

# Environmental protection

## Daido Metal Group Environmental Policy

Due to the necessity for the Group as a whole to tackle environmental conservation activities in order to help achieve a sustainable society, the Company formulated the "Daido Metal Group Environmental Policy" in April 2004.

By promoting business activities based on the concept of "finite resources and finite possibilities for cleansing", and that take the finite nature of the global environment into account to the maximum extent possible, the DAIDO METAL GROUP as a whole is working proactively towards the formation of a recycling-based society.

### Fundamental philosophy

The DAIDO METAL GROUP views the global environment as a precious resource for all people to share, and considers protection of the environment to be one of the most important issues facing mankind. We will focus all efforts and technology on preserving the environment.

### Fundamental policies

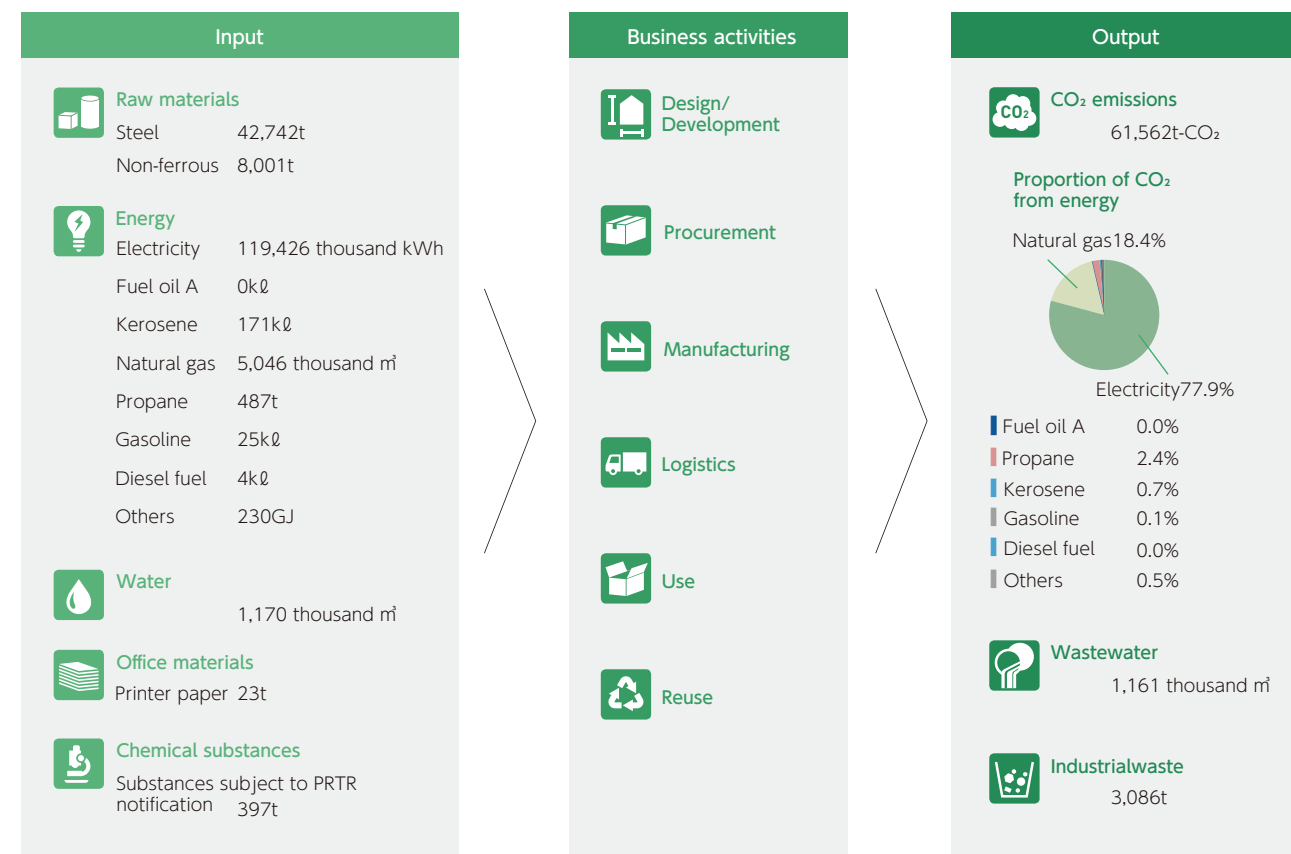
- The Group will comply with environmental laws and regulations and other requirements to which it has agreed.
- In order to promote environmental conservation, continuously improve activities for the maintenance of the environment and prevent pollution, the Company will set and regularly review environmental targets and goals.
- In all business activities, comprehensive efforts will be made to reduce energy consumption and use of materials, recycle materials, and reduce industrial waste to a minimum.
- Through the development of products and technologies, the Group will employ its overall technical abilities in an effort to preserve and clean up the environment.
- The Group will take active steps to inform customers, the local community and other related parties of its efforts to preserve the environment, and promote communication regarding the issue.
- Through environmental education and informative activities, the Group will seek to boost environmental awareness among all employees, and encourage them to take it upon themselves to participate in environment-related activities.
- In order to increase the effectiveness of this policy, the Company will strive to publicize it among employees and all those working for the Company.

