

Initiatives for environmental issues

Changes in the Earth's environment may affect Mitsui Kinzoku Group's business. We strive to reduce the negative impact on the environment brought about by our business activities because we recognize that it constitutes a great risk to our business.

Environmental management

Mitsui Kinzoku Group has established the Supreme Safety & Environmental Meeting as a place to deliberate and determine the most important matters related to safety and the environment. Guidelines and action plans determined at the Meeting are spread to each site by the Environmental and Safety Supervisory Manager (General manager of the Environmental and Safety Dept.) under the direction of the Chief Environmental and Safety Officer. Each site that operates under ISO14001 has a chief person that serves as the person responsible for managing environmental and safety, and who makes sure that the required actions are being reliably executed.

The Basic Environmental Policy and the Environmental Action Plan

In 2001, Mitsui Kinzoku Group established the Basic Environmental Policy and the Environmental Action Plan. In response to the Paris Agreement as well as the expansion of ESG investment, we revised the basic policy and the action plan in 2018, in order to strengthen our Group's efforts to address environmental issues. In the action plan, we have assessed the negative impacts of our business activities on stakeholders in our value chains and set targets for activities with significant impacts, on which we will focus our efforts to reduce their environmental footprint. In 2019, we held briefings to explain our action plan to ensure that its details are known throughout the Group. We will also make sure that plans of each site reflect the targets set in the action plan to promote their achievement.

Response to climate change

Mitsui Kinzoku Group considers climate change as an important change in our external environment which may affect the continuity of our business. As our businesses include non-ferrous smelting, electrolytic copper foil, and other businesses with high energy consumption, we are well aware of the impacts of energy consumption and greenhouse gas (GHG) emissions from business activities on climate change. We are also concerned that these matters may have impacts on our Group's business model and financial condition as climate change accelerates. With these as a background, Mitsui Kinzoku Group is striving to curb its GHG emissions and review its energy usage, among other efforts, to reduce risks associated with climate change. We will also take advantage of opportunities related to climate change by creating products that will contribute to the reduction of GHG emissions and that will meet our environmental criteria to be certified as our environmental contribution products.

Basic Environmental Policy

[Principle]

While recognizing the conservation of the global environment as one of the most important management issues, we will act with consideration for environmental conservation in all aspects of our business activities.

[Policies]

- 1 We will make efforts to prevent environmental contamination and reduce negative environmental impacts by complying with laws and regulations, assessing the impact of our business activities on the environment, including with regard to biodiversity, and setting necessary self-standards.
- 2 We will improve the organization and system to promote the environmental preservation activities at each site and company of the Mitsui Kinzoku Group.
- 3 We will strive to address climate change and reduce wastes and the emission of environmental pollutants by setting targets.
- 4 As a commitment to sustainable use of natural resources and conservation of biodiversity, we will actively promote the introduction of environmentally-friendly technologies, materials, and the development of environmentally conscious products and solutions.
- 5 We will continuously improve the environmental management system by regularly implementing an audit.
- 6 We will raise awareness of all people working in the Mitsui Kinzoku Group by emphasizing the importance of environmental conservation through environmental education and awareness raising.

These policies apply to all the directors, officers and employees of Mitsui Kinzoku and its Group companies.

(Revised in April 2018)

Outline of the Environmental Action Plan

1 Establishment and improvement of environmental management system

Establishment and improvement of environmental management system at each site according to the form and scale of business

2 Reduction of environmental footprint

- Prevention of global warming
- Effective resource utilization and waste reduction
- Reduction of emissions of environmental pollutants
- Utilization of renewable energy
- Appropriate utilization and management of water resources
- Biodiversity conservation
- Thorough management of mine closure

3 Development and provision of environmental contribution products

Development of environmental contribution products and market expansion

4 Emergency measures

Preparation of well-organized emergency manuals for disasters and accidents and continuous improvements of them

5 Education/public relations/social contribution activities

- Strengthening environmental education
- Disclosure of environmental information
- Dialogue with stakeholders

(Revised in April 2018)

