

EMPOWERING SUSTAINABILITY



Management Discussion and Analysis (MD&A)

Q4/ 2023



OPERATING HIGHLIGHT	Q4/22	Q4/23	Change +/-	2022	2023	Change +/-
Unit : THB Million			%YoY			%YoY
Operating Revenue	242.1	211.8	(12.5%)	938.1	911.2	(2.9%)
Gross Profit	81.1	66.0	(18.7%)	307.6	307.0	(0.2%)
EBITDA	108.3	97.4	(10.1%)	409.5	438.6	7.1%
Net Profit	59.9	46.8	(21.9%)	216.4	240.0	10.9%
Gross Profit Margin	33.5%	31.1%	(2.4%)	32.8%	33.7%	0.9%
EBITDA Margin	44.5%	46.0%	1.5%	43.7%	48.1%	4.5%
Net Profit Margin	24.8%	22.1%	(2.7%)	23.1%	26.4%	3.3%

In 2023, the Group reported operating revenue of Baht 911.2 million, decreased by Baht 26.9 million or 2.9%, and reported net profit of Baht 240.0 million, increased by Baht 23.6 million or 10.9% from 2022. The main factors are (i) efficiency in raw material management, (ii) increases in Ft and FiT rates, (iii) an increase in revenue from electricity sales derived from higher sale volume of electricity from selling to industrial customer and an additional power purchase agreement for the TBP power plant of 6 MW, (iv) decreases in finance costs from contractual principal repayment, and (v) income, net with related expenses, from insurance compensation of Baht 22.3 million incurred in Q3 of the current year. As a result, net profit from normal operation (excluded insurance claims transaction) was Baht 217.7 million, increased by Baht 15.5 million, or 7.7% compared with profit in 2022.

In upcoming 2024, the Group expects to have more than 96 MW installed capacity on hand, as well as entering into relating businesses that the Group has expertise and developing new technology to enhance the efficiency of power generation. The Company has entered the carbon credit market as a future trend in line with inclining of demand for carbon credits. In addition, the Company will continue exploring for partnership opportunities with both domestic and international business alliances.

YoY

Q4/23 vs Q4/22 and 2023 vs 2022

- In Q4/2023, the Group reported operating revenue of Baht 211.8 million, decreased by Baht 30.3 million or 12.5% from Q4/2022, was mainly from planed overhaul of TBP power plant, which is a subsidiary of the Group, resulted in a decrease in revenue from electricity and steam sales.
- For 2023, the reported operating revenue of Baht 911.2 million decreased from 2022 by Baht 26.9 million, or 2.9%.
 The main factors were a planned overhaul of TBP and a decrease in revenue from construction under construction
 agreement of Baht 7.8 million from waste-to-energy power plant, with an important condition that assets will be
 transferred to local government agencies upon the expiration of the Solid Waste Disposal Agreement (BOOT), where
 income is recorded equal to cost according to accounting standards..
- In Q4/2023, the Group reported gross profit margin of 31.1%, slightly decreased from 33.5% in Q4/2022, mainly due to planned maintenance shutdown of TPG and TBP. Whereas gross profit margin in 2023 was 33.7%, increased from 32.8% in 2022, that mainly due to growth of electricity sales that contributed higher margin than other type of revenues, the lower raw material costs and the capability to manage costs efficiently.
- In Q4/2023, the net profit of Baht 46.8 million decreased by Baht 13.1 million or 21.9%, due to the planed overhaul of TBP. In 2023, the net profit of Baht 240.0 million increased by Baht 23.6 million or 10.9%. The main factors were the increase in electricity sale, the lower raw material costs and the insurance claims transaction in the net amount of Baht 22.3 million (one-off transaction) as mentioned above.









SIGNIFICANT EVENTS in 2023



Community Waste Power Plant TES SKW, TES CPN, TES RBR, and TES CNT signed PPA with the Provincial Electricity Authority (PEA)

During April, May and December 2023, the group companies signed additional 4 Power Purchase Agreements (PPA) with PEA for operation in Community Waste Power Plant in Sa Kaeo, Chumphon, Ratchaburi, and Chai Nat with the selling capacity of 6 Megawatts (MW), 4 MW, 6 MW, and 6 MW, respectively. The group companies has started preparation for construction and in the process of request for construction license. The construction phase will take approximate 20 months, which the companies believe that the construction will complete and being able to generate income in 2025.



