

Environmental Management

Basic Policy

JFE Group companies are developing innovative technologies and international cooperation for the protection of the global environment by operating in harmony with the global environment, as well as protecting it, in accordance with the Group's environmental philosophy and policy.

Environmental Philosophy

The JFE Group puts top priority on protecting and enhancing the global environment to maintain its business in harmony with the environment and ultimately for the prosperity of society as a whole.

Environmental Strategies

1. Reduce the environmental impact of all businesses
2. Contribute through technologies and products
3. Contribute through businesses for resource conservation and energy efficiency
4. Communicate with society
5. Facilitate international cooperation

Management Structure

Framework for Environmental Management

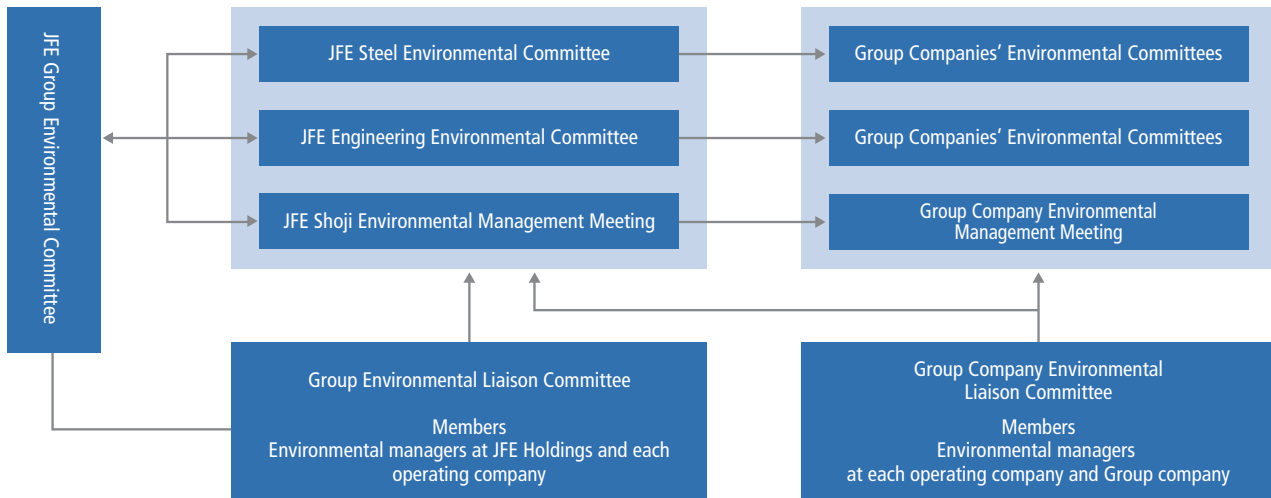
The JFE Group Environmental Committee, chaired by the president of JFE Holdings and operating under the JFE Group Sustainability Council, sets goals for environmental protection, monitors the progress of these initiatives and works to improve the Group's overall environmental performance. Key issues for corporate management such as climate change are deliberated at the Group Management Strategy Committee as well and reported to the Board of Directors. The board oversees environmental challenges by discussing the reported material. Additionally, specialized committees set up by JFE Group operating companies and affiliates implement specific activities.

In our Seventh Medium-term Business Plan, we positioned climate change as a top-priority business concern and formulated the JFE Group Environmental Vision for 2050. To this end, we are aggressively pushing forward to achieving our CO₂ reduction targets and achieving carbon neutrality by 2050.

For further details, refer to:

- ▶ [System for Promoting Sustainability](#) (P.10)
- ▶ [Seventh Medium-term Business Plan](#) (P.22)
- ▶ [JFE Group Environmental Vision for 2050](#) (P.52)

Environmental Management System



Initiatives

Environmental Management System

Acquiring ISO 14001 certification is a key part of every JFE Group company's environmental program. All global production sites of JFE Steel and JFE Engineering and major offices of JFE Shoji have been certified, encompassing 67% of 43,994 employees at 82 companies covered in this report and 52% of all sites. In FY2023, there were no major violations of environmental laws or regulations by Group companies (air, water, soil, etc.) that resulted in a fine or other penalty.

For quantitative data related to ISO 14001 for each business, please refer to the following information.

► [List of ISO 14001-certified companies](https://www.jfe-holdings.co.jp/en/common/pdf/sustainability/environment/env_manage/iso14001.pdf) (https://www.jfe-holdings.co.jp/en/common/pdf/sustainability/environment/env_manage/iso14001.pdf)

JFE Steel

Environmental Committee and Environment Management Committees Provide Appropriate Management Supervision

JFE Steel maintains Environment Management Departments at its head office and in each business office, as well as an Environmental Committee, chaired by its president and Environment Management Committees in each local office.

