

# Contribution to global environmental conservation

# To Realize a Decarbonized Society

We recognize that climate change represents both risks and an important management mission for the Toho Titanium Group to gain new profit opportunities. We will work to mitigate and adapt to climate change through our business, actively contribute to decarbonization through technological innovation, and work proactively in good collaboration with stakeholders to achieve both medium- to long-term improvements in the Group's corporate value and sustainable development of

society as a whole.

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Our Group supports the Japanese government's decision to lead the country toward decarbonization. We will comply with all laws and regulations related to climate change and help achieve the goals set forth in the SDGs and the Paris Agreement through the reduction of GHG emissions across the whole value chain. We also recognize the importance of climate-related financial disclosures, support the TCFD, and disclose information in line with the TCFD.

# **TOPICS**

# Realization of Net Zero Energy Building (ZEB) \*1

At the Chigasaki Plant, we constructed a general office building that received ZEB certification, the first in our Group and the first in Chigasaki City. This general office building combines high-performance energy-saving technologies with energycreating technologies to maintain a comfortable indoor environment while reducing the building's annual primary energy consumption to net zero or below. It is an office complex that offers both functionality and comfort. The building is scheduled to start functioning as a "ZEB" after the completion of peripheral improvements by the end of December

\*1 ZEB: Building that meets the following requirements (1) and (2) (1) Reduction of 50% or more from the standard primary energy consumption (Excluding renewable energy: energy conservation) (2) Reduction of 100% or more from the

standard primary energy consumption (Including renewable energy: energy conservation + energy creation)

# 1) Low-E double glazing (11) High efficiency air-cooled heat 1) Daylight sensing LED (12) Motion sensor LED lights (6) Eaves effect due to (13) High efficiency ventilation (7) Solar panel carport

# Introduction of solar power generation equipment

In December 2023, the Wakamatsu Plant installed solar power generation equipment (PPA\*3 model) on the roofs of the plant and warehouse buildings, and power transmission began in December

We will actively promote the introduction of carbon-neutral energy and energy-saving equipment by considering the installation of such equipment in plants and buildings to be constructed in the future.



Solar power panels installed within the Wakamatsu Plant

3: Abbreviation of Power Purchase Agreement. A power purchase agreement in which the power roducer installs, operates, and maintains power generation facilities on and off site, and supplies the nerated power to customers

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# Initiatives to make fuel carbon-free

In October 2022, the Kurobe Plant switched from LPG used in the manufacturing process to carbon-offset LPG. Carbon offset LPG offsets the greenhouse gas emissions produced when it is burned with carbon credits

# Participation in GX League\*

Our Group has participated in the GX League sponsored by the Ministry of Economy, Trade and Industry since FY2024.

Aiming to realize a carbon-neutral society by 2050, we will contribute to society by working to Activities to realize reduce GHG emissions.



\*GX League: a carbon-neutral society by 2050 and economic growth at

# Providing Products Beneficial to the Environment and Safety

Our Group is responding to the emerging demands of our customers and promoting the development of new process and products that contribute to the reduction of the global environmental burden. We are also highly conscious of contributing to the SDGs in the raw materials we use, manufacturing processes, and product applications, thereby contributing to the development of a sustainable society.

The New Materials Division started construction of a new WEBTi® Plant in FY2024 to be used as a material for PEM water electorolyzer. We aim to start its mass production in

The Catalyst Division is continuing to develop

environmentally friendly catalysts and, in the course of this, is promoting sales expansion for products that were commercialized in FY2024.





# Sustainable Resource Utilization

## **Effective Use of Water Resources**

Our Group is working to improve operations and promote water recycling, as well as identify regions with high water risks and reduce water intake. We have confirmed that we meet the permit standards for water quality and quantity in each region, comply with laws and regulations, and there are no business

sites experiencing water stress as of FY2024 based on the water stress level survey results \*1 in the "Aqueduct Water Risk Atlas \*2".

\*1 https://www.toho-titanium.co.jp/csr/data/ (Japanese only)
\*2 A tool published by the World Resources Institute (WRI) for measuring water risks in various regions around the world.

#### Promotion of Waste Reduction and Reuse

While controlling amounts of waste generated at each business site as much as possible, we are also enhancing our sorting of waste to render it valuable and recyclable. When waste disposal is the only option left, we do so properly and in compliance with the Waste Disposal and Public Cleansing Act.

## Recycling of Sludge Generated from the Wakamatsu Plant With regards to the sludge generated from the Wakamatsu

Plant, we are working to recycle sludge so that it can be used for landfill disposal.





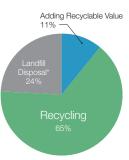
Drying sludge to make press cake

## **Promotion of Waste Plastic Reuse**

Continuing from the previous fiscal year, we are promoting initiatives to recycling waste by changing the outsourcing company for waste treatment and adopting a recycling process. At Chigasaki Plant, we continue to work to recycle waste plastic and carrying out activities that contribute to environmental conservation.



