

EMPOWERING SUSTAINABILITY



Management Discussion and Analysis (MD&A)

Q1 / 2023


EXECUTIVE SUMMARY

| OPERATING HIGHLIGHT | Q1/22 | Q4/22 | Q1/23 | Change +/- | |
|--------------------------|--------------|--------------|--------------|---------------|---------------|
| | | | | %YoY | %QoQ |
| Unit : THB Million | | | | | |
| Operating Revenue | 221.8 | 242.1 | 234.9 | 5.9% | (3.0%) |
| Gross Profit | 74.4 | 81.1 | 85.1 | 14.4% | 4.9% |
| EBITDA | 98.4 | 108.3 | 110.3 | 12.1% | 1.8% |
| Net Profit | 51.7 | 59.9 | 63.0 | 22.1% | 5.2% |
| Gross Profit Margin | 33.5% | 33.5% | 36.2% | 2.7% | 2.7% |
| EBITDA Margin | 44.4% | 44.5% | 47.0% | 2.6% | 2.5% |
| Net Profit Margin | 23.3% | 24.8% | 26.8% | 3.5% | 2.0% |

In Q1/2023, The Thachang Group places importance on expanding production capacity and continuously seek for new growth opportunities from new clean energy sources in response to the sustainable growth strategy. In Q1/2023, the Group reported operating revenue of Baht 234.9 million, increased by Baht 13.1 million or 5.9%, and reported net profit of Baht 63.0 million, increased by Baht 11.3 million or 22.1% from Q1/2022. The increase in operating income and net profit was mainly due to the increase in Ft (floating time), FiT and additional power purchase agreement for the TBP power plant of 6 MW. In 2023, the Group expects to have approximately 100 MW installed capacity on hand, as well as entering other clean energy power plants and applying new technology to increase the efficiency of power generation. The Company plans to enter the carbon credit market to prepare to capture future trends. In addition, the Company will continue to seek for partnership opportunities with both domestic and international business players.

YoY Q1/23 vs Q1/22

- In Q1/2023, the Group reported operating revenue of Baht 234.9 million, increased by Baht 13.1 million or 5.9% from Q1/2022, mainly due to the increase in Ft Rate (Float time) and FiT, as well as obtaining TBP's additional power purchasing agreement of 6 MW.
- In Q1/2023, the Group reported gross profit margin of 36.2%, increased from 33.5% in Q1/2022 mainly due to higher selling price corresponding to the higher Ft Rate (Float time) and FiT, along with the additional power purchase agreements for the TBP power plants and the lower raw material costs due to the palm harvesting season. In addition, the Group have displayed the ability to manage costs more efficiently.
- In Q1/2023, the Group reported net profit of Baht 63.0 million, increased by Baht 11.3 million or 22.1% from Q1/2022, mainly due to the increase in Ft Rate (Float time) and FiT, as well as the additional power purchase agreements for the TBP power plants and the lower raw material costs due to the palm harvesting season.

QoQ Q1/23 vs Q4/22

- In Q1/2023, The Group reported operating revenue of Baht 234.9 million, decreased by Baht 7.2 million or 3.0% from Q4/2022, mainly due to decrease in electricity sales revenue. In March 2023, there was a planned maintenance shutdown of TPG and TBP power plants to inspect the machines for stability test to ensure continuous operation.
- The Group reported gross profit margin of 36.2%, increased from 33.5% in Q4/2022 due to higher selling price corresponding to the Ft Rate (Float time) and FiT, as well as the lower raw material costs due to the palm harvesting season.
- The Group reported net profit of Baht 63.0 million, increased by Baht 3.1 million or 5.2% from Q4/2022, mainly due to the lower raw material costs from the the palm harvesting season and the Group's ability to manage costs more efficiently.

Q1/2023 SIGNIFICANT EVENTS



Continuous Growth in Performance from Efficient Operation

In Q1/2023, the Group recorded Net Profit of Baht 63.0 million, increased by Baht 11.3 million or 22.1% from Q1/2022. When comparing to Q4/2022, Net Profit increased by Baht 3.1 million or 5.2%. The improved in performance was a result of the increase in Ft (floating time) and FiT, while the cost of raw materials has decreased due to the palm harvesting season. This have displayed the ability of the Group to operate the business efficiently and to continuously display positive profits.

Progress of the Community Waste Power Plant Project

Municipal Waste Power Plant

There are 5 municipal waste projects which were selected by the Local Government Organization (LG), which are the TES CPN Community Waste Power Plant in Mueang District, Chumphon Province, the TES SKW Community Waste Power Plant in Watthana Nakhon District, Sa Kaeo Province, and the TES RBR Community Waste Power Plant in Mueang District, Ratchaburi Province, are in the process of preparing for construction. As for the TES TCN Power Plant in Samut Sakhon Province and the TES CNT Power Plant in Chai Nat Province, are preparing to enter into project management agreement with a total combined installed capacity of 39.9 MW. In addition, the Company plans to expand investments in other types of renewable energy power plants with have potential, both domestically and internationally, such as solar energy, wind energy, and biogas, aiming to achieve a long-term goal of installing over 200 MW of power capacity by 2032.



