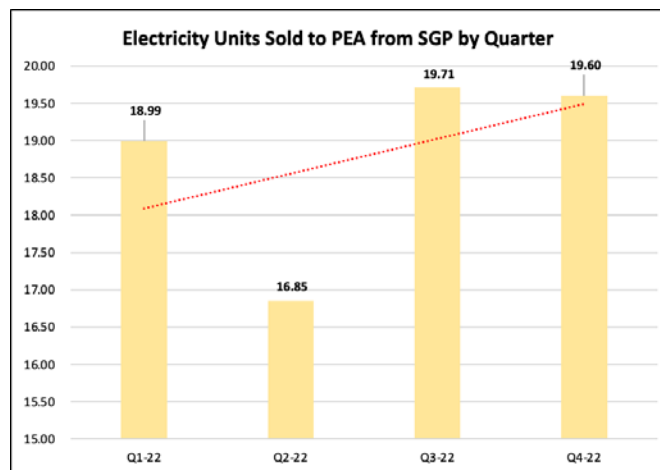
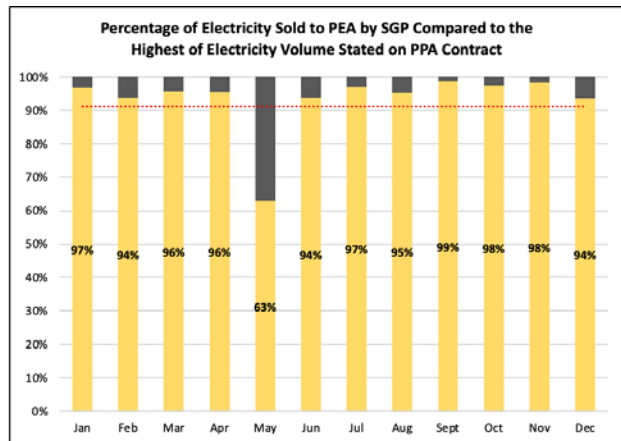
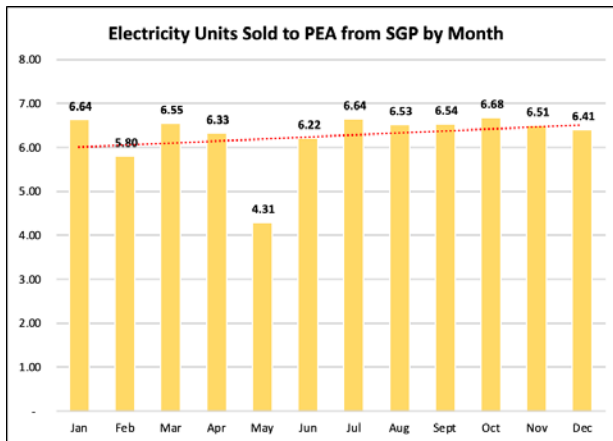
In 2022, PGP has generated 76,227,460 units with 3 days 12 hours of unplanned shutdown and 10 days of planned shutdown. Details as follows:



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 4.49 baht per unit.

In Q4-2022, SGP generated and sold 19,610,624 units with 2 days 12 hours of unplanned shutdown.