Reduction of GHG emissions

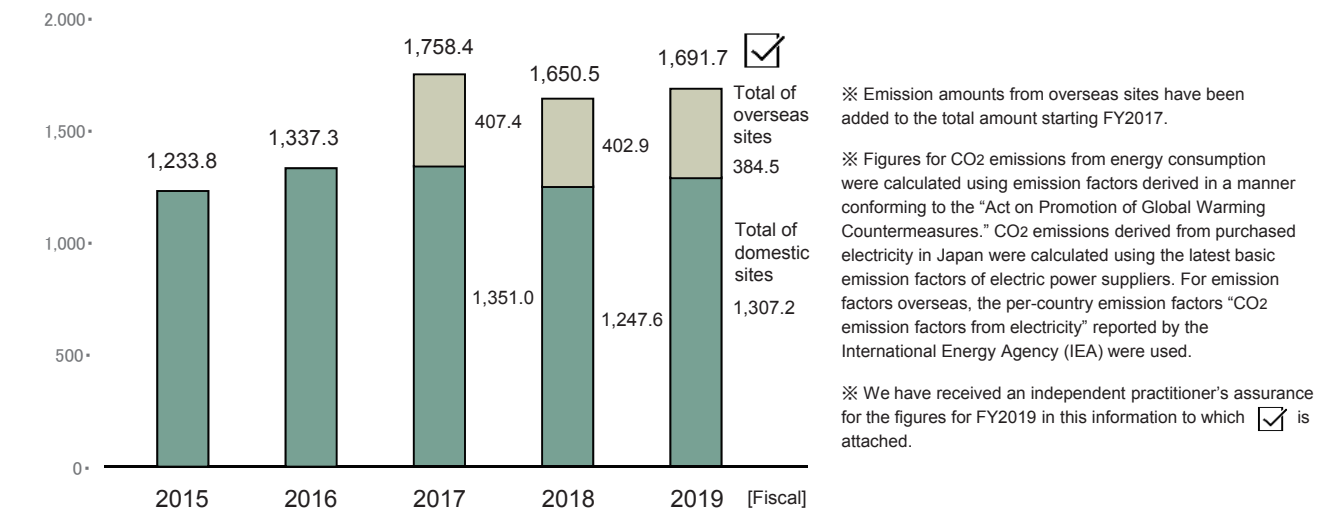
In FY2019, we adopted a new calculation method of GHG emissions in line with the global trend of response to climate change. The method allows us to reflect our avoided emissions through the creation and use of renewable energy. Based on this calculation method, in June this year, we reset our GHG emissions reduction target by FY2030 over FY2013 levels at 26%, from the previous 7%, including avoided emissions from renewable energy use.

Our activities to reduce GHG emissions are driven by the Energy-Saving Committee, a group-wide organization chaired by the Chief Environmental and Safety Officer. The committee promotes the reduction of energy consumption and the increase of renewable energy generation, while also providing education within the Group and keeping us updated on the trends in Japan

and overseas, in order to achieve our long-term targets. The committee also reviews its policies as needed based on the previous year's performance and deploys them across the sites.

In April this year, a new dedicated organization for energy management was established. The organization specializes in duties related to energy, including identifying opportunities to save energy and create renewable energy at each site, investigating and addressing the technical issues of the sites, and verifying the effects of the efforts exerted by the sites on the reduction of their energy consumption. The organization will also collaborate with the corporate planning department of the company to propose to the senior management investments necessary for projects and activities.

CO2 emissions from energy consumption (thousand t-CO2)