► [Environmental Management System \(Environmental Strategies\) \(Japanese only\)](https://www.jfe-steel.co.jp/research/environment.html)

(https://www.jfe-steel.co.jp/research/environment.html)

JFE Engineering

Environmental Committee Oversees Environmental Management

JFE Engineering maintains an Environment Management Department at each of its major locations, including production sites and branch offices as well as all divisions in charge of products. The Environmental Committee, chaired by the president, oversees environmental management for the entire company. Under its Environmental Management System, JFE Engineering works to minimize environmental impact at production sites, branch offices and construction sites and contribute to environmental protection through all products and services. The major strategies for FY2024 are (1) promote environmental contribution through products for mitigating global warming and climate change, (2) promote environmental protection, effective energy conservation, and resource recycling in business activities, and (3) ensure thorough compliance with environmental laws and regulations. We are reflecting these strategies into the related operations. These strategies are incorporated into related operations and are addressed.

JFE Shoji

Expand ISO 14001 Certification Acquisition Coverage

JFE Shoji obtained ISO 14001 certification for its head office, Osaka branch, and Nagoya branch in 2000 and later expanded the scope of certification to all domestic offices. JFE Shoji also applies the same environmental management system to domestic Group companies, promoting the same environment management activities and striving for the same certification. Overseas coil centers are also planning to acquire ISO 14001 certification.

Environmental Audit

In addition to the regular internal and external audits at ISO 14001-certified sites, the audit and environment departments at each operating company's head office conduct independent environmental audits at their production sites.

JFE Steel

Conduct Detailed Audits

Once a year, JFE Steel's Audit Department and the Environment, Disaster Prevention and Recycling Department conduct an environmental audit at each operational site. JFE Steel categorizes Group companies based on the result of risk assessment considering owned equipment and conducts detailed audits every one to five years using checklists.



Document audit at a domestic Group company on-site audit at a domestic Group company



On-site audit at a domestic Group company

JFE Engineering

Conduct Audits to Confirm Compliance with Environmental Laws and Regulations

JFE Engineering places a top priority on complying with environmental laws and regulations.

The Safety and Environment Department conducts annual audits at about 50 locations selected from the manufacturing sites, construction sites in Japan, and Group companies to confirm compliance with environmental laws and regulations. JFE Engineering also conducts internal audits on its own environmental management system to evaluate and enhance the effectiveness of various environment-related initiatives. Furthermore, environmental inspections are conducted at all construction sites by the department responsible for construction to verify compliance with the laws and regulations, and annual self-checks are conducted at the Tsurumi, Tsu, and Kasaoka manufacturing sites to confirm legal compliance.

JFE Shoji

Conduct Internal Audits and Environmental Audits

At JFE Shoji, the ISO Environmental Audit Department annually confirms that processing centers and warehouses of ISO 14001-certified Group companies comply with relevant environmental laws and regulations. For non-certified Group companies, the department conducts an environmental audit every three years.

For quantitative data related to environmental audits, please refer to the following information.

➤ [Environmental Data](#) (P.235)

Environmental Education

The JFE Group actively provides education to foster a corporate culture of environmental protection. Education at operating companies includes training for new recruits and newly promoted employees as well as specific environmental-protection training by position and job.

For Group-wide environmental training, we hold an annual Review Session on Environment-Related Laws and Regulations, to which lawyers specialized in environment-related laws and regulations are invited to give lectures on the latest information related to the enactment and revision of these laws, as well as associated violations and court decisions. Employees from wide-ranging departments, including the environment, disaster prevention, legal affairs, general affairs, and manufacturing departments of the operating companies and their group companies, who are involved in environment-related activities, attend these annual sessions as the basis for planning their activities, such as educating employees and raising awareness about the Group's policies and initiatives.

JFE Steel

Promote Pollution Control Managers Acquire Qualifications

JFE Steel encourages employees to obtain qualifications as pollution-control managers. A training program for environmental managers at group companies was launched in FY2011. In addition, JFE Steel provides employees with training to ensure compliance with environmental laws, disseminates information about regulatory revisions at its Environmental Liaison Committee meetings for Group companies, and organizes brush-up training in waste management skills for on-site personnel.

JFE Engineering

Provide General Environmental Education

JFE Engineering educates all employees about environmental issues to increase their understanding of the company's policies and initiatives. To ensure proper environmental management at production and construction sites, training is often tailored to specific employee operations, helping to enhance their capabilities. In FY2023, JFE Engineering launched an initiative to identify training needs at greater detail, such as automatically tracking the number of employees participating in trainings via video-distribution.

JFE Shoji

Provide General Environmental Training and Specialized Training for Internal Audit Staff

JFE Shoji provides all employees with general environmental training in compliance with ISO 14001 and specialized training for internal audit staff. All employees within the scope of certification receive a pocket-size ISO Employee Card to carry with them so they can check the details of ISO 14001 activities at any time. In addition, each company performs a self-check using its own extensive checklist to ensure understanding and rigorous compliance with environmental laws. Also, JFE Shoji provides environmental training to new executives and information about revised laws and regulations to environmental management personnel.

For quantitative data related to environmental education, please refer to the following information.

