

# **TX2030**

### **TESS Transformation 2030**

**TESS Group Mid-term Management Plan (2025-2030)** 

August 14, 2024

**TESS Holdings Co., Ltd.** 

(Securities code: 5074)

#### **TX 2030 -TESS Transformation 2030-**

- Focus growth investments and management resources on key business areas while sustaining existing operations as the earnings base.
- Policy to achieve high profitability and increase ROE and ROIC through business restructuring.

#### **Key Metrics**

| Period                | Gross<br>profit | Operating income | ROE   | ROIC | In-house FIP<br>rollover<br>Renewable<br>energy cap. | Cumulative<br>installed cap.<br>(Power storage<br>plants for the grid) | Cumulative installed cap. (Power storage plants other than for the grid) | Biomass<br>fuel supply | Renewable<br>energy<br>generation<br>cap. * |
|-----------------------|-----------------|------------------|-------|------|--|--|--|------------------------|---|
| FY06/2030<br>Forecast | 21.5 bn yen     | 13.4 bn yen      | 11.7% | 5.7% | 113MW  | 700MW  | 150MW  | 500,000<br>tons/year   | 470MW                                       |
| FY06/2027<br>Forecast | 13.2 bn yen     | 6.4 bn yen       | 5.8%  | 3.0% | 75MW   | 100MW  | 120MW  | 350,000<br>tons/year   | 380MW                                       |
| FY06/2024<br>Actual   | 6.5 bn yen      | 2.3 bn yen       | 3.4%  | 1.6% | OMW  | OMW  | OMW  | 104,000<br>tons/year   | 231.8MW                                     |

- Expanding business as an engineering company consistently working on energy conservation and environmental measures since its establishment.
- In the engineering business, we acquired large-scale development-type EPC projects in addition to contracted projects, in response to the rapid expansion of the renewable energy market following the start of the FIT system in 2012. In the energy supply business, we have established a medium- to long-term earnings base by increasing revenues from the sale of electricity from our own renewable energy power plants.
- In the future, the market for "FIP conversion of FIT solar power plants + storage battery co-location" is expected to grow rapidly from the perspective of effectively utilizing "Power storage plants for the grid" and existing FIT solar power plants in order to stabilize the power grid.
- In addition to the existing business of energy-conservation and renewable energy solutions (solar power, CGS, and other existing fields), the company will prioritize investments in the "Power storage system-related business" and "resource-recycling biomass fuel business" sectors, focusing management resources on these growth areas through 2030. \* Portion owned by
- Increase corporate value and promote stable shareholder returns by emphasizing ROE and ROIC and promoting ESG management.

#### Image of Sales, Gross Profit, and Operating Income Trends

FIT solar power plants development-type EPC drove earnings through the fiscal year ending June 30 2023, based on increased revenues from sales of power from in-house renewable energy power plants. 123,000

We expect sales and profits to increase toward 2030, driven by strategic growth investments in key areas during the preparation phase.



#### ■ By FY06/2023: Establishment of revenue base focused on renewable energy business

- Gaining large EPCs through FIT solar power development.
- Expansion of renewable energy generation business through FIT and on-site PPA.
- Start resource-recycling biomass fuel business through PKS export sales and EFB pellet R&D.

#### ■ FY06/2024-FY06/2027: Preparation period through growth investments

- · Increase in headcount, particularly in sales and engineering divisions.
- Development and auction bidding for large power storage• Improve revenues from expansion of FIP plants for the grid
- Focus on FIP conversion of FIT solar power plants + storage battery co-location, increase earnings from own • Full-scale resource-recycling biomass fuel solar power plants, and acquire EPC, O&M for customers. business. • Expansion of decarbonization solutions in the BtoR area. Increase supply of PKS, focus on commercialization of EFB pellet development.