Auction of Municipal Waste Power Plant

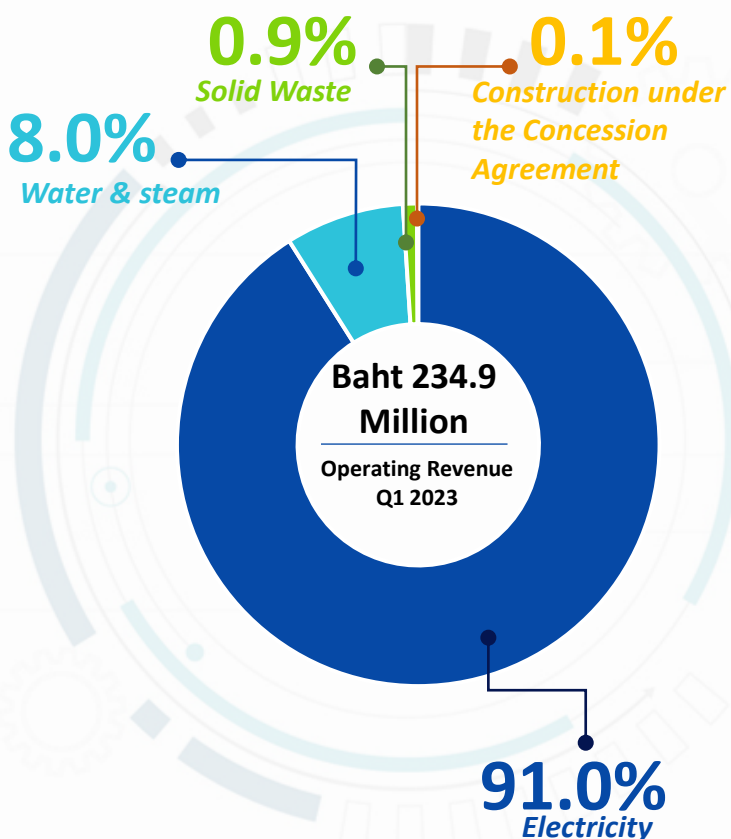
The Company is preparing to bid on a municipal waste project with the local government organization (LGO) for 2 more projects, which includes the TES PRI power plant in Prachinburi province and the TES UBN power plant in Ubon Ratchathani province. The Company is in the process of preparing for auction. If selected by the LGO, the Company expects to have a total installed capacity of 90 MW in the next three years, after the commercial operation of these two projects, and expects the proportion of revenue from the municipal waste projects to be 65% of total revenue.



OPERATING RESULT IN Q1/2023

| OVERALL OPERATING RESULTS | Q1/22 | Q4/22 | Q1/23 | Change +/- | |
|---|-------------|-------------|-------------|--------------|-------------|
| Unit : THB Million | | | | %YoY | %QoQ |
| Operating Revenue | 221.8 | 242.1 | 234.9 | 5.9% | (3.0%) |
| Cost of Sales | 147.4 | 161.0 | 149.7 | 1.6% | (7.0%) |
| Gross Profit | 74.4 | 81.1 | 85.1 | 14.4% | 4.9% |
| Other Income | 11.5 | 1.4 | 0.6 | (94.8%) | (57.1%) |
| Administrative Expenses | 21.6 | 12.6 | 11.2 | (48.1%) | (11.1%) |
| Gains (losses) on Exchange Rate | 0.1 | 1.4 | - | (100.0%) | (100.0%) |
| Finance Cost | 12.5 | 10.8 | 11.5 | (8.0%) | 6.5% |
| Profit before Income tax expense | 51.9 | 60.5 | 63.0 | 21.4% | 4.1% |
| Tax expense (income) | 0.2 | 0.6 | (0.01) | (105.0%) | (101.7%) |
| Net Profit | 51.7 | 59.9 | 63.0 | 22.1% | 5.2% |

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. It has a total capacity of 29.7 MW, distributed to the PEA and other private companies not a part of the TGE group.

*****Community Waste Power Plant** is in the process of submitting a contract to the PEA for the selling of electricity and is expected to COD within 2024.

REVENUE FROM WATER AND STEAM

Revenue from the sale of reverse osmosis (RO) water and steam to companies not a part of the TGE group.

REVENUE FROM SOLID WASTE MANAGEMENT

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

REVENUE FROM CONSTRUCTION UNDER CONCESSION AGREEMENT

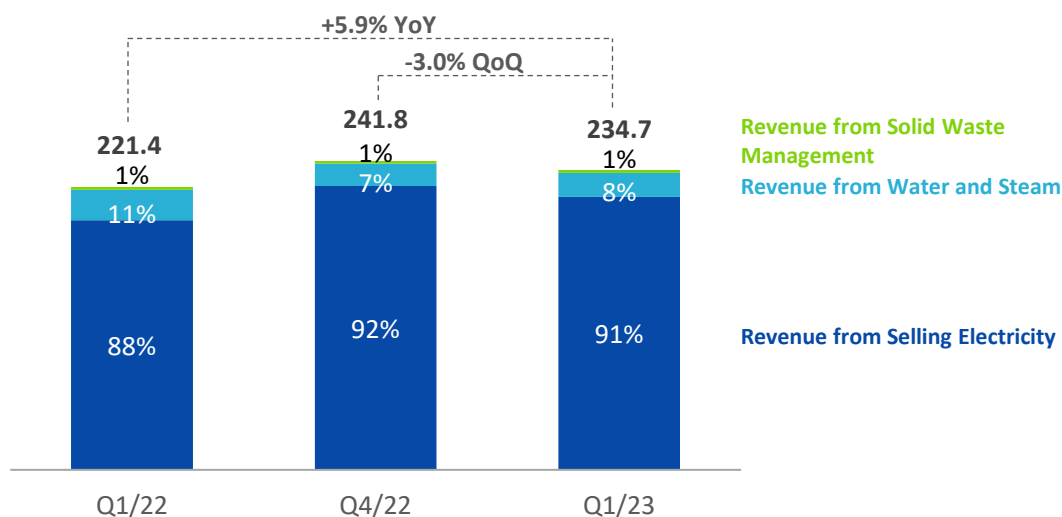
Revenue from construction of solid waste power plant, with an important condition that assets will be transferred to local government agencies upon the expiration of the Solid Waste Disposal Agreement (BOOT), where income is recorded equal to cost according to accounting standards.