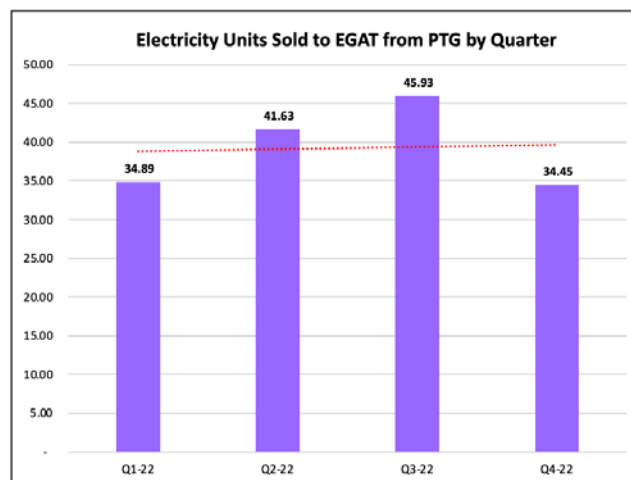
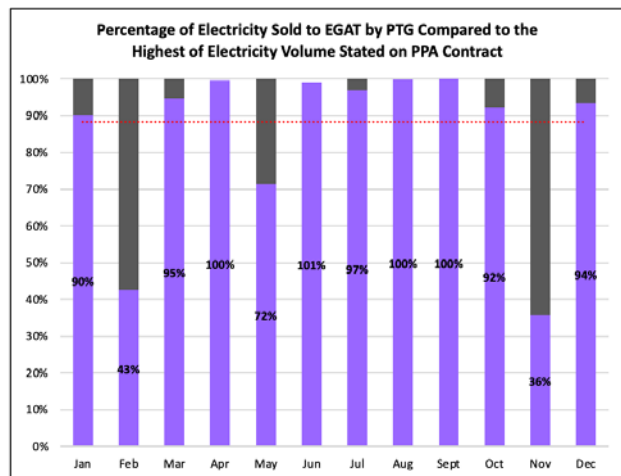
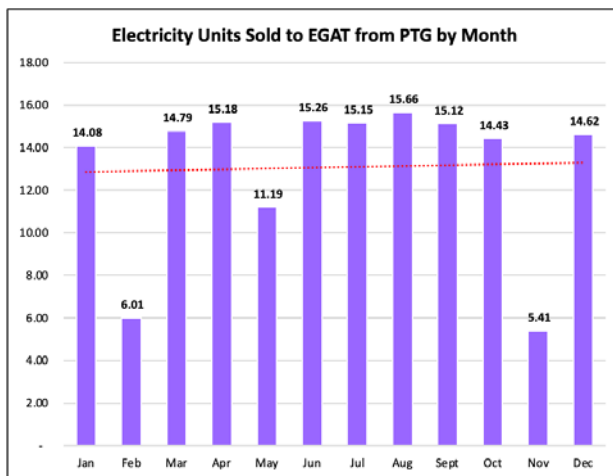
In 2022, SGP has generated 75,156,543 units with 9 days 5 hours of unplanned shutdown and 11 days 15 hours of planned shutdown. Details as follows:



**PTG** power plant has started selling electricity commercially on 19 May 2020 with an electricity sales volume under the Adder system power purchase agreement of 21.0 megawatts with a net selling price of 3.99 baht per unit.

In Q4-2022, PGT generated and sold 34,453,050 units with 2 days 17 hours of unplanned shutdown and 19 days of planned shutdown.

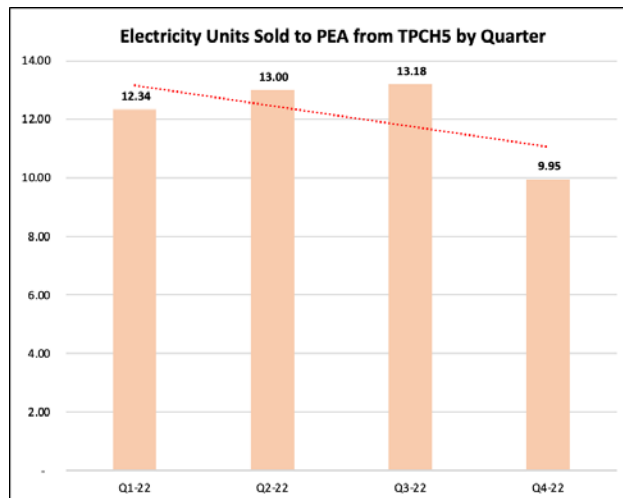
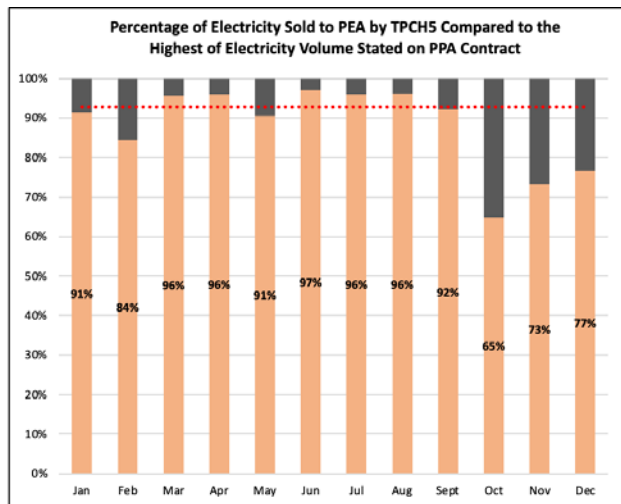
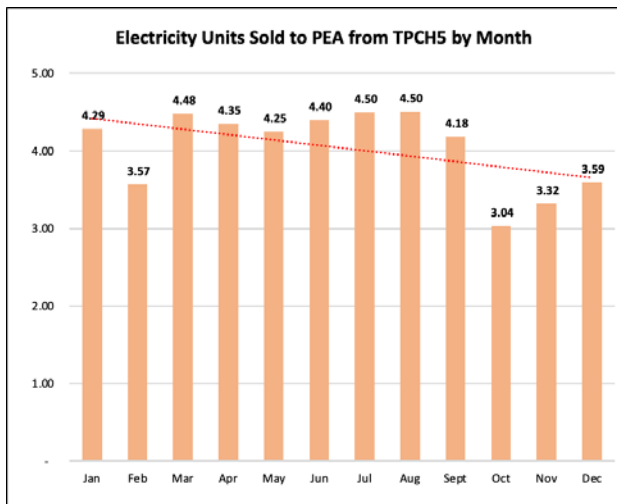
In 2021, PGT has generated 156,895,780 units with 23 days 5 hours of unplanned shutdown and 24 days of unplanned shutdown. Details as follows:



**TPCH5** power plant has started selling electricity commercially on 17 November 2020 with an electricity sales volume under the bidding system power purchase agreement of 6.3 megawatts with a net selling price of 3.46 baht per unit.

In Q4-2022, TPCH5 generated and sold 9,947,576 units with 20 days 14 hours of unplanned shutdown and 10 days of planned shutdown.

In 2022, TPCH5 has generated 48,463,711 units with 29 days 18 hours of unplanned shutdown and 12 days of unplanned shutdown. Details as follows:

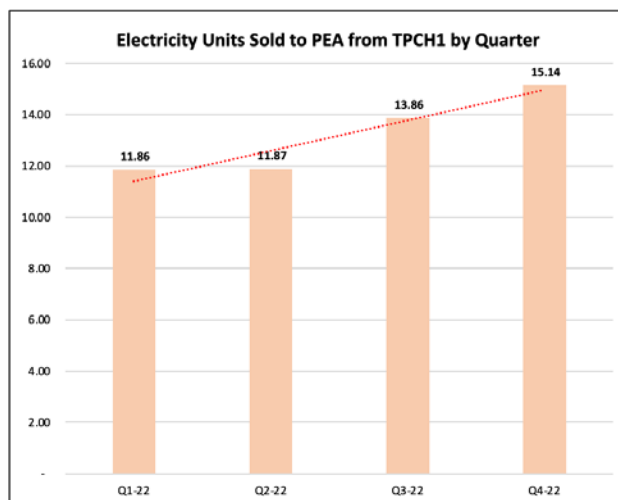
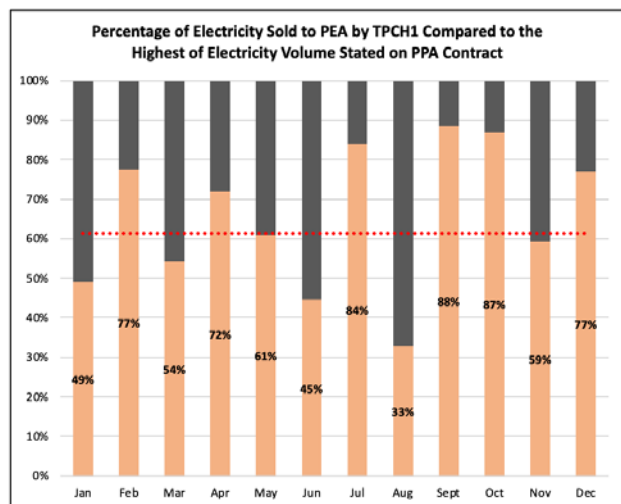
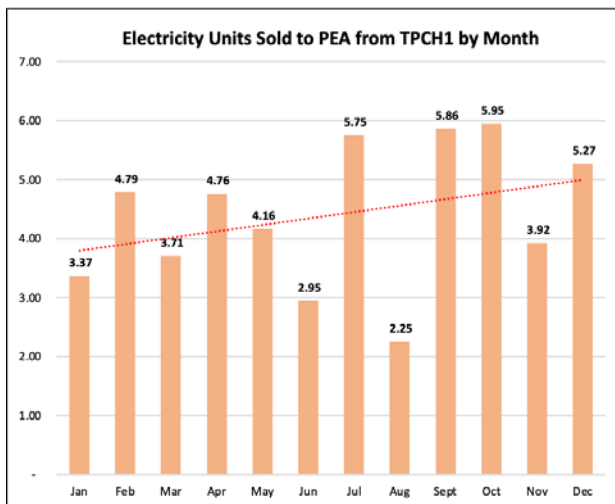