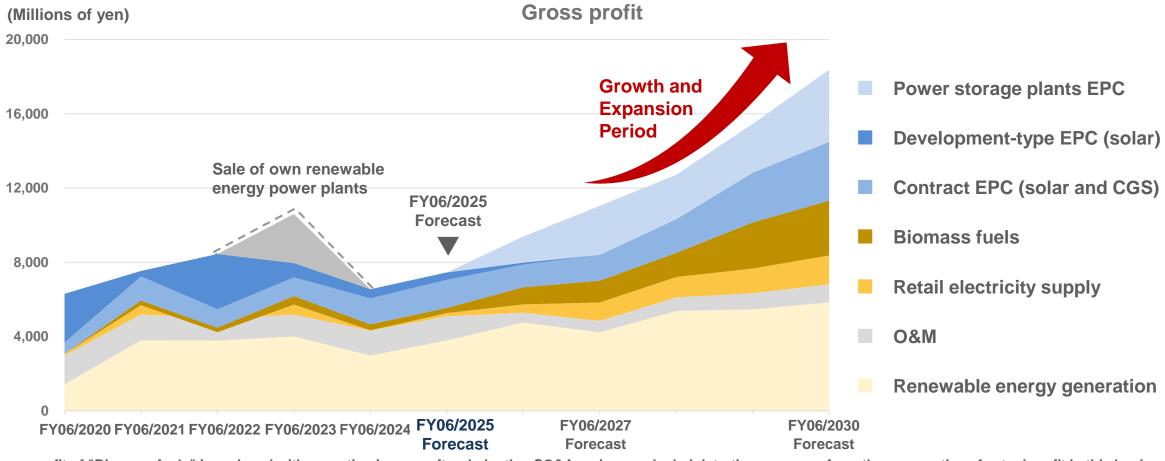
#### ■ FY06/2028-FY06/2030: Growth and expansion period

- Expand sales through EPC for large power storage plants for the grid
- conversion of FIT solar power plants + storage battery co-location.



#### **Prospect of Business Structure Transformation Toward 2030**

- Our aim is to transform the business structure with FY06/2024 marking the inflection point of the performance curve, despite incurring a high upfront cost as of FY06/2025.
- ► EPC for power storage plants for the gridis expected to be in full operation in FY06/2027 and followed by a period of growth and expansion starting in FY06/2028.



<sup>\*</sup>Gross profit of "Biomass fuels" is replaced with operating income after deducting SG&A and general administrative expenses from the perspective of actual profit in this business.

Therefore, there is a discrepancies in the total amount of gross profit with the previous page.



- ► Steady progress in the development process; sales are expected to be recorded from the transfer of rights and other assets in FY06/2025 or FY06/2026.
- ► Sales are not included in the forecast for the fiscal year ending June 30, 2025 and the medium-term management plan, as the schedule has not been finalized at this time.
  - This project will be developed as a business site related to renewable energy power generation.
  - Plans to transfer the land and rights to a third party after obtaining permits, approvals, and rights under the City Planning Law, Agricultural Land Law, and other relevant laws.
  - Discussions on the development process and transfer of rights are progressing steadily, and the transfer is expected to be completed and sales recorded by the end of the medium-term management plan period, either FY06/2025 or FY06/2026.
  - The schedule cannot be finalized at this stage due to the lengthy process for approvals and permits.
  - Due to the difficulty in determining the timing of recording, revenues from the transfer of the rights to this project are not included in the forecast for the fiscal year ending June 30, 2025 or in the medium-term management plan.
  - The Company is confident that the transfer of the rights will be achievable and will announce revisions to its earnings forecasts once the transfer of the rights is confirmed.



### **Growth Strategies in Focused Business Fields**

#### **Recognition of Business Environment**

- ► The market for decarbonization will expand both domestically and internationally during the medium-term management plan period.
- ► Growing importance of power storage systems from the perspective of effective use of renewable energy power and grid stabilization.

#### **Environment Surrounding Decarbonization**

- Market size related to decarbonization is growing in anticipation of carbon neutrality in 2050.
- Domestic energy-intensive companies' decarbonization needs remain strong, and inquiries continue to outpace our resources.
- Electricity demand in the industrial sector is expected to continue to increase significantly due to the construction of new data centers and semiconductor factories.
- It is assumed that new power sources will be secured from the perspective of ensuring domestic energy security in response to soaring fossil fuel import prices.
- Japan Launches AZEC (Asia Zero Emission Community) Initiative to Promote GX in Asia to Reduce Global Greenhouse Gas Emissions.