BUSINESS OVERVIEW BY CATEGORY

| REVENUE BREAKDOWN | Q1/22 | Q4/22 | Q1/23 | Change +/- | |
|--|--------------|--------------|--------------|---------------|---------------|
| Unit : THB Million | | | | %YoY | %QoQ |
| Revenue from Selling Electricity | 195.4 | 222.1 | 213.8 | 9.4% | (3.7%) |
| Revenue from Selling Water and Steam | 23.9 | 17.6 | 18.7 | (21.8%) | 6.2% |
| Revenue from Solid Waste Management | 2.1 | 2.1 | 2.2 | 4.8% | 4.8% |
| Total Revenue from sales and services | 221.4 | 241.8 | 234.7 | 6.0% | (2.9%) |
| Revenue from cost of Construction under the Concession Agreement | 0.4 | 0.3 | 0.2 | (50.0%) | (33.3%) |
| Total Operating Revenue | 221.8 | 242.1 | 234.9 | 5.9% | (3.0%) |
| Other Income | 11.5 | 1.4 | 0.6 | (94.8%) | (57.1%) |
| Total Revenue | 233.3 | 243.5 | 235.5 | 0.9% | (3.3%) |

1. Operating Revenue

Unit: Million Baht, %



**Exclude construction revenue under concession agreement

YoY Q1/23 vs Q1/22

In Q1/2023, the Group reported consolidated operating revenue of Baht 234.7 million, increased by Baht 13.3 million or 5.9% from Q1/2022, mainly due to the following factors:

- **Revenue from Selling Electricity** was Baht 213.8 million in Q1/2023, increased by Baht 18.4 million or 9.4% due to the increase in Ft rate (float time) and FiT, resulting in an increase in the average selling price of electricity among industrial customers, as well as the recognition of TBP power plant revenue from additional power purchase agreements with PEA.
- **Revenue from Selling Water and Steam** was Baht 18.7 million in Q1/2023, decreased by Baht 5.2 million or 21.8% mainly due to a decrease in revenue from steam revenue of TBP power plants to related companies as the boiler at TCP have resumed to normal operation. However, the Group can still fully utilize the capacity of TBP to generate electricity in order to sell to TCP instead.
- **Revenue from Solid Waste Management** was Baht 2.2 million in Q1/2023, slightly increased by Baht 0.1 million or 4.8%

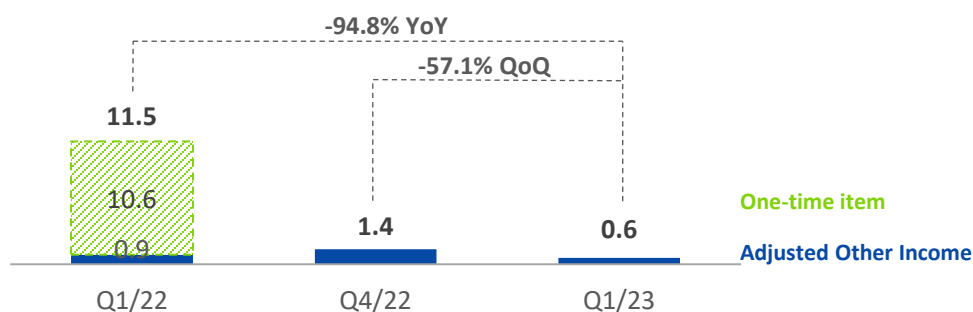
QoQ Q1/23 vs Q4/22

In Q1/2023, the Group reported consolidated operating income of Baht 234.7 million, decreased by Baht 7.1 million or 2.9% from Q4/2022, mainly due to the following factors:

- **Revenue from Selling Electricity** was Baht 213.8 million in Q1/2023, decreased by Baht 8.3 million or 3.7% from Q4/2022 due to the scheduled maintenance shutdown in March 2023 of the TPG and TBP power plants to inspect the machines for stability test to ensure continuous operation.
- **Revenue from Selling Water and Steam** was Baht 18.7 million in Q1/2023, increased by Baht 1.1 million or 6.2% mainly due to increase in steam revenue from the TBP power plant to related Companies from the purchase of steam from TCP, as in January 2023, the steam boiler at TCP was malfunctioning and could not be used efficiently.
- **Revenue from Solid Waste Management** was Baht 2.2 million in Q1/2023, slightly increased by Baht 0.1 million or 4.8%.