## Overall picture of business activities and environmental impacts

The amounts of materials, energy and water resources used by the DAIDO METAL GROUP in Japan in FY2021, and the waste generated, are as follows.

Note: Energy usage is presented in accordance with the Energy Saving Act.

### Business activities and environmental impact



## Environmental accounting

In environmental accounting the costs and benefits of environmental conservation activities are reflected clearly in environmental management and this information is published, so we have been working to understand environmental costs and benefits since FY2001.

We refer to Ministry of the Environment guidelines when aggregating and categorizing the figures, but we have limited our approach to items identifiable as 100% environmental costs.

### [Scope of data]

DAIDO METAL CO., LTD., Daido Plain Bearings Co., Ltd., Daido Industrial Bearings Japan Co., Ltd., DAIDO METAL SAGA CO., LTD., NDC Co., Ltd., and Iino Manufacturing Co., Ltd.

### [Period under review]

FY2021 (1 April 2021 - 31 March 2022)

### Environmental conservation costs

(Unit: Millions yen)

| Classification             | Content                                                                                                                                            | The amount of the investment                    |       |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-------|
| Area-specific costs        | Cost of preventing pollution                                                                                                                       | Measures to address air/water quality, noise    | 184.2 |
|                            | Global environmental conservation costs                                                                                                            | Global warming prevention, energy savings, etc. | 48.3  |
|                            | Resource recycling costs                                                                                                                           | Waste reduction/disposal/recycling, etc.        | 208.5 |
| Management activity costs  | Environmental education, acquisition/maintenance of EMS certification, personnel costs associated with environmental conservation activities, etc. | 34.3                                            |       |
| Research activity costs    | R&D costs for mitigating environmental impacts                                                                                                     | 61.1                                            |       |
| Social activity costs      | Greening, landscaping, awareness activities, etc.                                                                                                  | 10.4                                            |       |
| Environmental damage costs | Restoration costs for soil contamination, etc.                                                                                                     | 32                                              |       |
| <b>Total</b>               |                                                                                                                                                    | <b>578.8</b>                                    |       |

Note: Figures are calculated using the amounts invested in FY2021. We have not aggregated compound costs which combine costs with an environmental purpose and those whose purpose is unrelated. Personnel costs are allocated in proportion to the time spent on such duties. \*As all figures are rounded to the nearest whole number, the sum of individual items may not exactly equal the total.

## Development and manufacture of environmentally friendly products

"Hydrogen Corolla," the ORC Rookie Racing Corolla H2 Concept, completed Super Endurance Round 3 at the Fuji 24 Hour Race.

The hydrogen based G16E engine is a gasoline engine that has been refined in racing. The engines use our plain bearings.

Our products also contribute to technological development toward carbon neutrality (a decarbonized society).

## Waste Reduction Activities

A large proportion of our industrial waste is generated from plating and processing processes. Since FY2016 the effect of reduction of plating waste fluids has been visible, and we have been implementing measures such as weight reduction by reusing lubricants and solvents. We will continue to discuss reduction and weight reduction measures at the Environmental Meeting, and will continue to implement detailed reduction measures in the future.

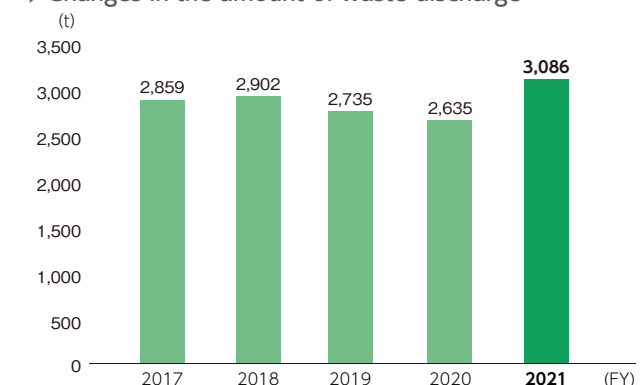
### [Scope of data]

DAIDO METAL CO., LTD., Daido Plain Bearings Co., Ltd., Daido Industrial Bearings Japan Co., Ltd., DAIDO METAL SAGA CO., LTD., NDC Co., Ltd., and Iino Manufacturing Co., Ltd.