#### **Growing importance of power storage systems**

- Nationwide expansion of renewable energy power plants output curbs poses a major social challenge to the effective use of renewable energy electricity.
- The importance of power storage plants, which can flexibly charge and discharge electricity in response to fluctuations in the renewable energy output, is expected to increase in order to ensure a stable supply of electric power.
- Backed by the stabilization of revenues in the auction of long-term decarbonized power sources, subsidies, and other policies, further promotion will be expected in the future.
- FIP conversion of FIT solar power plants + storage battery co-location contribute to the improvement of the overall profitability of the business while minimizing the impact of output curtailment.



Focus on building up the development pipeline by making maximum use of the development know-how and development system cultivated in the FIT solar power plants business.

| Period             | Gross profit<br>(Millions of yen) | Cumulative installed capacity (MW) |
|--------------------|-----------------------------------|------------------------------------|
| FY06/2030 Forecast | 3,900                             | 700                                |
| FY06/2027 Forecast | 1,400                             | 100                                |
| FY06/2024 Actual   | 0                                 | 0                                  |

#### **Our Strengths**

- Steady expansion of development pipeline with know-how and development system for renewable energy power plants, having developed more than 500 MW FIT solar power plants in the highvoltage and extra-high-voltage fields.
- Capability of one-stop service with comprehensive in-house production from site development to financing, design, construction, maintenance, remote monitoring, operation control, and management of storage batteries.
- Accumulation of expertise in the development, construction, and operation of grid storage facilities for the wholesale power trading market, supply-demand adjustment market, and capacity market, underpinned by a successful bid for the Shizuoka Kikugawa Power Storage Plant (22,077 kW capacity) in the Long-Term Decarbonization Power Supply Auction.
- High price competitiveness through the establishment of cooperative frameworks with storage battery manufacturers.

#### **Growth strategy**

- Expanding the development pipeline with know-how cultivated through the development of FIT solar power plants. Undertaking EPC on consignment for developed power storage plants.
- Current development pipeline: approx. 2,000 MW capacity (approx. 30 projects).
- Aiming to develop more than 700 MW of projects by 2030 through the tolling method with infrastructure companies as off-takers and utilizing long-term decarbonization power auctions.
- Expanding the energy supply business by providing one-stop services including O&M and operation and management.



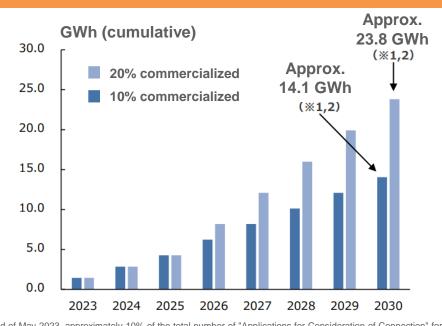
"Project Lion" Power storage project for the grid in the UK

The amount of grid storage batteries installed is expected to expand rapidly to a cumulative total of about 14.1~23.8
 GWh in 2030

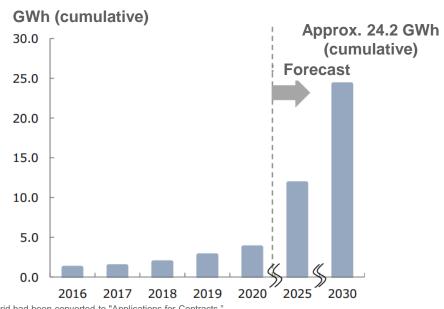
\*After estimating the output (GW) of the grid storage batteries to be commercialized based on the status of applications for consideration of grid connection, the storage battery capacity (GWh) is calculated assuming a 3-hour rate based on past subsidy project results, etc.

 The amount of storage batteries installed for residential, commercial, and industrial use is also expected to grow rapidly, reaching a cumulative total of approximately 24.2 GWh in 2030

#### Prospects for the introduction of grid storage batteries



### Forecast for introduction of storage batteries for residential, commercial, and industrial use



(\*1) As of the end of May 2023, approximately 10% of the total number of "Applications for Consideration of Connection" for power storage plants for the grid had been converted to "Applications for Contracts."