2. Other Income

Unit: Million Baht, %



YoY Q1/23 vs Q1/22

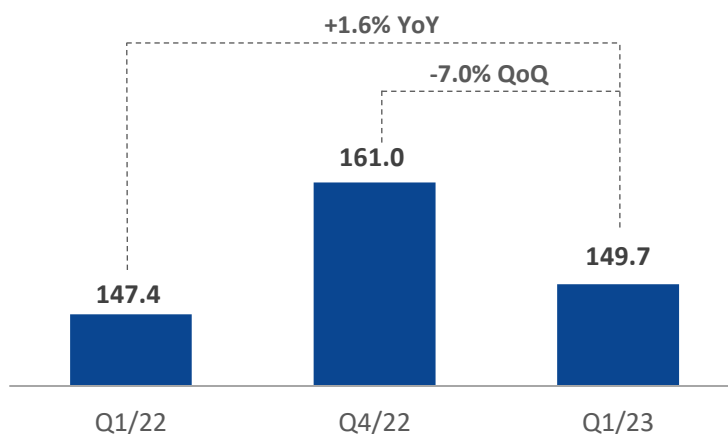
In Q1/2023, the Group recorded other income of Baht 0.6 million, decreased by Baht 10.9 million or 94.8% from Q1/2022. In Q1/2022, the Group received insurance compensation from the fire damage to the empty palm bunches, worth Baht 10.6 million. Therefore, if excluding this extraordinary item, other income will decrease slightly by Baht 0.3 million after the adjustment. However, the fire incident demonstrates the Group's ability to plan and prevent losses from unforeseeable events.

QoQ Q1/23 vs Q4/22

In Q1/2023, the Group recorded other income of Baht 0.6 million, decreased by Baht 0.8 million or 57.1% from Q4/2022, mainly due to the recognition of interest on fixed deposits which is commonly realized during December.

3. Cost of Sales

Unit: Million Baht, %



YoY Q1/23 vs Q1/22

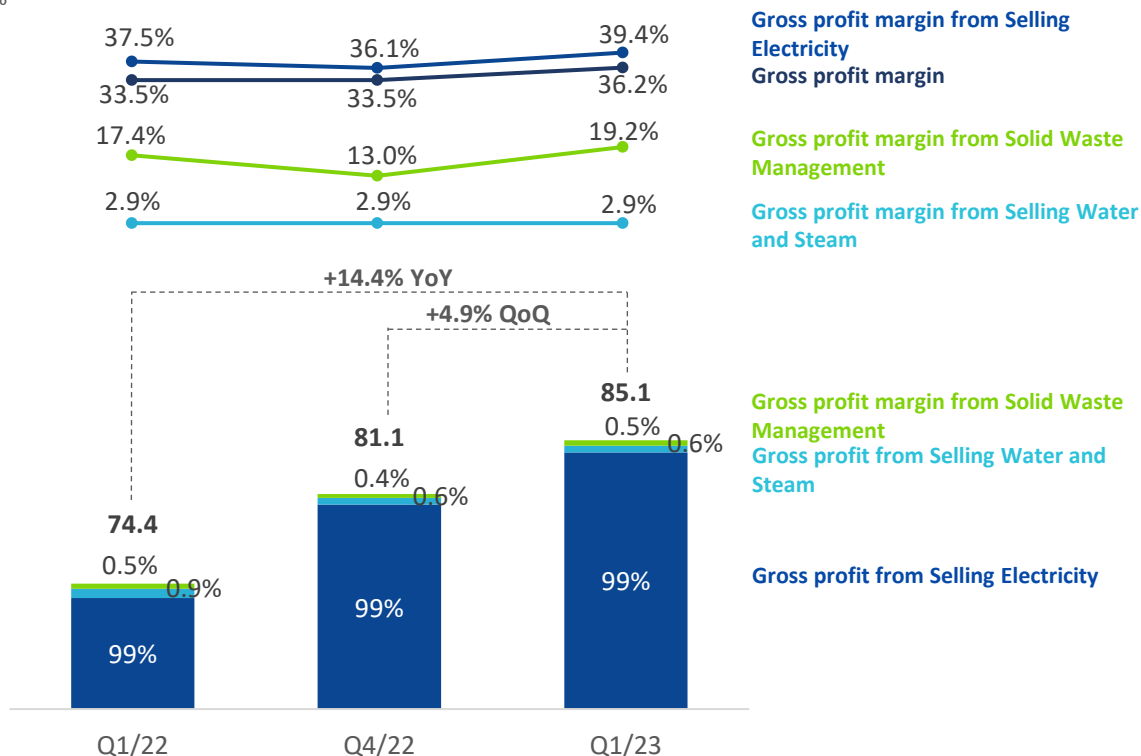
In the Q1/2023, the Group recorded cost of sales of Baht 149.7 million, increased by Baht 2.3 million or 1.6% from Q1/2022 corresponding to the increase in revenue from powerplant.

QoQ Q1/23 vs Q4/22

In Q1/2023, the Group recorded cost of sales of Baht 149.7 million, decreased by Baht 11.3 million or 7.0% from Q4/2022 due to palm harvesting season in Q1/2023, resulting in lower costs of palm compared to Q4/2022.

4. Gross Profit and Gross Profit Margin

Unit: Million Baht, %



YoY Q1/23 vs Q1/22

Gross profit: In Q1/2023, the Group recorded Gross profit of Baht 85.1 million, increase by Baht 10.7 million or 14.4% from Q1/2022 due to the following factors:

- **Gross profit from Selling Electricity:** In Q1/2023, the Group recorded Gross profit of Baht 84.2 million, increased by Baht 10.9 million or 14.9% due to increase in electricity selling price corresponding to higher Ft (Float time) and FIT, as well as revenue recognition of TBP power plant from additional power purchase agreement with PEA.
- **Gross profit from Selling Water and Steam:** In Q1/2023, the Group recorded Gross profit of Baht 0.5 million, decreased by Baht 0.2 million or 28.6% due to a decrease in steam revenue of TBP power plant to related companies.
- **Gross profit from Solid Waste Management** In Q1/2023, the Group recorded Gross profit of Baht 0.4 million, unchanged from Q1/2022.