TBP obtained 'carbon credit' certification of 88,581 Tons

In June 2023, the biomass power plant TBP, a subsidiary of TGE, was certified for voluntary greenhouse gases from Thailand Greenhouse Gas Management Organization (TGO) with the certified carbon credit of 88,581 Ton carbon dioxide equivalent (tCO2eq) for the carbon credit calculation period of the project from 1 January 2022 – 28 February 2023. The Group is considering an appropriate timing to sell the carbon credits through Carbon Markets Club.

The Group currently obtained carbon credit from 2 biomass power plants in the total amount of 122,545 tons carbon dioxide equivalent.



TGE entered into biogas power plant management service

In November 2023, the Board of Directors passed a resolution to approve TGE to enter into the biogas power plant with Thachang Biogas Co., Ltd., with the total installed capacity of 7 MW and contract period of 3 months from 1 January 2024 – 31 March 2024. In January 2024, the shareholders passed as resolution to enter into the power plant management service of 4 years and 9 months, from 1 April 2024 – 31 December 2028.



TGE issued warrants to purchase ordinary shares of the Company (TGE-W1)

In January 2024, the shareholders passed a resolution to issue warrants to purchase ordinary shares of the Company (TGE-W1) in the amount of not exceeding 314,285,715 units to the existing shareholders according to their shareholding ratio in the ratio of 7 ordinary shares per 1 unit of warrant with the exercise price of 1 Baht. The period of warrants is not exceeding 1 year from the issuance of warrants.



Progress of the Community Waste Power Plant Project



Municipal Waste Power Plant

There are 6 municipal waste projects with the total combined installed capacity of 49.8 MW selected by the Local Government Organization (LGO) that consist of:

- the TES SKW Community Waste Power Plant in Watthana Nakhon District, Sa Kaeo Province, the TES CPN Community Waste Power Plant in Mueang District, Chumphon Province, the TES RBR Community Waste Power Plant in Mueang District, Ratchaburi Province, and the TES CNT Power Plant in Nong Mamong District, Chai Nat Province, which already signed the Power Purchase Agreement (PPA) and in the process of requesting for construction license.
- the TES TCN Power Plant in Samut Sakhon Province and the TES UBN power plant in Ubon Ratchathani province are preparing to enter into project management agreement with LGO.

The Company is preparing to bid municipal waste projects with the LGO, which is the TES PRI power plant in Prachinburi province. If the project is selected by the LGO, TGE group expects to have a total installed capacity of more than 96 MW (combined capacity of biomass power plants, biogas power plant and municipal waste power plants) after the commercial operation of these projects. The anticipated proportion of revenue from the municipal waste projects should be over 70% of total Group revenue. In addition, the Company plans to expand investments in other types of potential renewable energy power plants, both domestically and internationally, such as solar energy, and also seeks potential business partners to achieve a long-term goal of installed power capacity over 200 MW within 2032.

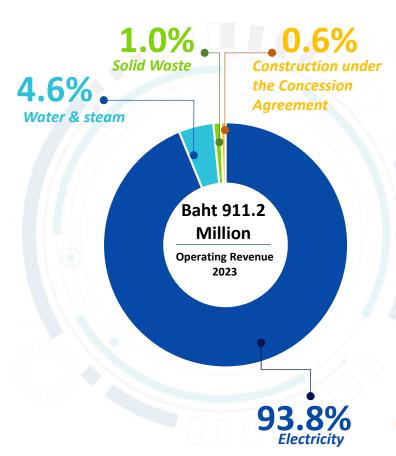




OPERATING RESULT IN 2023

OVERALL OPERATING RESULTS	Q4/22	Q4/23	Change +/-	2022	2023	Change +/-
Unit : THB Million			%YoY			%YoY
Operating Revenue	242.0	211.8	(12.5%)	938.1	911.2	(2.9%)
Cost of Sales	(161.0)	(145.8)	9.4%	(630.5)	(604.2)	4.2%
Gross Profit	81.0	66.0	(18.6%)	307.6	307.0	(0.2%)
Other Income	1.4	5.2	>100.0%	17.5	37.2	>100%
Administrative Expenses	(12.6)	(12.7)	(1.3%)	(56.7)	(53.4)	5.9%
Finance Cost	(10.8)	(12.0)	(12.0%)	(50.6)	(47.5)	6.1%
Profit before Income tax expense	60.5	47.4	(21.8%)	217.2	243.3	12.0%
Tax income (expense)	(0.6)	(0.6)	6.4%	(0.7)	(3.3)	>100.0%
Net Profit	59.9	46.8	(21.9%)	216.4	240.0	10.9%

Operating Revenue Structure



REVENUE FROM ELECTRICITY

Energy from Biomass consists of 3 projects: TGE, TPG, and TBP. The raw material used to produce electricity are Chopped Palm bunch, Palm Fibers, Roots, Chopped Palm Trees etc. There is total capacity of 29.7 MW, distributed to the PEA and other industry customers.