Assuming that about 20% of the cases will change from "Applications for Consideration of Connection" to "Applications for Contracts" if probability of its operation increases to the level of solar power and on-shore wind power (because of the storage battery cost reduction (see "Organization for Cross-regional Coordination of Transmission Operators, JAPAN' Compilation of information related to grid access operations for power generation" in FY2022)

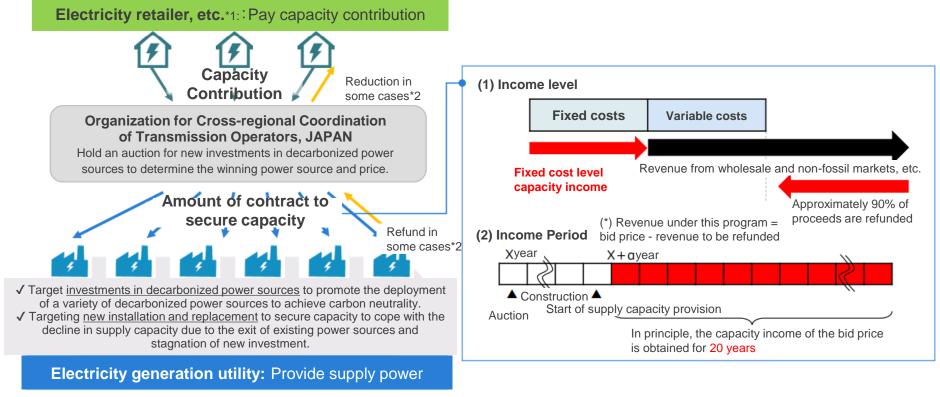
(\*2) The number of projects that shift from "contract application" to "actual operation" refers to the operation ratio of projects that have not yet been certified, which was assumed in the introduction forecast of onshore wind power generation at the time of the 6th Energy Base Study. The number of projects that will move from "contract application" to "actual operation" is based on the assumption that about 70% of the projects will move from "contract application" to "actual operation" in this forecast as well.

Source: Cabinet Secretariat, JAPAN website "Hosting an expert working group to realize GX"

"Investment strategies by sector ③ (power storage batteries/automobiles, SAF/aircraft, ships, Resource-recycling) " (November 8, 2023) https://www.cas.go.jp/jp/seisaku/gx\_jikkou\_kaigi/senmonka\_wg/dai3/siryou.pdf



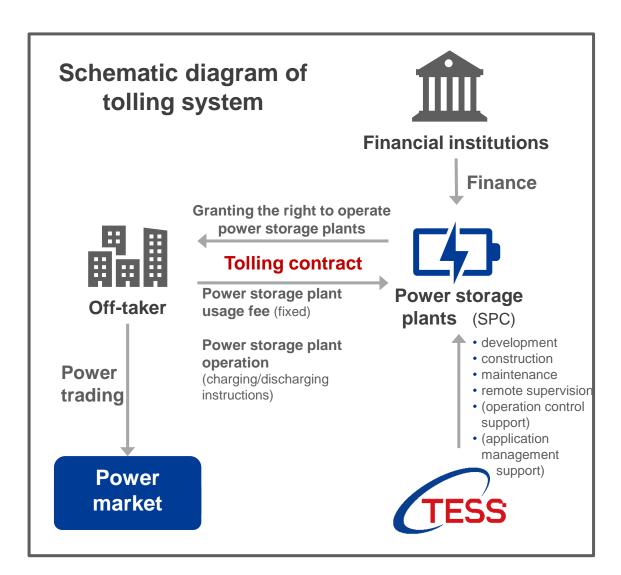
- Long-term decarbonized power supply auction is a mechanism to secure supply capacity for a period of 20 years in principle, targeting new investments in newly established or replaced decarbonized power sources.
- The amount of the capacity reservation contract obtained by the power producer is paid from the capacity contribution of the Electricity retailer.