### [Period under review]

FY2021 (1 April 2021 - 31 March 2022)

### Changes in the amount of waste discharge



## TOPICS

### Use a water dispenser to eliminate plastic bottle waste!

Daido Metal Europe GmbH

The world's oceans are increasingly polluted by plastic waste and plastic particles, and are threatened with catastrophic effects on marine life.

Since its establishment in 2017, Daido Metal Europe has installed water dispensers instead of vending machines that use plastic bottles, limiting the use of plastic products. Therefore, there is almost no plastic waste. Using glasses, they can drink carbonated and cold water, so it has a reputation for being good for health, and the employees are becoming more aware of recycling.



An employee bringing their own glass to reduce plastic waste

### Management System for Chemicals Contained in Products

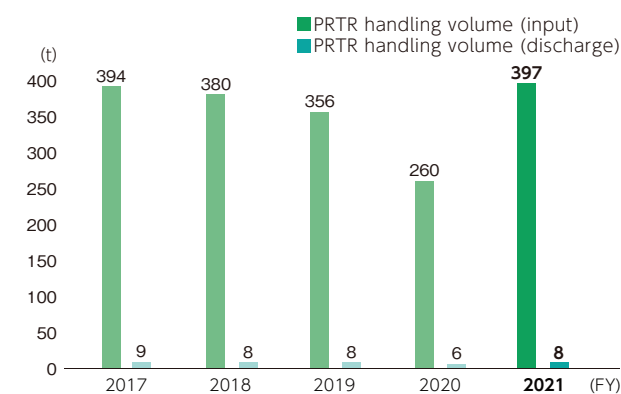
With progress being made in the creation of frameworks for controlling the use of chemical substances at an international level, such as REACH regulations, it is important that management of chemical substances contained in products is implemented appropriately at each stage of procurement, manufacturing, and shipping.

DAIDO METAL's management of this issue is based on JIS Z 7201 (Management of chemicals in products - Principles and guidelines), and this information is published internally as well as being used to respond promptly to client requests.

**[Scope of data]**  
DAIDO METAL CO., LTD.,

**[Period under review]**  
FY2021 (1 April 2021 - 31 March 2022)

#### Changes in the amount of PRTR discharge



### Conformity with Environmental Standards (ISO 14001)

All of our production sites in Japan have obtained ISO 14001 certification, the international standard for environmental management systems, and we are working to protect the natural environment by reducing CO<sub>2</sub> emissions and waste.

In addition to complying with laws and regulations, we have established our own standards and are working to reduce and improve risks, including the environment surrounding the Group, including employees and customers.



Conformity with Environmental Standards (ISO 14001)

### Environmental risk management (environmental emergency drills)

We are considering various risks to prevent environmental impact.

To prevent the leakage of substances that have an impact on the environment, we conduct emergency response drills assuming the event of an accident every year.

Not only can we take appropriate measures, but we also ensure the safety of our workers by repeating training, and opinions are exchanged after the training for further improvement of the level.



### Environmental Education

We conduct environmental education with the aim of raising the environmental awareness of our employees. We are deepening our basic understanding of environmental issues and our position, and advancing the level of our daily environmental activities. Using the ISO 14001 General Education Textbook for all employees, we conduct acceptance training and confirm the implementation status.

# Addressing Climate Change

## Addressing Climate Change and Global Warming Prevention

### FY2021 environmental activity target and result of activities

We believe that responding to climate change and global warming is a corporate obligation, and regard it as necessary for maintaining and increasing corporate value. As an organization that is expanding its business globally, the DAIDO

METAL GROUP works to help resolve the problem of climate change through its business, and to mitigate the environmental impact of its business activities.

