

# Environment

The JAMCO Group is working on environmental protection, including energy and resource conservation, contributing to a sustainable society both environmentally and economically, including research and development toward providing products and services with low environmental impact.



## Basic Environmental Philosophy and Environmental Policies

Basic Environmental Philosophy and Environmental Policies



<https://www.jamco.co.jp/en/csr/environment.html>

### Basic Policy

JAMCO proactively engages in conservation activities to preserve the global environment through business activities. Accordingly, we have established the Basic Environmental Philosophy and Environmental Policies based on our management philosophy and basic policy on sustainability.

## Environmental Management System

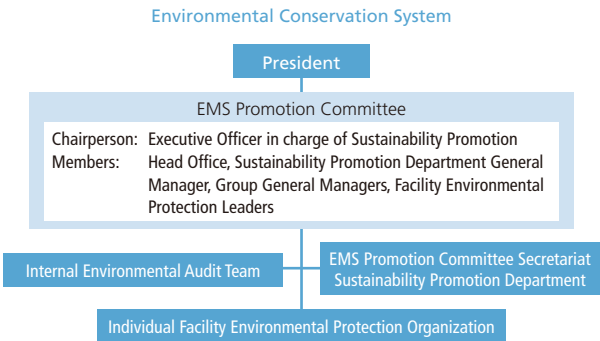
### Environmental Conservation Activities Promotion System

We are building an environmental protection activities promotion system to realize our Basic Environmental Philosophy and Environmental Policies. Our environmental protection initiatives are conducted primarily on the basis of internal regulations in compliance with ISO14001 (Environmental Management System (EMS)), and we have secured ISO14001 certification for our head office, Component Manufacturing Center, and JAMCO AEROMANUFACTURING Co. Ltd.

Our President defines our Basic Environmental Philosophy, and the Executive Officer in charge of Sustainability Promotion

supervises companywide environmental protection initiatives and conducts management reviews in accordance with said Philosophy as Chairperson of the EMS Promotion Committee. We have established specific facilities within each district to perform environmental conservation activities as an integrated unit, with the facilities' Environmental Committees promoting these activities in an organized manner. Each facility sets individual environmental targets for every fiscal year as objectives to achieve during the financial year. The facilities work on continuous improvements related to the targets by systematically promoting environmental conservation activities and checking their progress through internal environmental audits. Facilities that have received ISO14001 certification undergo conformity assessments through periodic reviews by a certification body.

Environmental Conservation System



### Environmental Audit System

In order to improve environmental conservation activities, internal and external audits are carried out periodically to

confirm whether the activities are being performed appropriately in conformance with associated requirements, and if they are being maintained in an effective manner.

The internal environmental auditing team is made up of internal auditors who fulfill qualification requirements that are determined by internal regulations. Internal environmental audits follow an audit plan and check sheet. We focus on onsite audits that verify the consistency between administrative procedures and how activities are being performed. We link this to improvements in activities by gathering together the results of each audit into individual reports and requesting that corrective action be taken for non-compliant items. Every financial year we summarize the results of the internal audits and reflect them in the management review.

ISO14001 certified facilities maintain the certifications through annual examinations by external auditors for compliance with the standard's requirements.

## Environmental Action Plans

### ■ Carrying Out Environmental Protection Activities Continuity Plans

Environmental conservation activities throughout the year are summarized by management review, and issues are reviewed for improvement. For the important action items decided through the review, each facility continuously performs the PDCA cycle: Planning of environmental targets/implementation plans/measures (Plan), implementation of measures (Do), confirmation and implementation result reports on the achievement of environmental targets (Check), and management review (Action). Through such continuous efforts, in response to various movements and changes in the environment, we are encouraging environmental awareness among officers and employees throughout the company.

<b>Plan</b>	Making Visible Corporate Environmental Risks and Impacts
<b>Do</b>	Carrying Out Initiatives to Manage Visible Risks
<b>Check</b>	Assess Measures Undertaken
<b>Action</b>	Attend as Appropriate to Areas in need of Improvement

### ■ Management of Environmental Impact Assessment and Regulatory Compliance

We extract the aspects of our business activities that affect the environment, and in particular those items requiring improvements or special control under environmental laws and regulations are deemed to be significant environmental aspects. Areas which require adherence to laws and regulations, such as “emergency situations” and “wastewater,” independent standards are established and periodic checks are made to strengthen control measures.