# Breakdown of Industrial Waste (FY2024)



\* Of the landfill disposal ratio of 24% 23% is for development of offshore

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# Information Disclosure Based on TCFD Recommendations

Based on the Task Force on Climate-related Financial Disclosures (TCFD) framework, our Group organizes and discloses information within 4 frameworks: governance, strategy, risk management, and indicators and targets.

Our initiatives on climate change are as follows. We will promote progress toward our goal of net-zero GHG emissions by 2050.

#### Governance

The Risk Management Committee leads the identification of climate change risks, the deliberation of their impacts and countermeasures, and monitoring and management of handling of approved risks.

The ESG Promotion Committee leads the identification of climate change opportunities, the deliberation of their impacts and countermeasures/targets, and monitoring of handling of approved opportunities. These matters, together with climate

change risks deliberated at the Risk Management Committee, are reported to the Executive Committee.

The Executive Committee regularly (twice a year in principle) receives and approves reports on climate change risks and opportunities deliberated by the 2 Committees.

Then, the approved matters are reported to the Board of Directors, which has a supervisory function.

#### Governance structure for addressing climate change risks and opportunities



#### Strategy

Our Group is working to understand the financial impact of climate change through scenario analysis. Based on the results of the scenario analysis, we formulate a concrete transition plan toward a decarbonized society and reflect it in our Medium-term Management Plan from FY2023 to FY2025.



Please refer to "Disclosure content in accordance with the TCFD" on the Group website for details. https://www.toho-titanium.co.jp/pdf/csr/aboutTCFD.pdf (Japanese only)

#### **Risk Management**

#### The Climate Change Risk Identification Process

The process of identifying climate change risks is led by the Risk Management Committee. In cooperation with the ESG Promotion Committee, the Executive Committee finally identifies climate change risks of our Group.

#### How to Respond to Risks

The identified climate risks are classified into 4 categories (avoidance, mitigation, transfer, and acceptance) in accordance with the Risk Management Manual, and their responses are considered. After deliberation by the Risk Management Committee, the response policy is reported to the Executive Committee through the ESG Promotion Committee for final approval.

#### Integration into Company-wide Risk Management

The Risk Management Committee is chaired by the President and consists of executive officers, division managers, and members designated by the Chairperson. Climate change risks are managed by the Risk Management Committee in the same way as other risks, based on the system set forth in the Risk Management Manual

# **Indicators and Targets**

Our Group is committed to reducing GHG emissions through zero CO<sub>2</sub> emissions from manufacturing processes, energy conservation and effective use of energy, and carbon-free energy source uses.

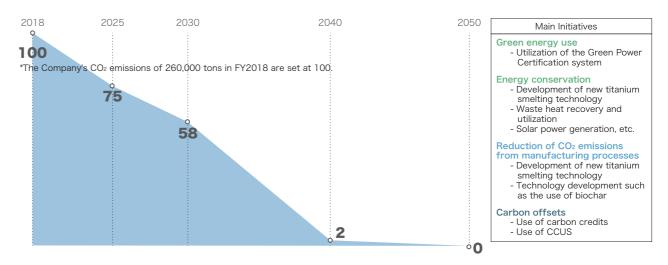
We have set a target of 25% reduction in the sum of Scope 1 and Scope 2 emissions for FY2025 and more than 40% reduction for FY2030 (both compared with FY2018), with the ultimate goal of net zero in FY2050.

We have set the following indicators for achieving carbon neutrality in FY2050.

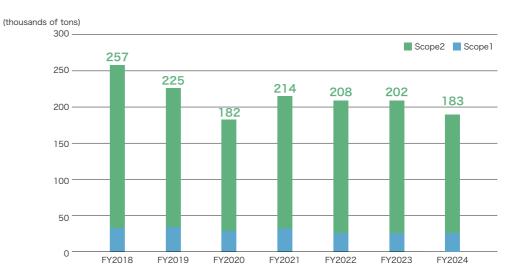
Indicator 1: GHG emissions from manufacturing processes

Indicator 2: GHG emissions from energy conservation and effective use of energy

Indicator 3: GHG emissions from carbon-neutralized energy source uses



#### **GHG Emissions**



Notes) 1. Scope 1: The amount offset by credits (J credits or voluntary credits). 2. Scope 3: 367 thousand tons of CO<sub>2</sub> in FY2022, 351 thousand tons of CO<sub>2</sub> in FY2024.

#### Adoption of CO<sub>2</sub>-free electricity

As part of our efforts to reduce CO<sub>2</sub> emissions, we introduced CO<sub>2</sub>-free electricity at the Chigasaki Plant, part of Wakamatsu Plant, and at Hitachi Plant in FY2021, and Kurobe Plant in FY2023. In FY2023, we installed solar power generation equipment based on the PPA model, and started generating and transmitting electricity.

The Group will continue to promote CO2-free use of the electricity it uses.

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