***Community Waste Power Plant consists of 4 projects that entered into PPA with PEA in Q2/2023 and Q4/2023 and expected to COD in the year 2025. In addition, there are other 3 projects in the business plan for expansion of installed capacity and electricity sale that expected to COD in approximate 2026.

REVENUE FROM WATER AND STEAM

Revenue from the sale of reverse osmosis (RO) water and steam to private companies in industry group customer.

REVENUE FROM SOLID WASTE MANAGEMENT

Revenue generated from the waste power plant in Sa Kaeo province, which is derived from waste disposal service for local authorities and related municipalities in the province. The power projects in Ratchaburi and Chumphon province will commence service once the power plants start their commercial operation.

REVENUE FROM CONSTRUCTION UNDER CONCESSION AGREEMENT

Revenue from construction of solid waste power plant, with an important condition that assets will be transferred to local government agencies upon the expiration of the Solid Waste Disposal Agreement (BOOT), where income is recorded equal to cost according to accounting standards.





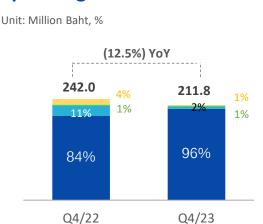


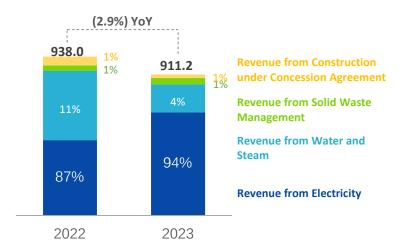


BUSINESS OVERVIEW BY CATEGORY

REVENUE BREAKDOWN	Q4/22	Q4/23	Change +/-	2022	2023	Change +/-
(Unit : THB Million)			%YoY			%YoY
Revenue from Electricity Sale	222.0	200.8	(9.6%)	812.9	854.5	5.1%
Revenue from Water and Steam Sale	17.6	3.8	(78.3%)	103.5	41.8	(59.6%)
Revenue from Solid Waste Management	2.1	2.5	19.7%	8.5	9.6	12.7%
Total Revenue from sales and services	241.7	207.1	(14.4%)	924.9	905.9	(2.1%)
Revenue from cost of Construction under the Concession Agreement	0.3	4.7	>100%	13.1	5.3	(59.5%)
Total Operating Revenue	242.0	211.8	(12.5%)	938.0	911.2	(2.9%)
Other Income	1.4	5.2	>100%	17.5	37.2	113.3%
Total Revenue	243.4	217.0	(10.9%)	955.5	948.4	(0.7%)

1. Operating Revenue





YoY

Q4/23 vs Q4/22 and 2023 vs 2022

In Q4/2023, the Group reported operating revenue of Baht 211.8 million, decreased by Baht 30.2 million or 12.5% from Q4/2022, and in 2023, the Group reported operating revenue of Baht 911.2 million that decreased from 2022 by Baht 26.9 million, or 2.9%. The decrease were mainly due to the following factors:

- Revenue from Electricity Sale was Baht 200.8 million in Q4/2023, decreased by Baht 21.3 million or 9.6%, whereas
 Baht 854.5 million of sale in 2023 was increased by Baht 41.6 million or 5.1%. The increase was resulted from the
 inclining of FiT and ft rates as well as increase in the sales volume to industry group customers and the recognition of
 TBP power plant revenue from additional power purchase agreements with PEA, resulting in an increase in the total
 amount of electricity sales to both industry customers and PEA.
- Revenue from Water and Steam Sale was Baht 3.8 million in Q4/2023, decreased by Baht 13.8 million or 78.3%, whereas Baht 41.8 million of sale in 2023 was decreased by Baht 61.7 million, or 59.6%. It was mainly due to a decrease in revenue from steam sale of TBP power plants to related companies since the related party purchased additional volume of steam during maintenance period of its own steam production equipment in 2022. However, the Group still fully utilized the production capacity by delivering higher sale volume of electricity to related party that compensated the said lower volume of the steam sales.
- Revenue from Solid Waste Management was Baht 2.5 million in Q4/2023, slightly increased by Baht 0.4 million or 19.7%, and Baht 9.6 million in 2023, slightly increased by Baht 1.1 million or 12.7%.