▶ [Environmental Data](#) (P.235)

Environmental Impact Reduction Initiatives

The JFE Group regards co-existence and mutual prosperity with local communities, the global environment, and society at large as a critical managerial challenge in terms of business continuity. It strives to control air and water pollutant emissions and aggressively invests in environmental protection. Related internal controls and education are steadily being strengthened as well. Also, the transfer and widespread application of proprietary technologies, mainly in developing countries, contribute to pollution prevention on a global scale.

For quantitative data related to reducing environmental impact, please refer to the following information.

▶ [Environmental Data](#) (P.235)

Controlling Air Emissions

JFE Steel

Initiatives to Further Reduce SOx and NOx Emissions

JFE Steel is installing low-nitrogen oxides (NOx) burners in reheat furnaces, switching to low-sulfur fuels and deploying desulfurization and denitration devices in sintering plants, all major sources of sulfur oxides (SOx) and NOx emissions. It has concluded agreements with local administrations that stipulate conditions that are stricter than the total volume restrictions required by the Air Pollution Control Law. The company is continuing to further control emissions at a level that is less than the amount set forth in the agreement. In addition, the company suppresses dust dispersion through measures that include enhancing on-site cleaning, installing sprinklers and windbreak fences in raw material yards, and improving the performance of dust collectors.

JFE Engineering

Appropriate Management in Place to Restrict SOx and NOx Emissions

To ensure compliance with the Air Pollution Control Law and relevant local regulations, JFE Engineering properly manages facilities that emit soot and smoke at its Yokohama head office, Tsurumi works, and Tsu works, so NOx and Sox emissions from those facilities are maintained at a level sufficiently lower than the total annual volume restriction (NOx: 18,000 Nm³, Sox: 100 Nm³). In addition, efforts are being made at construction sites to protect the environment through the use of construction machinery and on-site vehicles in compliance with the Automotive NOx and PM Law and Act on Regulation, Etc. of Emissions From Non-road Special Motor Vehicles (Off-Road Vehicle Law).

Management of Chemical Substances and Emission Control

JFE Steel

Initiatives to Reduce VOC Emissions

JFE Steel lowers its environmental impact by voluntarily reducing the chemical substances it releases. Release and transfer amounts of substances subject to Japan's Law concerning Pollutant Release and Transfer Register (PRTR Law) are reported in accordance with the law.

The Japan Iron and Steel Federation formulated a voluntary action plan to reduce VOC emissions by 30% from FY2000 levels by FY2010. As part of this action plan, JFE Steel set a target for reducing emissions to 1,078 tonnes or less. As a result of our initiatives, we achieved a significant reduction that exceeded the 30% reduction target in FY2010 and have been consistently cutting VOC emissions, by more than 50%. Going forward, we will continue to maintain the emissions below 1,078 tonnes and take the necessary steps to prevent any increase.

Emissions of benzene and dichloromethane are kept at low levels. We will continue to set targets for the two substances and maintain low emissions levels.

JFE Engineering

Management of Chemical Substances in Accordance with the PRTR Law

Major chemical substances subject to the PRTR Law for the JFE Engineering works in Tsurumi, Tsu, and Kasaoka include organic solvents such as xylene used for painting products, manganese and its compounds generated during welding. We report the release and transfer amounts of these substances in accordance with the law.

PCB Waste Management at JFE

Polychlorinated biphenyl (PCB) waste is properly stored and managed at the JFE Group's facilities. High concentration PCB waste is treated in accordance with guidelines set by the Japan Environmental Storage & Safety Corporation (JESCO). The Yokohama Eco Clean Plant of J&T Recycling Corporation treats insulating oil contaminated with slight amounts of PCB, helping to reduce pollutants both in and outside the JFE Group.

Environmental Accounting

Basic Policy

The JFE Group is saving energy and reducing its environmental impacts by making its production facilities increasingly efficient and introducing more environmentally friendly equipment. Any equipment or facilities related to energy conservation and environmental protection are categorized as environmental investment, while all activities related to environmental protection and impact reduction are categorized as environmental expenses.

Through these environmental investments and expenses, we are working to lower unit-based CO₂ emission to prevent global warming and to reduce final-disposal waste by maintaining a high recycling rate to effectively use natural resources. We are also striving to reduce emissions of pollutants into the water and air, which contributes to environmental protection and ensures thorough compliance with statutory regulations concerning exhaust gas emissions and discharged water.

For quantitative data related to environmental accounting, please refer to the following information.

▶ [Environmental Data](#) (P.235)

Related Links

▶ [Material Flow](#) (P.235)

▶ [JFE Steel: Environmental Initiatives \(Japanese only\)](https://www.jfe-steel.co.jp/research/environment.html) (https://www.jfe-steel.co.jp/research/environment.html)

▶ [JFE Engineering: 360° JFE Engineering—Protecting Natural Environments](https://www.jfe-eng.co.jp/en/360_jfe_engineering/#env) (https://www.jfe-eng.co.jp/en/360_jfe_engineering/#env)

▶ [JFE Shoji: Environment Management](https://www.jfe-shoji.co.jp/en/csr/environment/) (https://www.jfe-shoji.co.jp/en/csr/environment/)