<sup>\*1</sup> Electricity retailer, General electricity transmission and distribution utility, and Electricity generation utility.

Source: Organization for Cross-regional Coordination of Transmission Operators, JAPAN website "Outline of the Long-Term Decarbonization Power Supply Auction (Bidding year: FY2024 implementation) " (July 2024) https://www.occto.or.jp/market-board/market/oshirase/2024/files/202407\_youryou\_gaiyousetsumei\_long.pdf

<sup>\*2</sup> Refunds and reductions are described later in Chapters 3 and 4.



#### About the tolling system

- A tolling contract is a type of energy purchase agreement in which the off-taker pays the costs of generating electricity.
- The off-taker retains ownership of the energy obtained from the storage facility.
- The off-taker acquires the right to operate the storage facility through a long-term tolling contract with the SPC that owns the storage facility. In exchange, the off-taker pays a usage fee for the storage facility.
- The operator trades on the Japan Electric Power Exchange (JEPX) and the supply and demand adjustment market.
- The stable, long-term usage fee income from the operator enables the storage facility to recover its investment.
- Our company can provide one-stop services from the development and construction of energy storage facilities to maintenance, remote monitoring, operation control support, and operation management support.

▶ In response to the expansion of output curtailment, the company is developing both profit improvement at its own renewable energy power plants and solution proposals for its customers.

| Period             | Gross profit*EPC<br>(millions of yen) | Cumulative installed capacity*EPC (MW) | In-house FIP turnover<br>contribution<br>(millions of yen) | In-house FIP rollover<br>Renewable energy cap.<br>(MW) |
|--------------------|---------------------------------------|--|--|--|
| FY06/2030 Forecast | 0                                     | 150                                    | 1,700  | 113  |
| FY06/2027 Forecast | 1,300                                 | 120                                    | 200  | 75   |
| FY06/2024 Actual   | 0                                     | 0                                      | 0  | 0  |



#### **Our Strengths**

- The group has a track record of constructing approx. 710 solar power plants nationwide, amounting to approx. 1,060 MW, which enables rapid development of sales activities to users (e.g. the Kyusyu area where output is often suppressed, there are approx. 140 projects with a total capacity of approx. 270 MW).
- The group (including investments held by portfolio companies) owns approx. 275 MW of solar power plants under the FIT system (e.g. the group owns approx. 130 MW even in the Kyusyu area where output is often restricted).
- Capable to use our track record of the FIP conversion of FIT solar power plants + storage battery co-location for our clients.
- The group can provide comprehensive services, including power generation forecasting after FIP conversion and operation and management of recharging and discharging storage batteries in addition to EPC and O&M.

#### **Growth strategy**

#### For our own renewable energy power plants

- Targeting the Kyushu area, where output curtailment is expected to increase due to the FIT system, to improve electricity sales through FIP conversion of FIT solar power plants + storage battery co-location.
- By utilizing the results of FIP conversion of FIT solar power plants + storage battery co-location in the company's own projects to expand sales in engineering business.
- Expand the target to areas other than Kyushu area, depending on expected scenario of output curtailment.

#### For customers

- Focus on the Kyushu area, where output curtailment is common, from FY06/2025 to FY06/2028 to propose FIP conversion of FIT solar power plants + storage battery co-location to expand EPC sales.
- Reduce costs by strengthening the purchasing power of storage batteries and improving efficiency through equalization of specifications through expansion of the overall power storage system business with power storage plants for the grid.
- Expand the energy supply business by undertaking O&M and operation and management on an integrated basis.