Gross Profit Margin: Gross Profit Margin was 36.2%, increased from 33.5% in Q1/2022 due to higher electricity prices corresponding to higher Ft rate (Float time) and FIT, additional power purchase agreements of TBP power plants, the lower raw material costs due to the palm harvesting season, and the Group's ability to manage costs more efficiently.

QoQ Q1/23 vs Q4/22

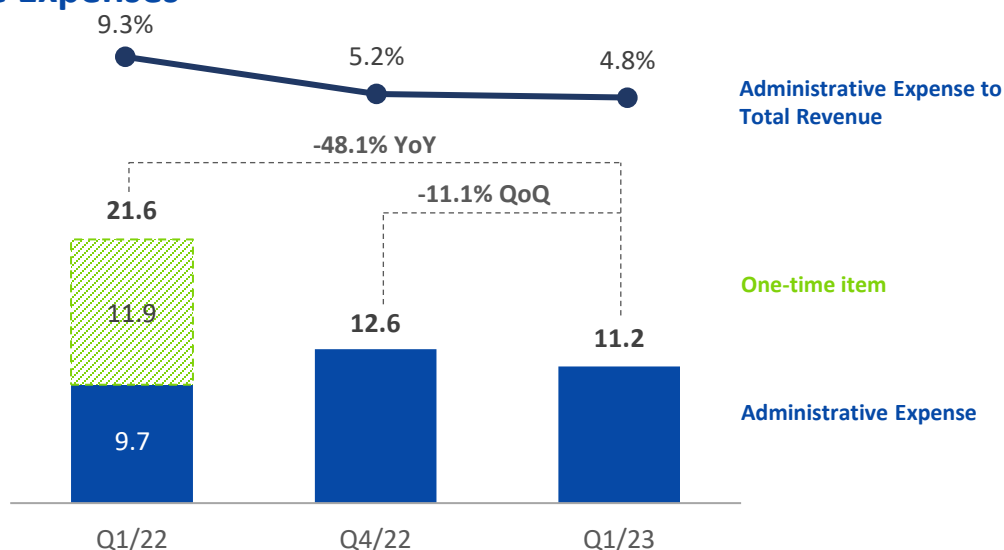
Gross Profit: In Q1/2023, the Group recorded Gross Profit of Baht 85.1 million, increased by Baht 4.0 million or 4.9% from Q4/2022, mainly due to:

- **Gross profit from Selling Electricity:** In Q1/2023, the Group recorded Gross profit of Baht 84.2 million, increased by Baht 4.0 million or 5.0% , mainly due to increase in electricity selling price corresponding to the higher Ft rate (Float time) and FiT, as well as the lower raw material costs due to the palm harvesting season.
- **Gross profit from Selling Water and Steam:** In Q1/2023, the Group recorded Gross profit of Baht 0.5 million, unchanged from Q4/2022. This demonstrated the Group's ability to maintain profitability.
- **Gross profit from Solid Waste Management:** In Q1/2023, the Group recorded Gross profit of Baht 0.4 million, slightly increased by Baht 0.1 million. This demonstrated the Group's ability to maintain profitability.

Gross Profit Margin: Gross Profit Margin was 36.2%, increased from 33.5% in Q4/2022, mainly due to the increase in electricity prices corresponding to the higher Ft rate (Float time) and FiT, as well as the lower raw material costs due to the palm harvesting season.

5. Administrative Expenses

Unit: Million Baht, %



YoY Q1/23 vs Q1/22

Administrative Expense: In Q1/2023, the Group recorded administrative expenses of Baht 11.2 million, decreased by Baht 10.4 million or 48.1% from Q1/2022. In Q1/2022, the Group had written off damaged raw materials from the palm fruit bunch fire incident with a value of Baht 11.9 million. Therefore, if excluded this item, the Company could record an increase in administrative expense of Baht 1.5 million or 15.5% from the post-IPO expenses in Q1/2022.

Administrative Expense to Total Revenue: The percentage of administrative expenses to total revenue was 4.7%, improved from 9.3% from Q1/2022 due to the write-off of raw materials in Q1/2022. While in Q1/2023, this item was not present, resulted in lower administrative expenses, while the Group also experienced an increase in total revenue.

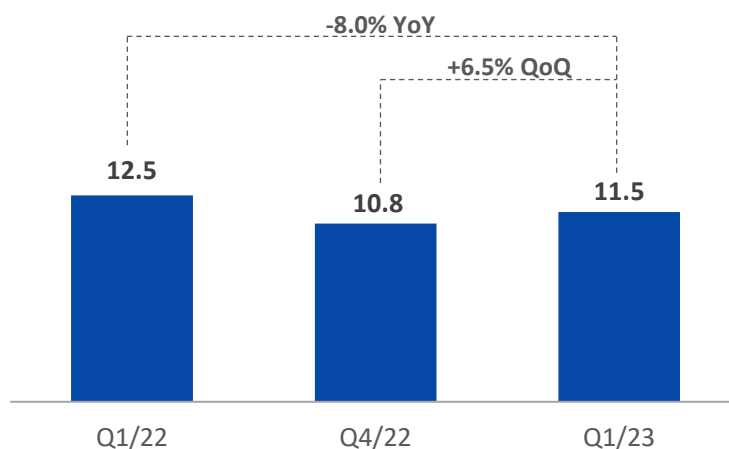
QoQ Q1/23 vs Q4/22

Administrative Expense: In Q1/2023, the Group recorded administrative expenses of Baht 11.2 million, decreased by 1.4 million baht or 11.1% from Q4/2022 due to write-off of spare parts based on useful life, while in Q1/2023, the item was not present resulting in lower administrative expenses.