**TPCH1** power plant has started selling electricity commercially on 27 November 2020 with an electricity sales volume under the bidding system power purchase agreement of 9.2 megawatts with a net selling price of 3.14 baht per unit.

In Q4-2022, TPCH1 generated and sold 15,141,885 units with 8 days of unplanned shutdown and 9 days of unplanned shutdown.

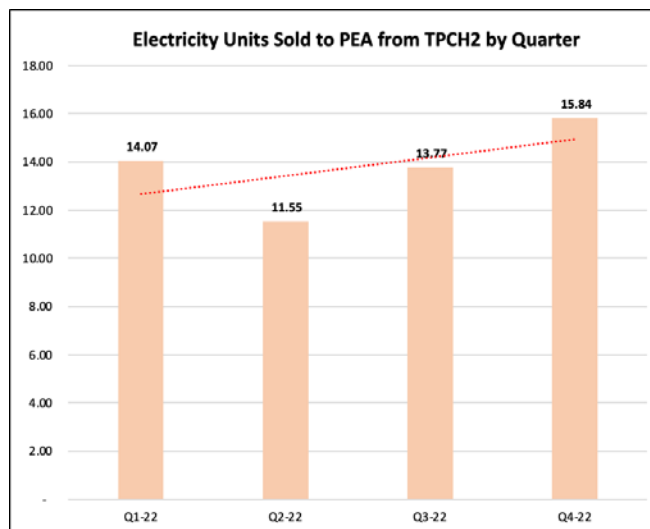
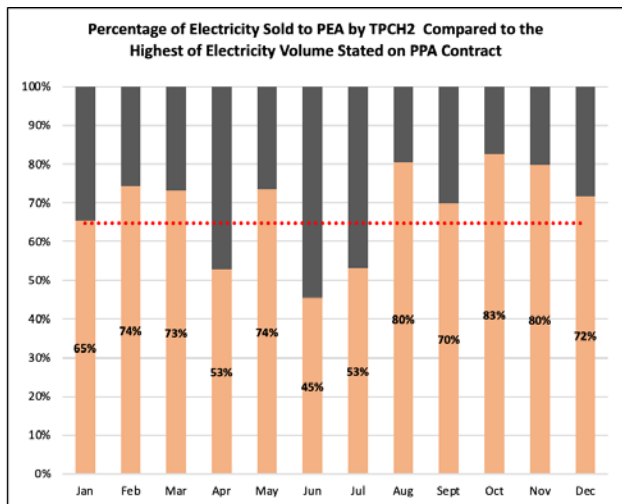
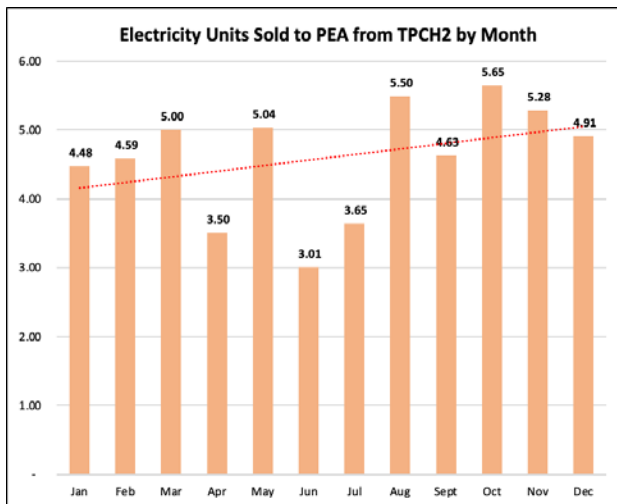
In 2022, TPCH1 has generated 52,739,521 units with 38 days 22 hours of unplanned shutdown and 49 of unplanned shutdown. Details as follows



**TPCH2** power plant has started selling electricity commercially on 17 February 2021 with an electricity sales volume under the bidding system power purchase agreement of 9.2 megawatts with a net selling price of 3.14 baht per unit.