| Category                                       | Scope                       | Environmental target (for FY2021)                                                                                                                                                                                                                                                                                                                                               | Primary activities (FY2021)                                                                                                               | Result of activities (FY2021)                                                                                                                          | Reduction percentage   |
|------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Global warming prevention and energy reduction | DAIDO METAL GROUP in Japan* | Reduce CO <sub>2</sub> emissions to below FY2020 levels by the end of FY2021.<br>●CO <sub>2</sub> emissions: Less than 54,893t                                                                                                                                                                                                                                                  |                                                                                                                                           | ●CO <sub>2</sub> emissions (actual result): 61,562t                                                                                                    | △12.1%                 |
|                                                |                             | Reduce CO <sub>2</sub> emissions to below FY2020 levels by the end of FY2021.<br>●CO <sub>2</sub> emissions: Less than 28,574t                                                                                                                                                                                                                                                  | ●Tracking progress in achieving goals of medium- to longterm plans for energy conservation                                                | ●CO <sub>2</sub> emissions (actual result): 30,431t                                                                                                    | △6.5%                  |
|                                                | DAIDO METAL CO., LTD        | ●Target for energy/1000JPY of sales<br>Reduce CO <sub>2</sub> /1000JPY of sales by 8% when compared to FY2013 by the end of FY2021.<br>-CO <sub>2</sub> /1000JPY of sales: 464.43g<br>Reduce energy/1000JPY of sales for each form of energy by 8% when compared to FY2013 by the end of FY2021.<br>-Electricity/1000JPY of sales: 0.8268kWh<br>-Fuel/1000JPY of sales: 155.81g | ●Considering options for adoption of energysaving equipment<br>●Rolling out successful environmental improvements across the organization | ●Energy/1000JPY of sales<br>-CO <sub>2</sub> /1000JPY of sales: 469.96g<br>-Electricity/1000JPY of sales: 0.8169kWh<br>-Fuel/1000JPY of sales: 160.22g | △1.2%<br>1.2%<br>△2.8% |

\*DAIDO METAL CO., LTD., Daido Plain Bearings Co., Ltd., Daido Industrial Bearings Japan Co., Ltd., DAIDO METAL SAGA CO., LTD., NDC Co., Ltd., Iino Manufacturing Co., Ltd.  
\*Fuel: Mainly heavy oil, kerosene, light oil, LP gas, and city gas Per-unit: Calculated by CO<sub>2</sub> emissions, electricity consumption, and fuel consumption/production value.

### Energy saving activities

We are promoting energy-saving activities with the aim of preventing global warming and making effective use of energy resources.

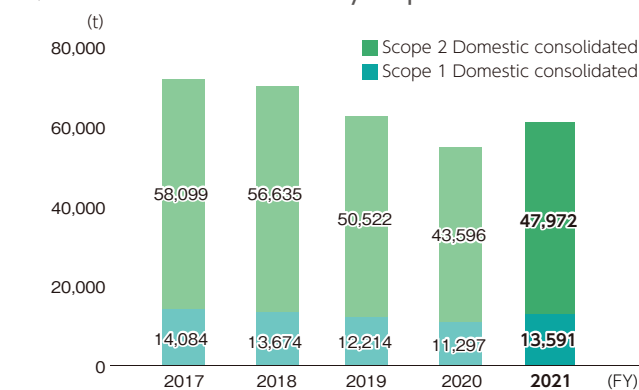
In FY2021 CO<sub>2</sub> emissions increased along with an increase in production volume, but we reduced emissions by 98.78g-CO<sub>2</sub>/thousand yen on intensity basis.

### CO<sub>2</sub> emissions by scope

We support the TCFD framework and aim to become carbon neutral by 2050.

In addition to continuously promoting energy efficiency at business sites, we will coordinate information and visualize the situation in order to reduce the greenhouse gas emissions of the entire Group.

#### Trends in CO<sub>2</sub> emissions by scope



# Carbon Neutral Strategy

INFORMATION DISCLOSURE BASED ON TCFD RECOMMENDATIONS

In June 2022 the Company announced its support for the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). In line with the TCFD recommendations, we will disclose important information on climate change as follows.



## Governance

We recognize climate change response as an important issue (Materiality) that we should prioritize in order to promote sustainable management. The Sustainability Committee chaired by the President deliberates on the direction of management including policies for addressing risks and opportunities related to climate change, reports to the Board of Directors as appropriate, and receives instructions and supervision from

management.

The Sustainability Committee is held at least twice a year to deliberate and discuss initiatives to resolve issues related to sustainability (CSR, ESG, SDGs), including climate change.