Administrative Expense to Total Revenue: The percentage of administrative expenses to total revenue was 4.8%, improved from 5.2% from Q4/2022 due to write-off of spare parts based on useful life, while in Q1/2023, the item was not present resulting in lower administrative expenses.

6. Finance Cost

Unit: Million Baht, %



YoY Q1/23 vs Q1/22

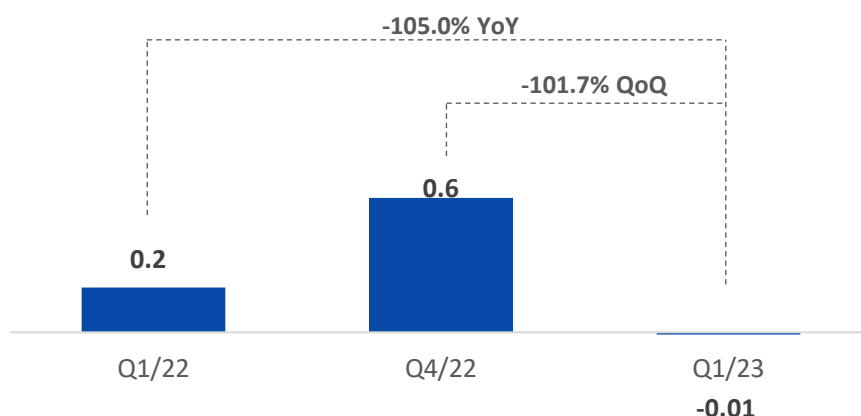
In Q1/2023, the Group recorded financial costs of Baht 11.5 million, decreased by Baht 1.0 million or 8.0% from Q1/2022. This was mainly due to the loans repayment according to the objectives specified in the IPO, including repayment of long-term loans from financial institutions.

QoQ Q1/23 vs Q4/22

In Q1/2023, the Group recorded financial costs of Baht 11.5 million, increased by Baht 0.7 million or 6.5% from Q4/2022, mainly due to an increase in interest rates on loans from financial institutions.

7. Tax Expense (Income)

Unit: Million Baht, %



YoY Q1/23 vs Q1/22

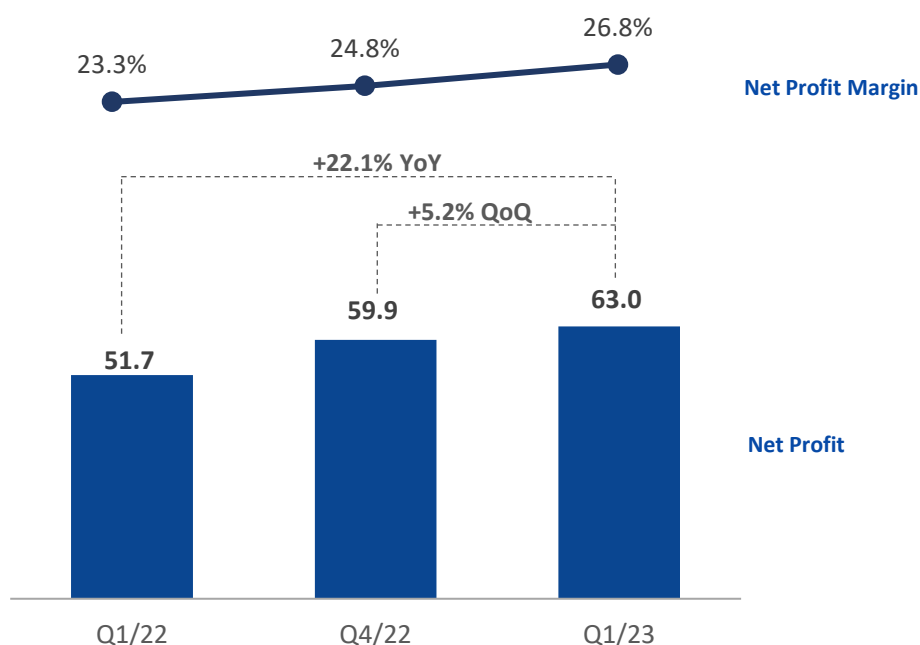
In Q1/2023, the Group recorded tax expenses (income) of Baht (0.01) million, decreased by Baht 0.21 million or 105.0% from Q1/2022, mainly due to deferred tax adjustments due to the difference between accounting expenses and tax expenses.

QoQ Q1/23 vs Q4/22

In Q1/2023, the Group recorded tax expenses (income) of Baht (0.01) million, decreased by Baht 0.61 million or 101.7% from Q4/2022, mainly due to the adjustment of deferred tax due to the difference between accounting expenses and tax expenses.