Expanding the Circular Economy and Stock Business by Utilizing Residues (PKS, EFB) from the Palm Industry.

| Period             | Gross profit<br>(Millions of yen) | Biomass fuel supply<br>(10,000 tons/year) |
|--------------------|-----------------------------------|---|
| FY06/2030 Forecast | 3,000                             | 50  |
| FY06/2027 Forecast | 1,100                             | 35  |
| FY06/2024 Actual   | 314                               | 10.4                                      |

#### **Our Strengths**

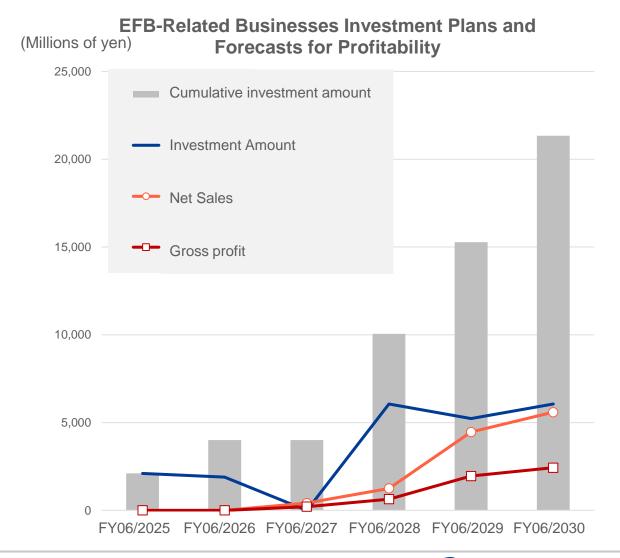
- Developed a fuel sales business in Indonesia to procure PKS fuel from 2020, started to sell the fuel to biomass power plants in Japan. Established a supply chain including a palm oil mill with two local stock piles (shipping bases).
- We are the only company that dispatches Japanese staff to Indonesia to directly manage PKS purchasing and shipping, and we have earned the strong trust of off-takers.
- In order to make effective use of EFB, R&D for pelletization has been conducted in Indonesia since 2018, and after combustion tests at power plants, etc., EFB has been successfully converted into fuel. R&D for mass production is ongoing.
- Signed an agreement with PTPN (Indonesian state-owned palm plantation company) for "EFB pellet production business. Successfully established a strategic advantage in acquiring raw materials and land for the plant.
- PKS and EFB share the same source of raw materials, and the supply chain established through the PKS fuel sales business can be effectively utilized for EFB fuel.

#### **Growth strategy**

- Aggressively develop and expand suppliers, backed by demand for the Group's Saga Imari Biomass Power plant.
- Expand sales of PKS fuel to external customers to 200,000 tons/year and to Saga Imari Biomass Power plant to 200,000 tons/year (total 400,000 tons/year), targeting FY06/2028.
- As for EFB pellets, start production and sales at a small-scale plant by the end of FY06/2025, and continue R&D for mass production. Aim to acquire production capacity of 100,000 t/year during the medium-term management plan period for large-scale commercialization.
- EFB pellets have an overwhelmingly low environmental impact compared to wood pellets due to the effective use of residual materials, appealing to environmentally conscious users.
- In the future, we will consider using various agricultural residues effectively as biomass fuels.



▶ In the EFB-related business, investments will be made continuously from FY06/2025 onward, and full-scale profitability is expected from FY06/2029.



#### **Background**

- Palm Kernel Shell (PKS), a residue generated in the process of palm oil production, is effectively used as fuel for biomass power generation.
- On the other hand, Empty palm Fruit Bunches (EFB) discharged from palm oil mills are not utilized effectively and are considered a problem because they emit methane into the atmosphere through decomposition when left unattended.
- In the 2030 energy mix, Japan's biomass power generation target is about 47 billion kWh, which requires about 20 million tons of biomass fuel per year.
- EFB has been approved as a new fuel that can be used under the FIT system in 2023, and demand for EFB is expected to increase in the future.

#### **Advantages of EFB fuel**

- The sustainability of imported wood pellets has been questioned due to the impact of natural forest clearance and plantation development.
- EFB fuel, on the other hand, is a more sustainable fuel made from crop residues and is expected to be sold at the same quality and price level as wood pellets.
- In Japan, the need for more sustainable fuel is increasing, and the company plans to expand sales by targeting co-firing with industrial coal power generation.

