

# Initiatives for the Environment

## Environmental Vision/Basic Environmental Policies

The Hitachi Metals Group promotes a “Decarbonized Society,” “Resource Efficient Society,” and “Harmonized Society with Nature” as the three key pillars of its Environmental Vision. We aim to realize higher-quality lifestyles and a sustainable society by resolving environmental issues through collaboration with our stakeholders.

## Hitachi Metals Group Basic Environmental Protection Policies

**Philosophy** Hitachi Metals’ Corporate Creed is to “contribute to society by being the best enterprise.” In line with this, we regard it as crucial to ensure that humanity’s shared environmental resources can be passed down to future generations in the best possible condition. Accordingly, throughout our operations we treat environmental considerations as an issue of the highest importance and strive actively to promote environmental protection efforts on both the global and local community levels.

**Slogans**

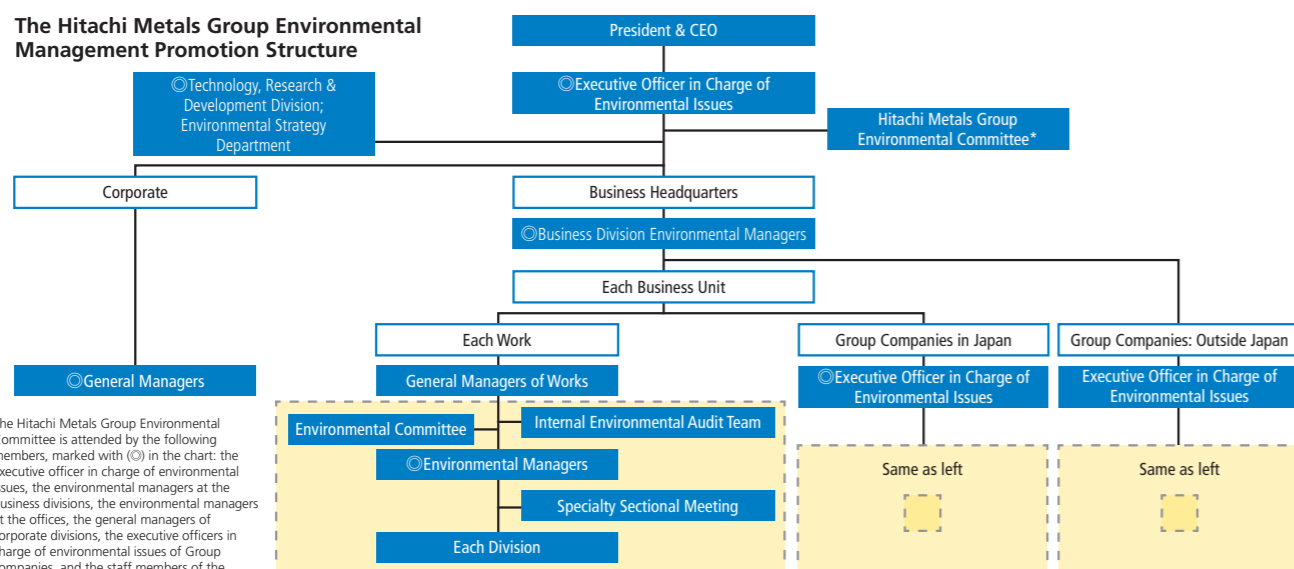
- With a deep awareness that environmental protection is a major issue for all humanity, fulfill social responsibilities by striving to establish a sustainable society in harmony with the environment regarding it as one of the essential aspects of corporate activity.
- Contribute to society by developing highly reliable technologies and products in response to needs for environmental protection and the limited natural resources.

## Promotion Structure

Environmental management within the Hitachi Metals Group hinges on the Environmental Strategy Department of the Technology, Research & Development Division, which promotes environmental management activities in cooperation with business division environmental managers. The executive officer in charge of environmental issues at Hitachi Metals heads the Environmental Committee. Through this system, we are promoting environmental protection activities by applying

voluntary environmental standards and establishing clear environment-related goals. We are also making continuous improvements by ensuring that our activities are appropriate and effective. Policies and targets related to environmental activities are reviewed and revised annually at the Hitachi Metals Group Environmental Committee. Reports on environmental activities are also made annually to the Board of Directors and Executive Committee.

### The Hitachi Metals Group Environmental Management Promotion Structure



## Hitachi Metals Group Action Plan

The Hitachi Metals Group advances activities based on three-year medium-term environmental plans.

The targets for the Medium-Term Environmental Plan for fiscal 2019 through fiscal 2021 are shown on the next page. In fiscal 2020, the spread of COVID-19 caused a drop in demand for our products. As a result, the impact of reduced production volume and other factors was greater than the effects of efforts to reduce the environmental impact. As such, we failed to meet the plan’s targets for key environmentally conscious products and the improvement ratios of CO<sub>2</sub> emissions and water usage per

production unit. However, we achieved the targets for the improvement ratios of waste and valuables generation per production unit and the waste landfill rate.

In fiscal 2020, we also failed to meet the plan’s target for reducing energy consumption per production unit as stipulated by the Act on the Rational Use of Energy (Energy Efficiency Act), due to the reduced production volume. By formulating and promoting an energy efficiency plan including carbon neutrality that we are starting in fiscal 2021, we plan to achieve at least a 1% reduction in fiscal 2023 compared to the average over the past five years.