## Climate Action

### Climate Action as Management Strategy

The JAMCO Group’s basic principles of management mandates that we contribute to society through businesses operated according to our management philosophy of “striving for coexistence with nature and contributing to a prosperous and progressive society.” Responding to climate change is crucial in terms of creating a sustainable society and protecting the global environment, and we are promoting initiatives based on analyses and assessments of the risks and opportunities that climate change affords our businesses.

### Announcement of Acceptance and Disclosures Regarding TCFD Recommendations

In November 2022, we proclaimed our agreement with recommendations made by the Task Force on Climate-related Financial Disclosures (TCFD), which was established by the Financial Stability Board (FSB). We are endeavoring for full disclosure of information relating to climate-associated concerns pursuant to the TCFD Framework.

Refer to our corporate site for further information about our responses to climate change. (Japanese text only.)



## Governance

Our Board of Directors is involved, through key decision-making and direction of management, including management policies and plans, in decision-making on such matters as key policies and responses to concerns, as well as resource allocation including human resources plans and infrastructure investments relating to sustainability, including such climate-associated concerns as responses to climate change risks and opportunities.

We have also established a Sustainability Promotion Board (SPB), which promotes overall sustainability efforts including climate change problems and reports as appropriate to the Board of Directors chiefly on the progress of such efforts.

▶ See P. 9 for SPB organizational structure and initiatives.

### Risk Management

We are aware that the quality of our risk management capabilities and risk response, enabling prompt and accurate handling in line with management environment changes, is directly linked to corporate survival and corporate value assessment. Turning to risk, the Sustainability Promotion Department ascertains various environment-related data including climate change initiatives and stakeholder demands in countries the world over in identifying and evaluating climate-associated risks. Working Groups and concerned divisions collaborate in undertaking to turn opportunities into new businesses and enterprises oriented toward creating new value.

▶ See P. 40 for our risk management structure.

## Strategy

### Risks and Opportunities based on Scenario Analysis

We identified risks to our company and its businesses from climate change on the basis of 1.5°C and 4°C scenario analyses. To investigate strategies for preparing for long-term risks among these, we conducted impact analyses with reference to such materials as global warming scenarios from the United Nations' Sixth Assessment Report (AR6) of the Intergovernmental Panel on Climate Change (IPCC) and the International Energy Agency (IEA) World Energy Outlook.

We also examined the impact of these scenarios on the aviation industry, creating societal concepts and analyzing risks and opportunities envisioning the 1.5°C and 4°C scenarios.

### Scenario Analysis Results

The aviation industry is accelerating moves to become carbon neutral industrywide by 2050. On the basis of the 1.5°C and 4°C scenarios, the JAMCO Group, as part of this industry, is aware of the necessity to further promote CO<sub>2</sub> emissions reduction efforts throughout its supply chain and to proceed with new initiatives as well.

There are demands for contributions to operating fuel efficiency improvements chiefly through weight reductions in the aircraft furnishings that are our primary products, etc., and the possibility of so responding is both a risk and an opportunity affecting future orders and transactions.

Going forward, we believe that proceeding with development of low-carbon, high-strength lightweight products that we manufacture and sell will enable us to make offerings that take advantage of our corporate strengths in narrow-body planes that are forecast to expand in market scale as well as the widebody planes that are our main targets, representing an opportunity for increased net sales.

### Indices and Targets Based on Scenario Analysis

We are specifying materialities (important issues) to undertake to resolve environmental and societal concerns through business activities on the basis of JAMCO Vision 2030, and conducting progress management through executing measures and operation of non-financial KPIs.

We are carrying out such initiatives with the New Energy and Industrial Technology Development Organization (NEDO) project as promoting research and development into CFRP manufacturing technologies and next-generation lightweight carbon honeycomb panels, promoting product recycling, and proactively utilizing recycled materials, thereby proceeding with research and development capable of contributing to product decarbonization through these efforts, with a target of contributing to becoming carbon neutral.