### Energy-conservation and renewable energy solutions

(Solar Power, CGS, & other existing fields)

► Focus on improving profit margins through selective project choices while expanding the range of orders by strengthening resources, including increasing the number of personnel.

| Period             | Gross profit from<br>EPC sales<br>(Millions of yen) | Gross profit from<br>PPA business<br>(Millions of yen) |
|--------------------|---|--|
| FY06/2030 Forecast | 3,200   | 160  |
| FY06/2027 Forecast | 1,400   | 30   |
| FY06/2024 Actual   | 1,897   | ▲17  |

#### **Our Strengths**

- One-stop service from proposal to design, construction, remote monitoring, maintenance, and financing.
- Integrated proposals for FIP including demand forecasting, power generation planning, and operation management.
- Vendor-free proposal of the most relevant system to the clients.
- Bespoke installation method (purchase or PPA) tailored to the customer's needs.
- Strong existing customer base based on extensive installation experience.
  - Solar Power: approx. 710 projects, approx. 1,060 MW
  - CGS: approx. 740 projects, approx. 1,333 MW

#### **Growth strategy**

- Needs are firm and inquiries continue to outstrip resources. Increase sales and profits by increasing headcount through strengthened recruitment.
- Shift to a strategy of selectively taking orders for projects with high profit margins.
- With regard to the introduction method (purchase or PPA), focus on user needs and expand the overall number of introductions by flexibly proposing introductions in a form that meets those needs.
- Leverage the customer base with a rich installation track record to anticipate the further decarbonization needs of existing users.





### **Toward Enhancing Corporate Value**

#### **Toward Enhancing Corporate Value**

► Policy of increasing corporate value and providing shareholders with stable returns by emphasizing ROE and ROIC and promoting ESG management.

#### ■ ROE/ROIC oriented management

- Strive to achieve high profitability by transforming the business structure through growth investment.
- Establish a business structure that enables ROIC to exceed WACC (Weighted Average Cost of Capital) on an ongoing basis as a publicly traded company.

#### Growth Investment and Shareholder Returns

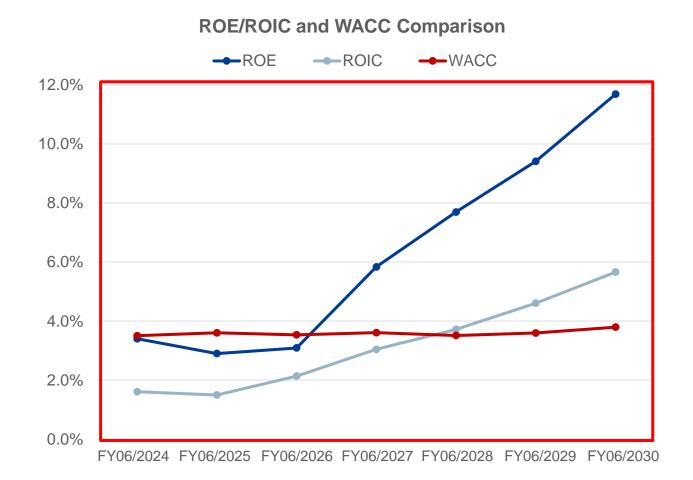
- The Company remains at a stage where capital expenditures exceed cash flows to build a highly profitable business.
- Continue to return profits to shareholders with a target consolidated dividend payout ratio of 30% in order to strike a balance between a highly profitable business and financial soundness.
- Endeavor to increase shareholder returns through earnings growth.

#### Promotion of ESG Management

 Reduce environmental impact through products and services, and promote solutions to social issues and strengthen governance of business activities.

#### **ROE/ROIC** oriented management

- ► Transform business structure and improve ROE and ROIC by promoting growth strategies.
- ► Target ROIC in excess of WACC on an ongoing basis.