### Corporate Governance

[https://www.daidometal.com/sustainability/corporate\\_governance/?ignore\\_ip=1](https://www.daidometal.com/sustainability/corporate_governance/?ignore_ip=1)



## Strategies (Risks and opportunities)

In order to understand the impact of climate change on the Group business, we have analyzed risks and opportunities for all businesses in the Group using the following two scenarios:

|                |                                                                                                                                   |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------|
| 1.5°C scenario | A scenario to ensure a transition to a decarbonized society                                                                       |
| 4°C scenario   | A scenario in which measures against global warming that surpass the current level are not taken and physical effects are assumed |

## Important risks and opportunities

We identified risks and opportunities for climate change and examined the importance of climate change to the Group and when it might occur.

- Time axis (time of occurrence) - Short term: By around 2025, Medium term: By around 2030, Long term: By around 2050
- Materiality (potential impacts on strategic and financial plans, etc.) - Large: Large impact, Medium: Medium impact, Small: Little impact on the Company

|                                            | Items                                                                 | Descriptions of risks and opportunities                                                                                                                                                                                                                                   | Timing & Materiality |                  |                  |                  |
|--------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------|------------------|------------------|
|                                            |                                                                       |                                                                                                                                                                                                                                                                           | Short term           | Medium term      | Long term        |                  |
| Transition risk (1.5°C scenario)           | Carbon tax                                                            | Increase in operating costs due to the introduction and rise of a carbon tax                                                                                                                                                                                              | Small                | Medium           | Large            |                  |
|                                            | Carbon emission control                                               | Increase in operational costs due to stricter regulations on fossil fuels (higher crude oil prices and higher conversion costs to alternative fuels) and rise of capital expenditures and other costs for coping with it                                                  | Large                | Large            | Large            |                  |
|                                            | Development of EV conversion                                          | In line with the spread of EV conversion, sales decrease due to declining demand for products for internal combustion engines; production facilities become stranded assets (with zero value)                                                                             | Small                | Large            | Large            |                  |
|                                            | Changes in evaluations by investors                                   | Deterioration of valuation for companies that do not decarbonize (decline of stock price due to their divestment)                                                                                                                                                         | Small                | Medium           | Medium           |                  |
|                                            | Changes in reputations among job seekers and employees                | Worsening evaluation for companies without decarbonization initiatives results in fewer job seekers, more retirees, and lower employee motivation and productivity                                                                                                        | Medium               | Medium           | Medium           |                  |
| Physical risk (4°C scenario)               | Intensification of abnormal weather                                   | Intensified abnormal weather events cause an increase in damage such as plant shutdowns and impacts on supply chains                                                                                                                                                      | Small                | Medium           | Large            |                  |
|                                            | Rise in average temperature                                           | Increased cooling costs (air conditioning energy costs) due to rising temperatures, and an increased occurrence of heatstroke among employees                                                                                                                             | Small                | Medium           | Large            |                  |
|                                            | Rise in sea level                                                     | As sea levels rise, floods and storm surges increase, and coastal factories and transportation infrastructure are damaged, disrupting supply chains and causing increased costs                                                                                           | Small                | Medium           | Large            |                  |
| Opportunity (1.5°C scenario, 4°C scenario) | Increase in demand for renewable energy                               | Demand for sliding bearings for offshore wind power plant increases due to increased demand for wind power generation. Contribution to cost reduction such as maintenance costs compared with conventional rolling bearings                                               | 1.5°C<br>4°C         | Small<br>Small   | Medium<br>Medium | Large<br>Medium  |
|                                            | Progress in shift to EVs                                              | •Sales increase due to product development for ZEV* Aluminum die-cast products, products for water pumps, products for air conditioners, etc.<br>•Penetration into EV market by diverting our core technologies such as tribological frictional parts-e-Axle and others   | 1.5°C<br>4°C         | Small<br>Small   | Medium<br>Medium | Large<br>Medium  |
|                                            | Increase in demand for high value-added products                      | Demand for high value-added products that contribute to energy saving through lower friction materials increases in order to comply with fuel efficiency regulations                                                                                                      | 1.5°C<br>4°C         | Small<br>Small   | Medium<br>Medium | Medium<br>Medium |
|                                            | Increase in demand for bearings for vessels                           | Demand for vessels increases due to the growth of the global economy and the expansion of maritime trade. Demand for bearings for internal combustion engines increases due to the shift to alternative fuels as a response to decarbonization and the updating of ships. | 1.5°C<br>4°C         | Small<br>Small   | Medium<br>Medium | Large<br>Medium  |
|                                            | Demand for internal combustion engines using CN-fuels                 | Increasing demand for bearings for internal combustion engine using CN (carbon neutral) fuel derived from renewable energy sources (hydrogen engine, biofuel engine, etc.)                                                                                                | 1.5°C<br>4°C         | Small<br>Small   | Medium<br>Small  | Medium<br>Small  |
|                                            | Increase in demand for air conditioning equipment                     | Increase in demand for bearings for air conditioning equipment due to rising temperatures                                                                                                                                                                                 | 1.5°C<br>4°C         | Small<br>Small   | Medium<br>Medium | Large<br>Large   |
|                                            | Continued demand for turbine bearings for power generation facilities | Increase in sales due to increased demand for turbine bearings for hydrogen and ammonia power generation plants (demand will continue as coal and oil are replaced with alternative fuels)                                                                                | 1.5°C<br>4°C         | Medium<br>Medium | Medium<br>Medium | Medium<br>Medium |