In Q4-2022, TPCH2 generated and sold 15,841,750 units with 15 days of unplanned shutdown and 10 days 9 hours of unplanned shutdown.

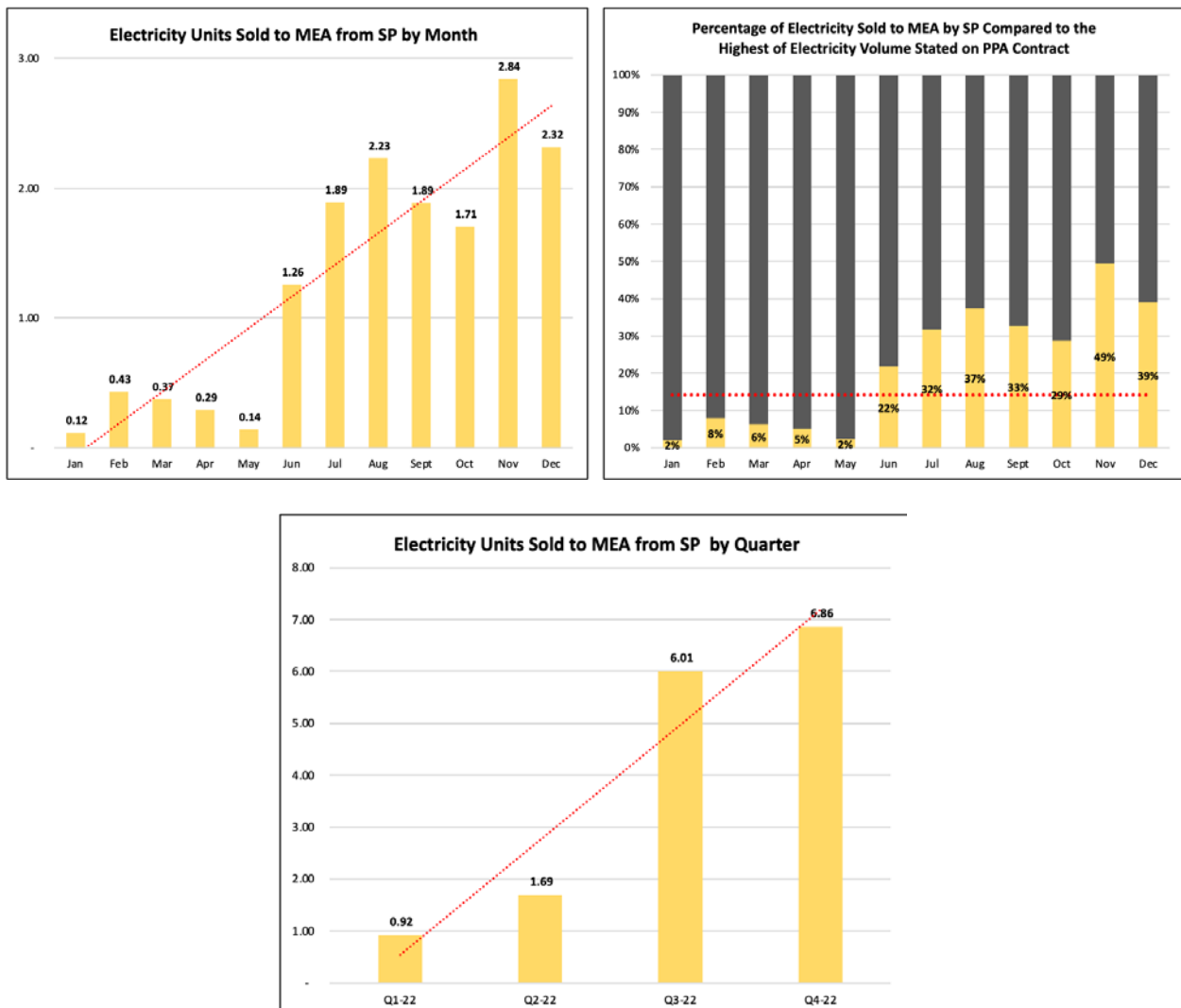
In 2022, TPCH2 has generated 55,226,317 units with 44 days of unplanned shutdown and 54 days 3 hours of unplanned shutdown. Details as follows:



SP power plant has started selling electricity commercially on 30 February 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 5.84 baht per unit.