Creation of renewable energy

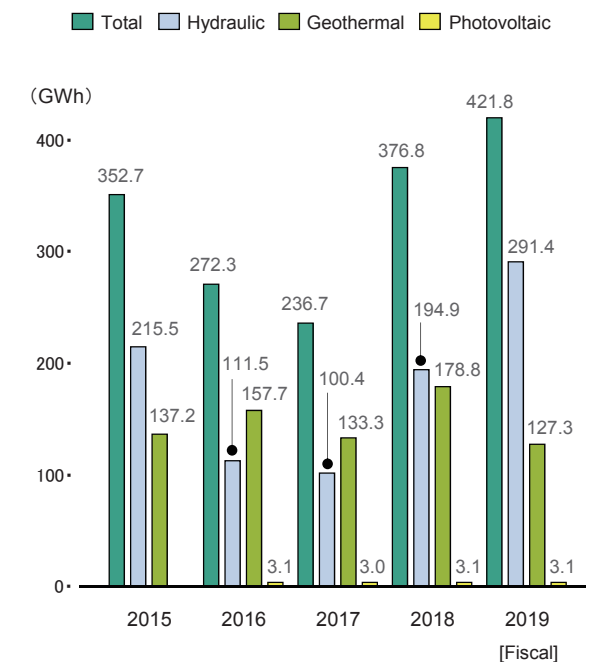
While keeping stable operation of existent renewable energy facilities, Mitsui Kinzoku Group works to introduce new renewable energy power generation projects as well as increase the ratio of renewable energy in its energy usage.

Kamioka Mining and Smelting Co., Ltd. completed the renewal construction work for five of its ten hydroelectric power plants in FY2018 and started full-scale operation from FY2019. The Copper Foil Division has newly installed solar power generation facilities at the sites in Ageo (Japan) and Taiwan with capacity of 10kW and 830kW respectively and started operation in April this year.



Solar power generation equipment, Taiwan Copper Foil Co., Ltd.

Total power generation using renewable energy

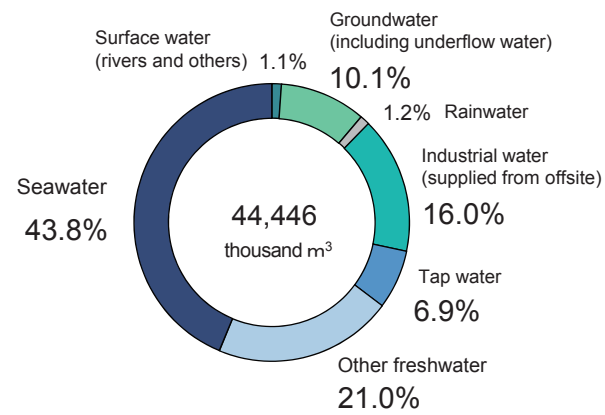


Appropriate utilization and management of water

Mitsui Kinzoku Group strives to reduce and recycle water used in the business operations. Water-related risks that could have an impact on our business have not become apparent as of today, but we will advance efforts to evaluate water-related risks from multiple perspectives that include physical risks, such as the drying up of water resources and the lack of sufficient amounts of water, as well as regulatory risks related to the use of water. These efforts will also help us reduce the risks in our business.

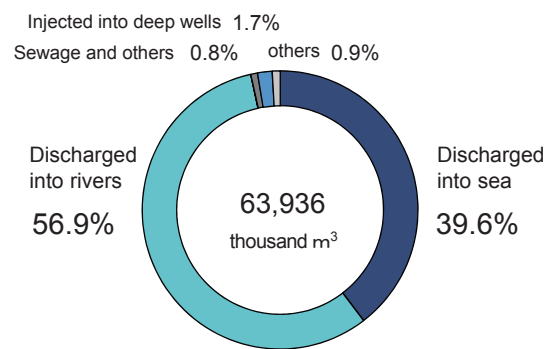
The amount of the circulated water usage through reusing and recycling was 30,967 thousand m³. The total amount of water use was 44,446 thousand m³, which is 11.3% less than the previous year.

Breakdown of water use (FY2019)



* Partially changed the classification method since FY2019.

Breakdown of wastewater (FY2019)

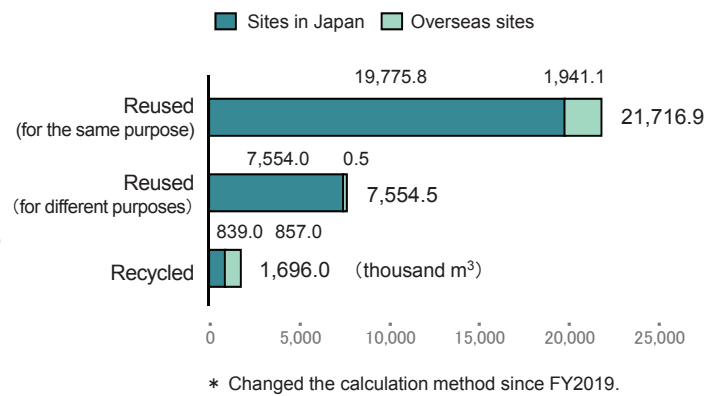


* Partially changed the classification method since FY2019. Revised the amount of wastewater for FY2018 disclosed last year from 48,194 thousand m³ to 74,700 thousand m³.