\*ZEVs (Zero-Emission Vehicle): Battery electric vehicles (BEVs) and fuel cell vehicles (FCV) that do not emit carbon dioxide or other exhaust gases when running

## Policy on climate change risks and opportunities

The Group will use scenario analysis to identify medium- to long-term risks and opportunities, analyze the impact of its management strategy and financial position, and take measures to respond appropriately to risks, strengthen its competitiveness against opportunities, and acquire new business opportunities. The results will be disclosed and reported to stakeholders through media such as the Company website and corporate reports.

## Future direction of management

As the shift to EVs accelerates in our mainstay the automotive industry, the Company has established the EV Shift Action Promotion Dept. which is not only responding to the shift to EV, but is also working to connect the needs of the automotive industry to new businesses, such as initiatives to vehicles equipped with internal combustion engines using CN-fuel (hydrogen-fueled vehicles, etc.). In addition, we will actively engage in research in new fields that lead to the development of products with environmentally and energy-friendly materials and functions. With regard to capital investment, we will promote the development of facilities with less energy loss and less use of materials and oils and review the optimal investment plan while paying close attention to future trends in demand for internal combustion engines.

We are also making the most of our core technologies cultivated over many years, and as a contribution to green energy, are continuing to actively develop the market for bearings for wind power generation, for which demand is expected to grow in the renewable energy field. We have established the Wind Turbine Technology R&D Institute, an independent organization dedicated to the development (design and evaluation) of basic technologies for bearings for wind power generation, so as to further increase sales in the wind turbine business.

We will continue to enhance our profitability (increase in sales and share) by refining existing businesses while responding to changes in the business environment by creating and fostering new businesses.

## Risk Management

The Company has established policies on the Group-wide risk control and management system, and appropriately manages various risks surrounding its business through the collection of information by the Risk Management Committee that is chaired by the President. The Risk Management Committee is held at least twice a year to set priorities for risks that may have a significant impact on the realization of sustainable management in the Group, taking into account the likelihood that risks will materialize and the degree of impact they will have on our business. We promote measures to mitigate risks based on

priority and strengthen risk control. We have identified priority risks such as climate change risks and risks caused by natural disasters and accidents, and the risk management department in charge is responsible for overseeing the risk management of the Group companies.

### Risk Management

<https://www.daidometal.com/sustainability/risk-management/>



## Metrics And Targets

Based on the recent increase in environmental awareness and the Japanese government's efforts to achieve carbon neutrality by 2050, the Group has formulated its carbon neutral policy and established the Carbon Neutral Promotion Dept., a specialist organization that oversees various measures.

In order to fulfill our responsibilities as a member of the global society, we aim to achieve carbon neutrality (net-zero CO<sub>2</sub> emissions) by 2050 in the Group as a whole, including overseas companies. We will work to reduce CO<sub>2</sub> emissions concretely in a step-by-step manner by working to reduce to energy, utilizing renewable energy, and promoting innovation.

### Environmental Initiatives

<https://www.daidometal.com/sustainability/environment/>



## Daido Metal's Carbon Neutrality

Having recognized that addressing climate change is an important management issue (Materiality), the Group aims to become carbon neutral by 2050 in order to contribute to a sustainable global society.

### Basic Idea

In order to achieve net-zero CO<sub>2</sub> emissions by 2050, the Group will incorporate such measures as energy savings, the use of renewable energy, and the promotion of innovation into its action plan. We will promote concrete initiatives aimed at reducing CO<sub>2</sub> emissions in a step-by-step manner with the aim of realizing a sustainable society and Group.

### Major Initiatives

Environmental Initiatives ⇒ P32