Water Security (Conservation of Water Resources)

Basic Policy

The JFE Group uses large quantities of fresh water for cooling and cleansing products and facilities in its core business of steel manufacturing. For this reason, the efficient use of water resources with due consideration to the source of the water and stakeholders in the area is a key challenge. In response, we have established a system for reducing water intake by maximizing the use of recycled water at our steelworks, and we manage the system by setting high goals for water recycling rates.

And while we have always taken measures against meteorological disasters such as droughts and floods at our manufacturing sites in Japan, we are further reinforcing them in anticipation of the increased frequency and severity of weather events associated with climate change by securing alternative means and raising the height of embankments. We also seek to identify water-related risks throughout our business sites and supply chain in Japan and overseas, such as the risk of drought at the source of water intake and pollution at the point of discharge. In areas under water stress, we will respond appropriately through dialogue with stakeholders.

Response to Water Risks

The JFE Group recognizes the issue of water resources as a risk that may significantly impact operations, and we have taken action against meteorological disasters such as droughts and floods. In recent years, we have been seeking to adequately identify and manage water risks based on the assumption that disasters due to climate change will increase in frequency and severity.

With regard to Group risk management, the JFE Group Environmental Committee, under the leadership of the CEO, who heads the JFE Group CSR Council, discusses, supervises, and guides Group-wide environmental initiatives, including the proper use of water resources.

As part of overall risk management, we identify, analyze and evaluate water risks based on past incidents of droughts and floods in the JFE Group's businesses, forecast data from the Meteorological Agency and results of our scenario analysis. In particular, we consider damage to business sites and disruption of the supply chain caused by restrictions on water intake due to droughts or increasing severity of meteorological disasters as key risks. In response, we are further reinforcing measures such as using recycled water, securing alternative means, and strengthening drainage facilities.

Furthermore, to ensure the stability of our steel business's procurement throughout its supply chain, we are striving to reduce risks by evaluating them based on past data concerning water-related disasters and results of scenario analysis for materials such as coal and iron ore, securing alternative routes of procurement and diversifying suppliers.

JFE Steel

Water Risks and Mitigation

JFE Steel identifies and evaluates water-related risks based on past incidents of damage caused by droughts and floods, forecast data from the Meteorological Agency and results of scenario analysis. We conduct a further evaluation of water risks around each manufacturing site from different perspectives by also using the World Resource Institute (WRI)'s Aqueduct, a mapping tool for evaluating overall water risks from droughts and floods in each region around the world. While Japan has not been designated as a water-scarce region by the WRI, there are risks of water shortages and flooding associated with climate conditions. JFE Steel identifies steelworks having risks that are affected by climate change and mitigates their risks by creating a BCP.

Efficient Use of Water Resources

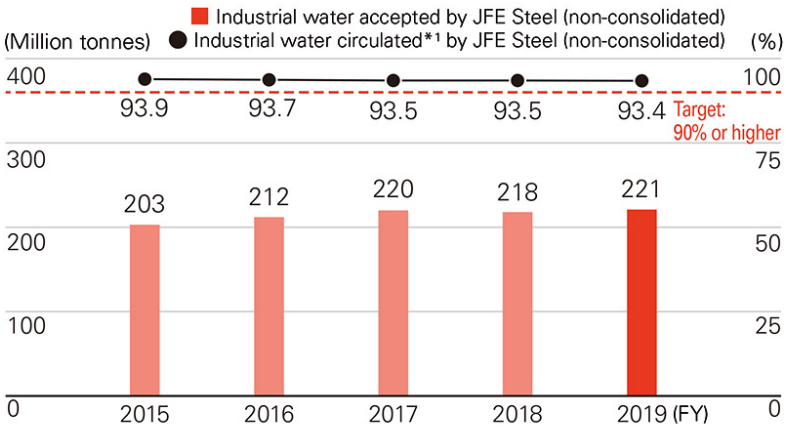
The JFE Group uses large quantities of fresh water for cooling and cleansing products and facilities during the process of steel manufacturing, which is its core business. Therefore, it is important to efficiently use water resources with due consideration to the source of water and stakeholders in the area. To address this, we have established a system for reducing water intake by maximizing the use recycled water at our steelworks, and we manage the system by setting high goals for water recycling rates.

JFE Steel

Cyclic Use of Water

A large amount of water is used in the iron and steelmaking process to cool facilities and process products. The target water recycling rate at JFE Steel is 90% or more, which is extremely high considering the amount evaporated when water is used. We are striving to improve the recycling rate by adopting purification processes such as biological and chemical wastewater treatments, and we have been successfully achieving the target. Our recycling rate of industrial water in FY2019 maintained a high level of 93.4%.

■ Industrial Water Accepted/Circulated



•JFE Steel

Total amount	3,326	3,340	3,410	3,376	3,323	(Million tonnes)
Industrial water accepted	203	212	220	218	221	(Million tonnes)

•Group companies*2

Total amount	–	339	280	289	293	(Million tonnes)
Industrial water accepted	25	26	21	20	20	(Million tonnes)

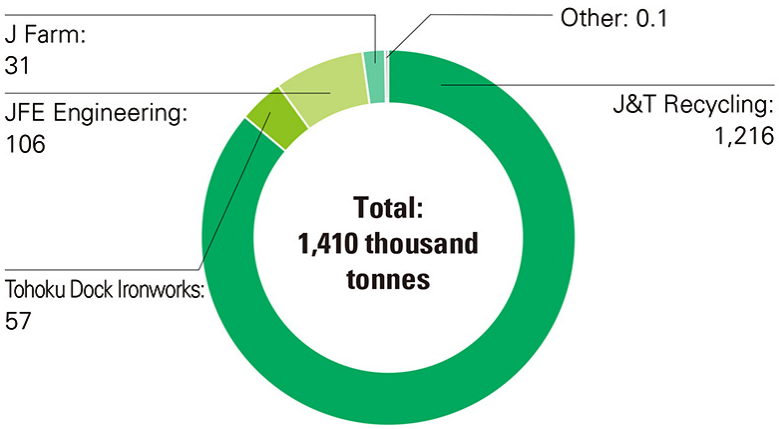
*1 Industrial water circulated (%) = (Total amount used − industrial water accepted)/total amount used × 100
*2 25 JFE Steel consolidated subsidiaries in Japan.

JFE Engineering

Water Consumption

JFE Engineering and its subsidiaries strive to efficiently use water in their business operations at each site.

■ JFE Engineering Group's Water Consumption for FY2019



Data cover JFE Engineering and 7 consolidated subsidiaries in Japan.

For more on quantitative data related to water, please refer to the following information.

➤ ESG Data: Environmental Data (P. 165)