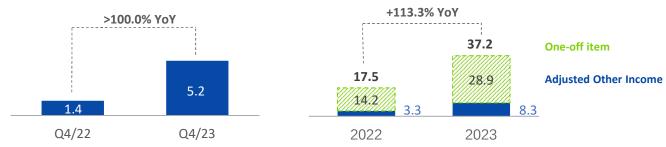






2. Other Income





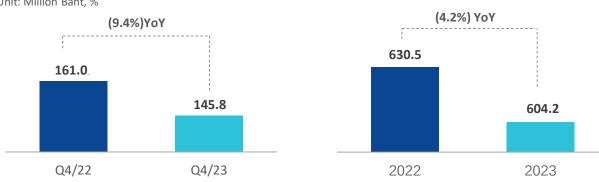
YoY

Q4/23 vs Q4/22 and 2023 vs 2022

In Q4/2023, the Group reported other income of Baht 5.2 million, increased by Baht 3.8 million from Q4/2022, mainly due to the cash management of the Group to generate interest income from banks. The Group reported other income of Baht 37.2 million in 2023, increased by Baht 19.7 million from the 2022 because the Group received the latest payment of insurance compensation from the machinery fire accident of Baht 28.9 million, while in 2022, insurance compensation received from the assets damaged in the same incident, worth of Baht 14.2 million. Other income excluded the one-off item increased due to bank deposit interest.

3. Operating Costs





YoY

Q4/23 vs Q4/22 and 2023 vs 2022

In the Q4/2023, the Group reported operating costs of Baht 145.8 million, decreased by Baht 15.2 million, or 9.4% and in 2023, the Group reported cost of sales and services of Baht 604.2 million that decreased from 2022 by Baht 26.3 million or 4.2%, which is in line with operating revenue. In addition, it is also because of the lower material costs and the capability to manage costs efficiently.





4. Gross Profit and Gross Profit Margin

Unit: Million Baht, %



Gross profit margin from Electricity Sale Gross profit margin*

Gross profit margin from Solid Waste Management

Gross profit margin from Water and Steam Sale

Gross profit margin from Solid Waste Management

Gross profit from Selling Water and Steam

Gross profit from Selling Electricity

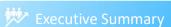
YoY

Q4/23 vs Q4/22 and 2023 vs 2022

Gross profit: In Q4/2023, the Group reported gross profit of Baht 66.0 million, decreased by Baht 15.0 million or 18.6% from Q4/2022, and in 2023, the Group reported the gross profit of Baht 307.0 million, slightly decreased from 2022 by Baht 0.6 million or 0.2%, due to the following factors:

- Gross profit from Electricity Sale: In Q4/2023, gross profit of Baht 65.8 million decreased by Baht 14.7 million or 18.3%, mainly due to the maintenance shutdown of a subsidiary according to the production plan. In 2023, the gross profit of Baht 304.0 million increased by Baht 1.1 million or 0.3% was mainly due to increase in sale volume of an industrial customer and additional power purchasing agreement of TBP with PEA, in addition to increase in selling price corresponding to higher FiT and ft rates.
- Gross profit from Water and Steam Sale: In Q4/2023, gross profit of Baht 0.1 million decreased by Baht 0.4 million, and Baht 1.2 million in 2023 decreased by Baht 1.8 million in line with decrease in volume of steam sales of TBP power plant to related parties.
- Gross profit from Solid Waste Management: In Q4/2023, gross profit of Baht 0.3 million was not significantly changed from Q4/2022, and Baht 1.8 million in 2023 was slightly increased by Baht 0.4 million from 2022, was mainly due to the increase in waste quantity.

Gross Profit Margin: In Q4/2023, gross profit margin (excluding revenue and cost from construction of waste power plant) was 31.8%, slightly decreased from 33.5% in Q4/2022, was mainly from the maintenance shutdown of a subsidiary according to the production plan. The gross profit margin was 33.9% in 2023, slightly increased from 33.3%, was mainly due to the growth of electricity sales that contributed higher margin than other type of revenues. The proportion of electricity sale per total revenue was 93.8% increased from 86.7% of corresponding period of previous year.