8. Net Profit and Net Profit Margin

Unit: Million Baht, %



YoY Q1/23 vs Q1/22

Net Profit: In Q1/2023, the Group recorded Net profit of Baht 63.0 million, increased by Baht 11.3 million or 22.1% from Q1/2022, mainly due to the increase in electricity selling price corresponding to the higher Ft rate (Float Time) and FiT. As a result, the average selling price of electricity for industrial and power sector customers has increased. In addition, TBP had additional power purchasing agreement of 6 MW with PEA and the cost of raw material has decreased from the palm harvesting season.

Net Profit Margin: Net profit margin was at 26.8%, increased from 23.3% in Q1/2022, driven by revenue growth from electricity sales. This was due to increase in electricity selling prices corresponding to higher the Ft rate (Float Time) and FiT. In addition, there was an additional power purchasing agreement from the TBP power plant, the cost of raw materials has decreased due to the palm harvesting season and the Group's ability to manage their cost efficiently.

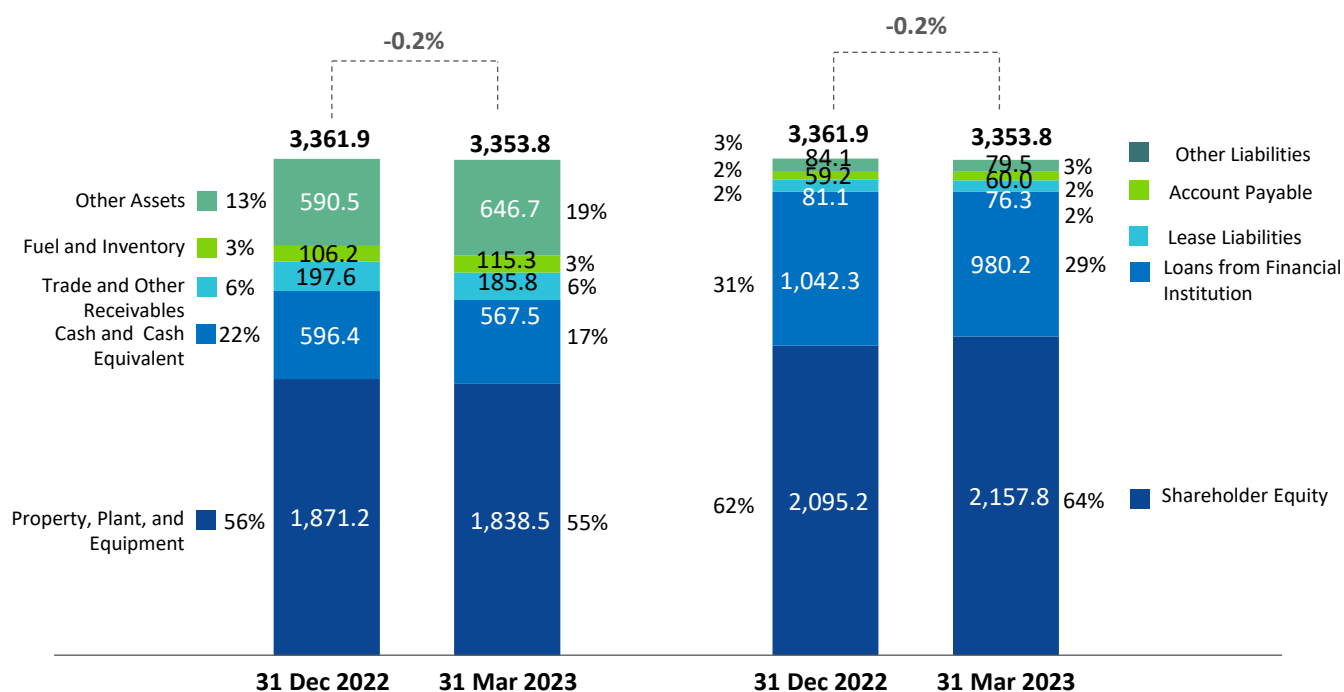
QoQ Q1/23 vs Q4/22

Net Profit: In Q1/2023, the Group recorded a Net profit of Baht 63.0 million, increased by Baht 3.1 million or 5.2% from Q4/2022. This was mainly due to the decreased cost of raw materials due to the palm harvesting season and the Group's ability to manage their cost efficiently.

Net Profit Margin: Net profit margin was at 26.8%, increased from 24.8% in Q4/2022, mainly due to the decrease in cost of raw materials due to the palm harvesting season and the Group's ability to manage their cost efficiently.

Statement of Financial Position

Unit: Million Baht



Total Assets

As of 31 March 2023, the Total Assets of the Group was Baht 3,353.8 million, decreased by Baht 8.1 million or 0.2% from 31 December 2022. The significant changes are as follows:

- **Fuel and Inventory:** increased by Baht 9.1 million due to raw material reserves from the palm harvesting season
- **Trade and other receivables:** decreased by Baht 11.8 million due to the decrease in receivables from the sales of electricity
- **Cash and cash equivalents:** decreased by Baht 28.9 million due to the project development costs of Chai Nat Power Plant
- **Property, Plant and Equipment:** decreased by Baht 32.7 million due to accounting depreciation expense

Total Liabilities

As of 31 March 2023, the Total Liabilities of the Group was Baht 1,196.0 million, decreased by Baht 70.7 million or 5.6% from 31 December 2022. The significant changes are as follows:

- **Lease Liabilities:** decreased by Baht 4.8 million due to the rent payment under the lease agreement
- **Loans from Financial Institution:** decreased by Baht 62.1 million due to loan payment according to the contract

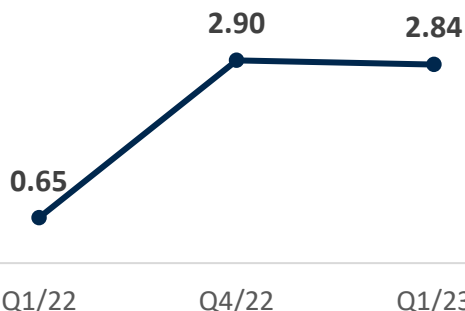
Total Shareholders' Equity

As of 31 March 2023, the Total Shareholder's Equity of the Group was Baht 2,157.8 million, increased by Baht 62.6 million or 3.0% from 31 December 2022. This was mainly due to the operating performance during the period.