## Results of Fiscal 2020 initiatives and fiscal 2021 plans

FY2020 initiatives (Planned)	FY2020 initiatives (Results)	FY2021 plans
<ul style="list-style-type: none"> <li>• Conduct environmental education at the Head Office and each business office (ongoing)</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct environmental auditor development training (once)</li> <li>• Conduct environmental e-learning (92% of employees)</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct environmental auditor development training (once or more times)</li> <li>• Conduct environmental e-learning (100% of employees)</li> </ul>
<ul style="list-style-type: none"> <li>• Increase the sales ratio of key environmentally conscious products (24%)</li> </ul>	<ul style="list-style-type: none"> <li>• Increase the sales ratio of key environmentally conscious products (21.4%)</li> </ul>	<ul style="list-style-type: none"> <li>• Increase the sales ratio of key environmentally conscious products (25%)</li> </ul>
<ul style="list-style-type: none"> <li>• Reduce CO<sub>2</sub> emissions per production unit (6% compared with base year FY2010)</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce CO<sub>2</sub> emissions per production unit (-2.3% compared with base year FY2010)</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce CO<sub>2</sub> emissions per production unit (7% compared with base year FY2010)</li> </ul>
<ul style="list-style-type: none"> <li>• Improvement ratio of waste generation per production unit (13% compared with base year FY2010)</li> <li>• Waste landfill rate (13%)*</li> </ul>	<ul style="list-style-type: none"> <li>• Improvement ratio of waste generation per production unit (15.2% compared with base year FY2010)</li> <li>• Waste landfill rate (10.9%)</li> </ul>	<ul style="list-style-type: none"> <li>• Improvement ratio of waste generation per production unit (14% compared with base year FY2010)</li> <li>• Waste landfill rate (12%)</li> </ul>
<ul style="list-style-type: none"> <li>• Improvement ratio of water usage per production unit (24% compared with base year FY2010)</li> </ul>	<ul style="list-style-type: none"> <li>• Improvement ratio of water usage per production unit (12.2% compared with base year FY2010)</li> </ul>	<ul style="list-style-type: none"> <li>• Improvement ratio of water usage per production unit (26% compared with base year FY2010)</li> </ul>

\* Excludes household trash, hazardous waste, and waste landfilled on-site

## Initiatives to Address Climate Change Issues

As countries around the world accelerate their initiatives to address climate change based on the Paris Agreement, the Japanese government announced in October 2020 the policy goal of achieving effectively zero emissions of carbon dioxide (CO<sub>2</sub>) and other greenhouse gases by 2050. Primarily for this reason, companies are increasingly being expected to work even more aggressively toward transitioning to a decarbonized society. Recognizing these expectations, the Hitachi Metals Group has set the following targets for CO<sub>2</sub> emissions.

**CO<sub>2</sub> emissions\*1 targets**

Medium-term target: 38% reduction by fiscal 2030 (compared to fiscal 2015\*2)

Long-term target: Aim for effectively zero emissions (carbon neutral) by fiscal 2050

\*1: Absolute total value of Scope 1 (direct CO<sub>2</sub> emissions by the Company) and Scope 2 (indirect emissions from the use of electricity, heat, and steam supplied by other companies)

\*2: CO<sub>2</sub> emissions in fiscal 2015: 2,779 thousand t-CO<sub>2</sub>/year

The Group aims to be a “high-performance materials company that contributes to a sustainable society.” In addition to reducing CO<sub>2</sub> emissions from our own businesses, we believe that it is important to contribute to reducing CO<sub>2</sub> emissions in society by developing advanced materials and offering them to customers. Following this belief, we define key environmentally conscious products as those targeted for growth based on a management strategy that contributes significantly to resolving environmental issues such as climate change and resource recycling. We are promoting the expansion of revenue ratios from these products.

In addition, in June 2021, we endorsed the TCFD recommendations on disclosure of climate-change initiatives. We are promoting actions such as scenario analysis and verification of countermeasures regarding the impact of transition risks and physical risks to our businesses and finances, toward the implementation of information disclosure in compliance with the TCFD Framework in fiscal 2022.

## Topics CO<sub>2</sub> reduction by introducing a forging and rolling planning system (Yasugi Works)

The Yasugi Works, which manufactures specialty steel products with large-scale equipment such as melting furnaces, 10,000 ton-class free forging presses, and high-speed radial forging machines, is striving to raise productivity and reduce CO<sub>2</sub>.

Our hot-working sites, which employ 10,000 ton-class free forging presses, strive continuously to engage in improvement activities aimed at enhancing productivity (improving capacity utilization rates), reducing wasted heating time, etc.

The introduction of 10,000 ton-class free forging presses has improved the product performance and productivity of hot molds and tool steel, which are tending to become larger than ever before, and we have also made other improvements. As improvement measures, we have introduced a system that can manage the shutdown and repair of heating furnaces, as well as a system that can efficiently plan forging and rolling. Furthermore, to enhance the effects of these systems, we have also worked to efficiently recover exhaust heat by introducing a heating furnace with a regenerative burner system, and to improve thermal efficiency by applying heat-insulating material, along with other initiatives.

As a result, we have successfully improved the efficiency of putting steel ingots into our forging machines, including 10,000 ton-class free forging presses, and reduced the energy consumption ratio by up to 13.2% (compared with that of fiscal 2019). In addition, we reduced overall working site fuel costs by roughly ¥7.50 million per month and CO<sub>2</sub> emissions by 13,000 t-CO<sub>2</sub> per year.



10,000 ton-class free forging press