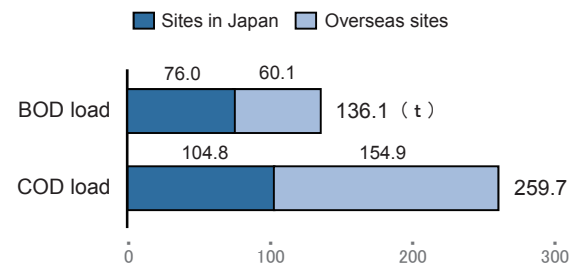
Prevent air and water pollution

Each manufacturing site of Mitsui Kinzoku Group monitors the following in accordance with laws, regulations and ordinances and voluntary standards: Sulfur oxide (SOx) emissions produced on the combustion of fossil fuels containing sulfur, nitrogen oxide (NOx) emissions from boilers, incinerators and other combustion equipment, and particulate matter, as well as water quality including BOD and COD which indicate the level of organic material in wastewater. We work on gathering and managing the monitoring results from each site, and sharing the initiatives and the technologies within the Group.

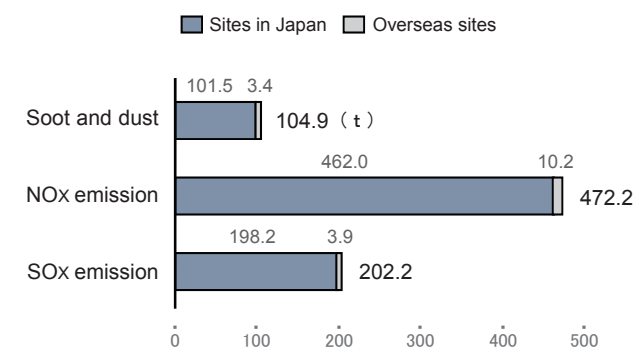
Amount of circulated water usage (FY2019)



Emissions to the water (FY2019)



Emissions to the atmosphere (FY2019)



Reduction of chemical substance emissions

Each manufacturing site of the Group files the release and the transfer amount of chemical substances to the government under the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (Law concerning Pollutant Release and Transfer Register [PRTR]). The management of hazardous chemical substances contained in products has become an essential requirement. We also respond to the guidelines for chemical substances contained in products, such as the RoHS Directive and the REACH regulations required by customers.

We aim to reduce the emission amount of environmental pollutants in accordance with the Environmental Action Plan, including our overseas sites. We continuously strive to collect and replace chemical substances that may cause environmental pollution. Thus we focus on reducing and removing use of such chemical substances from our products.

Initiatives to reduce waste

We strive to reduce the amount of waste generated in our business activities, and also conduct efforts to develop technology toward reusing and recycling.

In the Environmental Action Plan revised in 2018, we are committed to reducing the generation of waste throughout the Group and set a target basic at each business site.

Of the amount of byproducts in FY2019, 44% within Japan and 9% overseas were recycled and used either within or outside of our Group.