### Participation in the CONTRAIL Project

The CONTRAIL Project\*, which conducts atmospheric observations using aircraft, utilizes appropriate equipment that JAMCO is involved in developing. Greenhouse gas observations are conducted on aircraft, and the analysis results are distributed worldwide as valuable data for global warming research.

\*Subsidized by a project commissioned by the Ministry of the Environment



## Greenhouse Gas Emissions Results and Reductions Targets

### Results

(t-CO<sub>2</sub>)

	March 2021 Period	March 2022 Period	March 2023 Period	March 2024 Period
Scope 1	1,718	1,515	1,947	2,003
Scope 2 (Market-based)	8,612	7,916	8,337	8,208
Total	10,330	9,431	10,284	10,211

\*JAMCO PHILIPPINES, INC. and JADE ENGINEERING PTE LTD. are Location-based

### Third-Party Assurance

The JAMCO Group has conducted third-party verification in accordance with the international standard ISO 14064-3:2019 for greenhouse gas (GHG) emissions data (Scopes 1 and 2) for FY2023 (April 2023 to the end of March 2024), and it has obtained an assurance report (limited assurance level) from the verification body Socotec Certification Japan.



### Response to CDP

Our company responds to the analysis of corporate initiatives by the non-profit organization CDP in the areas of climate change and water security.



### ●GHG Types to Be Aggregated

GHG Types aggregated in this report are CO<sub>2</sub>, methane, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, and NF<sub>3</sub>.

### ●Scope 1 Emissions

GHG emissions in Japan, including those not resulting from energy, are computed using calorie conversion coefficients and carbon emission coefficients defined by the Act on Promotion of Global Warming Countermeasures.

### ●Scope 2 Emissions

GHGs associated with use of power purchased in Japan are computed using emissions coefficients of each electric company as defined by the Act on Promotion of Global Warming Countermeasures.

### ●Scope 3 Emissions

In FY2023, we provisionally calculated our Scope 3 emissions, excluding some overseas sites.

In the future, we plan to establish calculation procedures to improve accuracy and expand the scope of our calculations.

### ■Emissions Target

As targets conforming to being carbon neutral by 2050, the Japanese government has expressed that it will strive for a 46% reduction in GHGs from FY2013 levels by FY2030, and that it will continue to endeavor to increase this reduction to 50%. In response, we have set targets of being carbon neutral by 2050, and reducing total Scope 1 and Scope 2 to at least 50% of FY2019 levels by 2030.

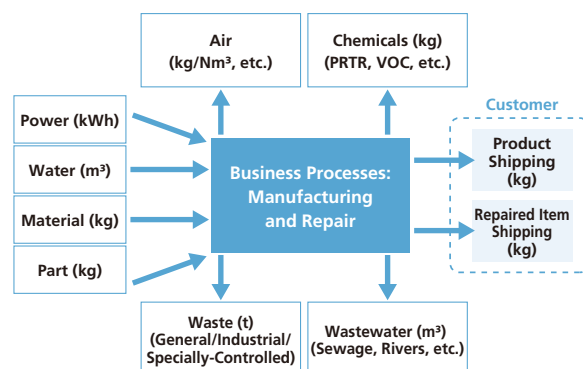
## Initiatives to Reduce Environmental Impact

### Initiatives to Reduce Environmental Impact in Business Activities

JAMCO specializes in the aircraft sector and is engaged in the manufacture and repair of aircraft interior products and components, and the maintenance and modification of aircraft and aircraft equipment. The figure below shows the overall picture of energy and resource inputs into our business activities and products and environmental impact outputs resulting from these activities as a material balance. In conducting our business, we consume many resources and discharge various substances. We strive to quantitatively grasp our environmental burden in order to reduce it in inputs and outputs alike.

As it becomes increasingly important to address global environmental issues, we are working hard to further reduce our environmental impact.

Material Balance



### Energy-saving Initiatives

We are working to reduce our energy consumption by driving energy conservation and efficiency in our production processes, and by reducing fuel consumption through such means as using inverters in our production equipment, air conditioning systems, lighting fixtures, and air compressors.