Key Financial Ratios

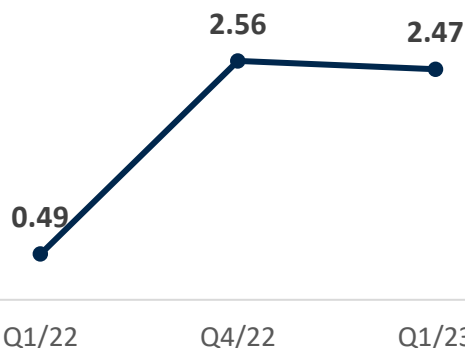
Current Ratio

Unit: Times



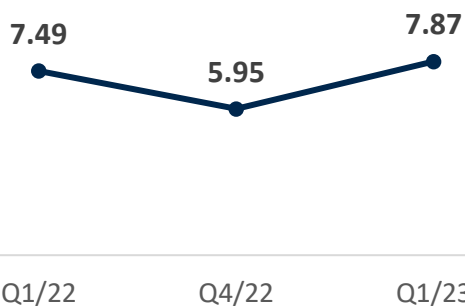
Quick Ratio

Unit: Times



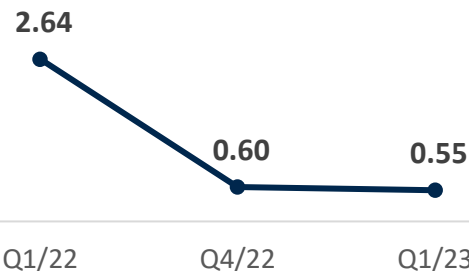
Account Receivable Turnover Ratio

Unit: Times



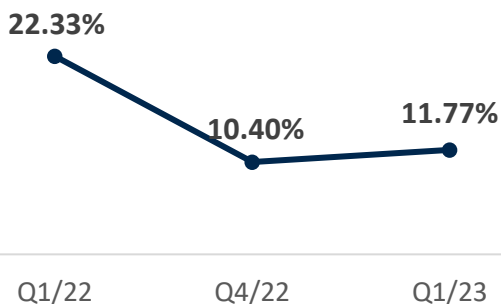
D/E Ratio

Unit: Times



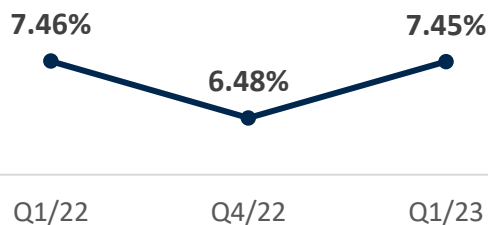
ROE

Unit: %



ROA

Unit: %



Appendix

There are 2 types of the Company's power plant businesses according to the fuels used in production, as listed on the tables

1. 3 Operational commercial biomass powerplant projects, as listed on the table

| Powerplant / Location | Operated by | Type /Energy source | Installed Capacity (MW) | Amount of electricity offered for long-term (MW) ^{/1} | Amount of electricity offered for short-term (MW) ^{/1} | 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) | TBP | VSPP / Biomass | 9.9 | 3.4 | 6.0 | 25 May 2021 |
| Total | | | 29.7 | 20.3 | 6.0 | |

2. Municipal waste projects

2.1 5 projects are under the development, as listed on the table

| Power plant / Location | Operated by | Type /Energy source | Installed Capacity (MW) | Amount of electricity offered (MW) ^{/1} | Date of commercial operation start |
|---|-------------|------------------------|-------------------------|--|------------------------------------|
| Municipal waste power plant project TES SKW (Watthana Nakorn district, Sa Kaeo) | TES SKW | VSPP / Municipal waste | 8.0 | 6.0 | Within 2524 |
| Municipal waste power plant project TES RBR (Mueang district, Ratchaburi) | TES RBR | VSPP / Municipal waste | 8.0 | 6.0 | Within 2524 |
| Municipal waste power plant project TES CPN (Mueang district, Chumphon) | TES CPN | VSPP / Municipal waste | 6.0 | 4.0 | Within 2524 |
| Municipal waste power plant project TES TCN (Samut Sakorn) | TES TCN | VSPP / Municipal waste | 9.9 | 8.0 | Within 2525 |
| Municipal waste power plant project TES CNT (Chainat) | TES CNT | VSPP / Municipal waste | 8.0 | 6.0 | Within 2525 |
| Total | | | 39.9 | 30.0 | |

2.2 2 projects in the bidding preparation with the Local Government Organizations, as listed on the table

| Power plant/ location | Operated by | Type /Energy source |
|---|-------------|------------------------|
| 1. Municipal waste power plant TES PRI (Prachin Buri) | TES PRI | VSPP / Municipal waste |
| 2. Municipal waste power plant TES UBN (Ubon Ratchathani) | TES UBN | VSPP / Municipal waste |