Use of recycled raw materials

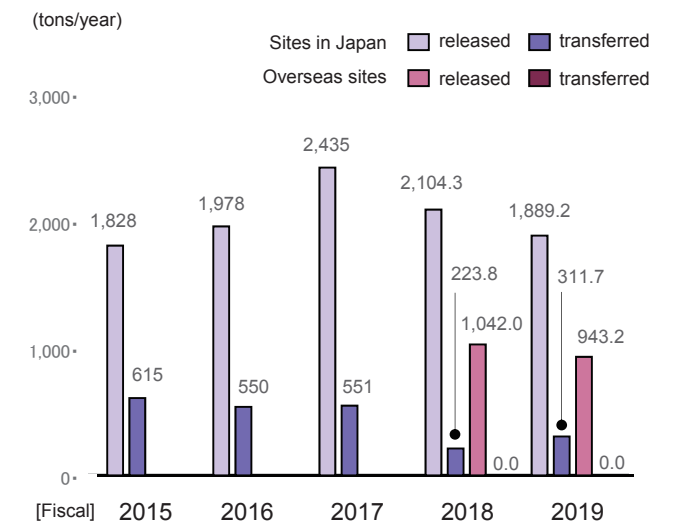
Mitsui Kinzoku Group works on the recycling of waste by using resources as effectively as possible. During this process, it is essential that we establish and improve separation and purification technologies in accordance with the materials, as well as make technological improvements and renew existing manufacturing equipment for each production process. At the same time, we develop and intensify a network for collecting recycled raw materials.

Development and release of environmental contribution products

According to the Environmental Action Plan, a group-wide team was established to develop the environmental contribution product program in 2019. The team has discussed the basic direction of the program and decided how it will be operated.

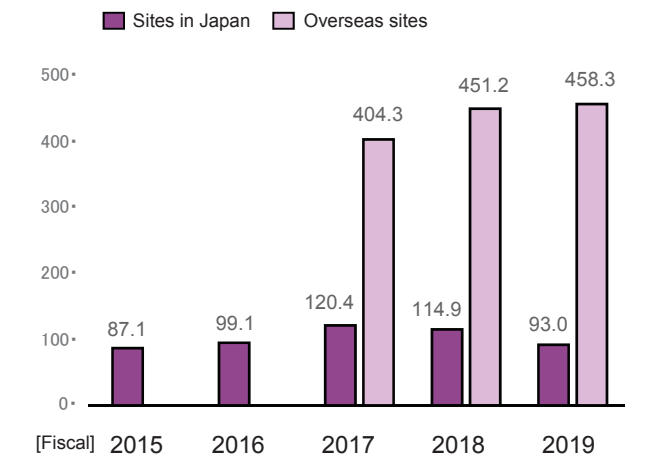
Under this program, we conduct lifecycle assessments for products of our Group to assess their positive and negative impact on the environment and society throughout their lifespan from raw materials to final product disposal. Products that meet certain criteria are certified as environmental contribution products. The program aims at expanding the development and release of certified products as solutions to environmental and social issues, such as the reduction of GHG emissions, conservation of ecosystems and resources, and improvement of quality of life, to enhance sustainability of our business.

Volume of chemical substances released and transferred



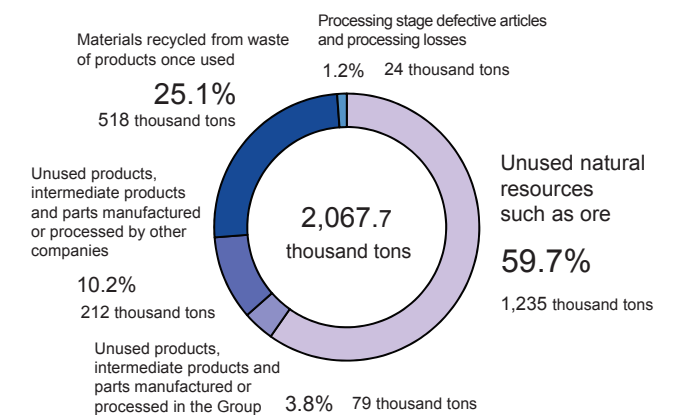
* Added the amounts of overseas sites from FY2018.
* Revised the values for sites in Japan for FY2018 disclosed last year.

Amount of waste generation (thousand tons)



* Added the amounts of overseas sites from FY2017.
* The major waste of overseas sites is tailings generated from mines.

Breakdown of usage by type of raw material (FY2019)



* Partially changed the classification method since FY2019. Revised the total amount of raw materials for FY2018 disclosed last year from 1,390.0 thousand tons to 2,119.0 thousand tons.