In FY2023, our sites promoted efficient operation of air conditioning systems and proceeded with updates and installations of more efficient equipment. In addition, we replaced our lighting equipment with LED lighting and worked on reducing energy consumption.

### Water Resources Initiatives

Water conservation efforts have been implemented throughout the company with the goal of reduce the water usage in business activities.

### Waste Reduction Initiatives

We are undertaking to reduce and recycle waste.

#### Thorough Separation Control

We thoroughly sort and collect waste by type of material, convert metals and paper (copy paper, cardboard, newspaper, etc.) to valuable resources, thereby working on promoting recycling and reducing waste.

#### Recycle Rate Improvement

We are undertaking to increase the types of items which can be recycled, via material and thermal recycling, by investigating and consulting with waste disposal subcontractors.

#### Proper Waste Management

JAMCO continues to implement initiatives to reduce waste based on the 3R (reduce, reuse, recycle) concept.

Additionally, the company conducts frequent on-site surveys of and collects information from waste disposal subcontractors to confirm that the disposal of waste products is being carried out appropriately. The information includes ascertaining disposal processes, control of manifests and other records, and certification renewal.

- Energy-saving Initiatives
- Water Resources Initiatives
- Waste Reduction Initiatives

The above reduction results for each usage/emission amount are published under Data Collection.

Environment-related Data (Data Collection)



[https://www.jamco.co.jp/en/csr/environmental\\_report/main/03/teaserItems2/04/linkList/0/link/08\\_DataCollection.pdf](https://www.jamco.co.jp/en/csr/environmental_report/main/03/teaserItems2/04/linkList/0/link/08_DataCollection.pdf)

### Management of Chemical Substances

Chemical substances used in our business activities are regulated by laws and regulations depending on their properties, risk, hazard, etc. Regarding particularly high-risk substances, we set up management procedures in our internal regulations and control them appropriately, to ensure stability of contents and accurate inventory. In addition, workers actually handling chemical substances possess the necessary qualifications and are working properly in accordance with management procedures.



## Promotion of Green Procurement

In order to continuously address environmental concerns in all corporate activities and reduce environmental burdens in the life cycle of products being produced and sold, JAMCO has promoted green procurement under which we procure materials and products with minimal environmental impact.

## Proper CFC Management

We perform proper management of fluorocarbons based on the Act on Rational Use and Proper Management of Fluorocarbons\*.

Fluorocarbons used in air conditioners, refrigerators, freezers and so on contain substances that cause global warming, and we maintain registers and conduct regular inspections of these devices.

We are also registered as a Class 1 Fluorocarbon Filling and Recovery Operator and properly perform the filling and recovery of fluorocarbons for equipment such as refrigeration and air conditioners installed in aircraft.

\*Act on Rational Use and Appropriate Management of Fluorocarbons

## Column

### Biodiversity Initiatives

We are aware that such environmental changes as climate change and global warming have a tremendous impact on humans, animals, and plants too. We are engaging with concerns about environmental protection and biodiversity. We are profoundly interested in the Taskforce on Nature-related Financial Disclosures (TNFD), a framework for disclosures relating to overall environmental protection.

Since its launch in June 2021, TNFD has proceeded to build a framework for private corporations and financial institutions to appropriately assess and disclose risks and opportunities relating to natural capital and biodiversity. Following on the International Sustainability Standards Board (ISSB), part of the International

Financial Reporting Standards (IFRS) Foundation, announcing that it was commencing a new standards setting project relating to biodiversity, ecosystems, and ecosystem services, we too believe that efforts are necessary in disclosures on the basis of the TNFD framework. We commenced research in FY2023, and will proceed to investigate concrete initiatives in the future.

In biodiversity protection, we are participating in local initiatives, including Tokyo Greenship Action, a Tokyo-led environmental protection group that acts in collaboration with corporations, NPOs, etc. We are cooperating to build an environment in which various plants may survive through such activities as cutting undergrowth and planting seedlings to preserve village forest environments.



Village forest conservation activities