In Q4-2022, SP generated and sold 6,864,000 units with 41 days 12 hours of unplanned shutdown.

In 2022, SP has generated 15,475,000 units with 75 days 10 hours of unplanned shutdown and 159 days 12 hours of unplanned shutdown. Details as follows:



## Industry Overview in 2023

The company is making great efforts to focus on developing and controlling the cost of electricity generation in projects that have commercially sold electricity. Strategies are constantly being adjusted to find suitable fuels; including the sufficiency of fuel, administrative costs, efficiency of machines through maintenance, and pollution measurements to be within the criteria specified by the law. Moreover, the company is in the process of developing multiple municipal waste power plant projects that the company invests in the name of Siam Power Co., Ltd. (SP), holding 50 percent of the shares. Two projects that have already been identified in the AEDP plan are expected to receive clarity regarding the power purchase agreement within 2023 and about 3-4 projects are under development, all of which are municipal waste-to-energy as a VSPP. In addition to projects in Thailand, The Company has participated in the study and development of IPP renewable energy projects in neighboring countries with business partners who have expertise in the area. The company's first overseas projects are expected to have more clarity by early 2023.

The company has also registered every renewable power plant project of the company for carbon credits, calculating the amount of credits received per year and has already signed credit sales contracts for additional income to the company. For the projects that are being developed, carbon credit registration in various standards has been studied since the beginning of the project study in order to find opportunities and maximize the benefits of the project. The value of carbon credit income has not been taken into the calculation of investment decisions due to platform and price volatility. However, the company is confident that carbon credits will be able to add value to The company in the future as it is the direction of global businesses that begin to focus and want to solve global warming problems.

For your information,

TPC Power Holding Public Company Limited



(Mr. Cherd Sak Wattanavijitkul)

President

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<b>TPCH</b>	: TPC Power Holding Public Company Limited
<b>CRB</b>	: Chang Rak Biopower Company Limited
<b>MWE</b>	: Maewong Energy Company Limited
<b>MGP</b>	: Mahachai Green Power Company Limited
<b>TSG</b>	: Thungsung Green Company Limited
<b>PGP</b>	: Phatthalung Green Power Company Limited
<b>SGP</b>	: Satun Green Power Company Limited
<b>PTG</b>	: Pattani Green Company Limited
<b>TPCH1</b>	: TPCH Power 1 Company Limited
<b>TPCH2</b>	: TPCH Power 2 Company Limited
<b>TPCH5</b>	: TPCH Power 5 Company Limited
<b>PA</b>	: PA Waste and Energy Company Limited
<b>SP</b>	: Siam Power Company Limited
<b>ECO</b>	: ECO Energy Group Corporation Company Limited
<b>PBM</b>	: Pracharat Biomass Mae Lan Company Limited
<b>PBB</b>	: Pracharat Biomass Bannang Sata Company Limited
<b>TPCH9</b>	: TPCH Power 9 Company Limited
<b>TPCH10</b>	: TPCH Power 10 Company Limited
<b>TPCH11</b>	: TPCH Power 11 Company Limited
<b>TPCH14</b>	: TPCH Power 14 Company Limited
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<b>TPCH17</b>	: TPCH Power 17 Company Limited
<b>TPCH18</b>	: TPCH Power 18 Company Limited
<b>TPCH19</b>	: TPCH Power 19 Company Limited
<b>PEA</b>	: Provincial Electricity Authority
<b>MEA</b>	: Metropolitan Electricity Authority
<b>COD</b>	: Commercial Operation Date
<b>SCOD</b>	: Scheduled Commercial Operation Date
<b>RDF</b>	: 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.