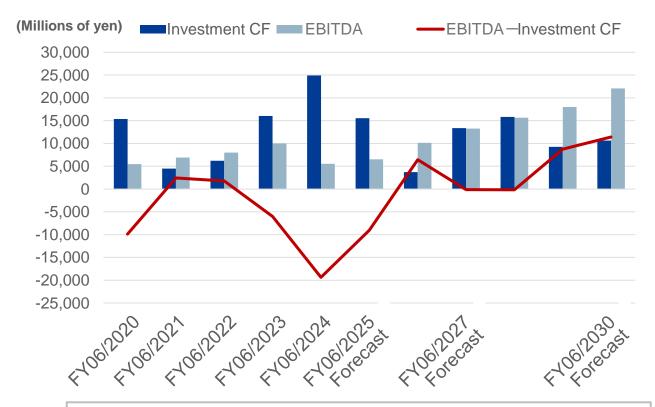
- Transform business structure and improve profitability by promoting and realizing growth strategies.
- Make effective use of non-recourse debt financing, including project financing, to invest in growth.
- We expect our WACC to remain around 4%.
- Our aim is to improve profitability by transforming our business structure, with ROIC at approximately the same level as WACC in 2028 and significantly exceeding WACC in 2030.

(ROE: over 11%, ROIC: over 5.5%)

#### **Growth Investment and Shareholder Return Policy**

- Achieve profit growth through continuous growth investments.
- ► Expand shareholders returns to a consolidated dividend target payout ratio of 30%\* on the basis of suitable shareholder return.

#### **EBITDA and Growth Investments**



Of this amount, the investment in the Imari Biomass Power Plant (excluding tax) is as follows

- By FY06/2024 : Approx. 23 billion yen
- FY06/2025 : Approx. 9 billion yen (Forecast)

- The company plans to maintain the dividend of 16 yen announced at the beginning of the fiscal year as to pay out stable dividends, although the forecast for FY06/2024 has been revised down (consolidated dividend payout ratio is expected to exceed 95%).
- The business environment is favorable, and we believe that profit growth through continuous investment in growth is the key to shareholder returns.
- Continue to return profits to shareholders based on a consolidated dividend payout ratio of 30% in order to achieve both sustainable shareholder returns and investment for growth.
- The company aims to increase shareholder returns significantly through profit growth over the medium term, although the dividend forecast for the fiscal year ending June 30, 2025 is 5.11 yen, a considerable decrease from the previous year.



<sup>\*</sup> Consolidated dividend payout ratio is defined as dividend per share divided by consolidated net income per share excluding the effect of valuation gains/losses on derivatives related to forward exchange contracts.

#### **Promotion of ESG Management**

► Reduce environmental impact through products and services, and promote solutions to social issues and strengthen governance of business activities.

#### **Environment: Realization of Total Energy Savings & Solutions**

- Contribute to global CO₂ emissions reduction by providing decarbonization solutions for customers and promoting our own renewable energy generation business.
- Promote proactive information disclosure in response to stakeholder requests.

| Item  | FY06/2024 Actual | FY06/2030 Target |
|---|------------------|------------------|
| Transmission of electricity from in-house renewable energy power plants | 246,000 MWh      | 749,000 MWh      |
| Amount of CO₂ emission reduction contribution                           | 105,000 ton      | 321,000 ton      |



- Promote the standards and frameworks which create inspirations and a good work environment in order to improve employee job satisfaction.
- Build a culture and work environment where staff can gain wide range of benefit from diversity.

#### **Governance: Fair and transparent management**

- Holding of information meetings and other events and enhanced information disclosure to ensure transparency in corporate management and build relationships of trust with stakeholders.
- Proactively create opportunities to hear opinions from external directors, experts, stakeholders, and other outside parties.





| Item   | FY06/2024<br>Actual | FY06/2030<br>Target   |
|--|---------------------|-----------------------|
| Percentage of female employees                     | 21.5%               | 30% or more           |
| Ratio of female managers                           | 3.0%                | 10% or more           |
| employment rate of the physically challenged       | 3.0%                | 3.1% or more          |
| Number of chiefs and assistant managers            | 111                 | Approx.200            |
| Percentage of employees taking paid leave          | 66.3%               | 80% or more           |
| Percentage of male employees taking parental leave | 12.5%               | 100%                  |
| Per full-time employee Investment in education     | 69,000 yen          | 80,000 yen<br>or more |



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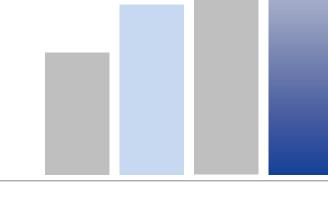
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## + E Performer







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