^{*} Note: Excluding revenue and cost from construction of solid waste power plant

5. Administrative Expenses

Unit: Million Baht, %



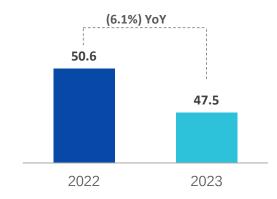
In Q4/2023, the Group reported administrative expenses of Baht 12.7 million, with no significant change from Q4/2022.

In 2023, the Group reported administrative expenses of Baht 53.4 million, decreased from 2022 by Baht 3.3 million or 5.9%, that was mainly from write-off of the damaged assets in 2022 in the amount of Baht 11.9 million (2023: Baht 6.6 million), in which the Company recorded other income from insurance compensation in the corresponding period. Other than the insurance claim transaction, the Group reported a slightly increase of Baht 2.0 million of normal administrative expenses that mainly from the post-IPO expenses and increase in employee expenses to support business expansion.

6. Finance Cost







YoY

Q4/23 vs Q4/22 and 2023 vs 2022

In Q4/2023, the Group reported financial costs of Baht 12.0 million, increased by Baht 1.2 million or 12.0% from Q4/2022 as a result of increased borrowing interest rate during 2023, and Baht 47.5 million in 2023 decreased by Baht 3.1 million or 6.1% from 2022. The decrease was mainly due to the repayment of long-term loans in 2023 and repayment for loans from related party in 2022 according to the IPO utilization purpose.



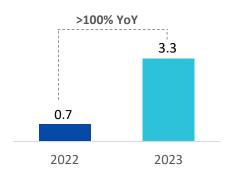




7. Income Tax Expense (Income)

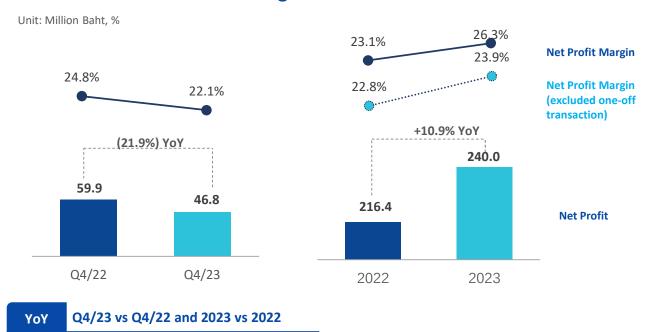
Unit: Million Baht, %





A change in tax expense of the Group was mainly due to (i) difference between income/expenses per accounting base and income/expense per tax base, (ii) reduce in tax rate of TGE in Q2/2022, in which TGE's corporate income tax is exempted under privilege from the Board of Investments (BOI), from 0% corporate income tax rate to 10% corporate income tax rate, as a result, the company's income tax expenses in 2023 increased from the previous year.

8. Net Profit and Net Profit Margin



Net Profit: In Q4/2023, the Group reported net profit of Baht 46.8 million, decreased by Baht 13.1 million or 21.9% from Q4/2022 due to the planned overhaul of TBP. In 2023, net profit of Baht 240.0 million increased by Baht 23.6 million or 10.9% from 2022. It was mainly due to the increase in electricity sale, the decrease in raw material cost, enhancing efficiency of cost management and revenue from insurance compensation.

Net Profit Margin: Net profit margin was 22.1% in Q4/2023, decreased from 24.8% in Q4/2022. Net profit margin was 26.3% in 2023, increased from 23.1% in 2022. It was mainly from the growth of electricity sales that contributed higher profit margin than other revenue types, a decrease in raw material cost, and revenue received from insurance compensation as described above.

By excluding the revenue from insurance compensation, the net profit margin in 2023 was 23.9%, increased from 22.8% in 2022, according to the reasons as described above.

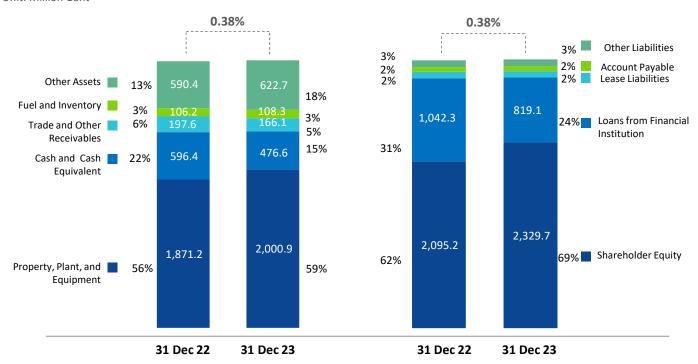






Statement of Financial Position

Unit: Million Baht



Total Assets

As of 31 December 2023, the total assets of the Group was Baht 3,374.7 million, increased by Baht 12.9 million or 0.38% from 31 December 2022. The major changes are as follows:

- Trade and other receivables: decreased by Baht 31.5 million due to the decrease in revenue department receivable from utilization of input VAT amounting to Baht 7.2 million, and the decrease in receivable from related parties in line with decrease in steam sale.
- Cash and cash equivalents: decreased by Baht 129.7 million was mainly due to lands purchase for waste power plant in Samut Sakorn province, payment of project development costs plant according the percentage of completion and pledge the cash for bank guarantee from financial institutions of the community waste power, and payment of field preparation cost for construction of community waste power plant.
- **Property, Plant and Equipment:** increased by Baht 129.8 million was mainly due to lands purchase for waste power plant in Samut Sakorn province, , and field preparation cost for construction of community waste power plant.

Total Liabilities

As of 31 December 2023, the total liabilities of the Group was Baht 1,045.0 million, decreased by Baht 221.6 million or 17.5% from 31 December 2022. The significant changes are as follows:

- · Lease Liabilities: decreased by Baht 4.0 million due to the rent payment under the lease agreement.
- Loans from Financial Institution: decreased by Baht 223.1 million due to loan repayment according to the long-term loan agreements.

As of 31 December 2023, the Debt-to-Equity (D/E) ratio was 0.45, decreased from 0.60 as of 31 December 2022, and the Interest-bearing debt to equity (IBDE) ratio as of 31 December 2023 was 0.35, decreased from 0.53 as of 31 December 2022. This was from loan repayment to the financial institutions in the period, and the increase in equity portion from the profit during the period.

Total Shareholders' Equity

As of 31 December 2023, the total shareholder's equity of the Group was Baht 2,329.7 million, increased by Baht 234.5 million or 11.2% from 31 December 2022. This was mainly due to the operating profit in 2023.







Appendix

There are 2 segments of the Company's power plant business according to the fuels used in production, as listed in the tables below

1. Three (3) Operational commercial biomass powerplant projects, as listed in the following table

Powerplant / Location	Operated by	Type /Energy source	Installed Capacity (MW)	Amount of electricity offered for long-term (MW)	Amount of electricity offered for short- term (MW)	Date of commercial operation start
Biomass power plant project TGE (Thachang district, Surat Thani)	TGE	VSPP / Biomass	9.9	7.2	-	8 May 2014
Biomass power plant project TPG (Thachang district, Surat Thani)	TPG	VSPP / Biomass	9.9	9.7	-	7 Nov 2019
Biomass power plant project TBP (Thachang district, Surat Thani)	ТВР	VSPP / Biomass	9.9	3.4	6.0	25 May 2021
Total			29.7	20.3	6.0	

2. Municipal waste projects

2.1 Six (6) projects are under the development, as listed in the table below:

Power plant / Location	Operated by	Type / Energy source	Installed Capacity (MW)	Amount of electricity offered (MW)	Commencing Date of commercial operation
Municipal waste power plant project TES SKW (Watthana Nakorn district, Sa Kaeo)	TES SKW	VSPP / Municipal waste	8.0	6.0	Within 2025
Municipal waste power plant project TES RBR (Mueang district, Ratchaburi)	TES RBR	VSPP / Municipal waste	8.0	6.0	Within 2025
Municipal waste power plant project TES CPN (Mueang district, Chumphon)	TES CPN	VSPP / Municipal waste	6.0	4.0	Within 2025
Municipal waste power plant project TES TCN (Samut Sakorn)	TES TCN	VSPP / Municipal waste	9.9	8.0	Within 2026
Municipal waste power plant project TES CNT (Chainat)	TES CNT	VSPP / Municipal waste	8.0	6.0	Within 2026
Municipal waste power plant TES UBN (Ubon Ratchathani)	TES UBN	VSPP / Municipal waste	9.9	8.0	Within 2026
Total			49.8	38.0	

2.2 One (1) projects in the bidding preparation with the Local Government Organizations, as listed in the table below:

Power plant/ location	Operated by	Type /Energy source	
1. Municipal waste power plant TES PRI (Prachin Buri)	TES PRI	VSPP / Municipal waste	

