

Promoting Environmental Management

Hitachi's Approach

Hitachi faces a broad range of challenges regarding its products and services, such as reducing carbon emissions and improving resource efficiency across the value chain. At the same time, given the expectations of society, achieving innovations that help resolve environmental issues presents major business opportunities.

Guided by our Environmental Vision, we announced in September 2016 a set of long-term environmental targets called Hitachi Environmental Innovation 2050 to guide our environmental initiatives from a broader and longer-term perspective. Aligning this with our Mid-term Management Plan, we have also formulated an Environmental Action Plan for 2018 that lays out specific activity areas and improvement targets over a three-year period through fiscal 2018 in promoting our environmental activities.

We will promote Group-wide efforts to achieve the targets set forth in the Environmental Action Plan for 2018 in order to conduct environmental management in a manner that meets the expectations of society.

face increasing demands and expectations to reduce the environmental burden of their business activities.

The Intergovernmental Panel on Climate Change (IPCC) concluded that limiting global warming “below 2°C relative to pre-industrial levels” would require “40 to 70% global anthropogenic GHG emissions reductions by 2050 compared to 2010.” The Paris Agreement adopted in December 2015 at the 21st Conference of the Parties (COP21) to the United Nations Framework Convention on Climate Change—and which came into force in November 2016—set ambitious targets, including a global long-term target of keeping global warming to below 2°C and efforts to limit the increase to 1.5°C. Environmental targets have also been set in the Sustainable Development Goals (SDGs)—the centerpiece of the 2030 Agenda for Sustainable Development, adopted by the United Nations in 2015—whose Goal 13 reads: “Take urgent action to combat climate change and its impacts.”

In the light of these global trends and our own management policy, we created an Environmental Vision to better define the kind of society that Hitachi envisions from a long-term perspective. Our Environmental Vision envisions a low-carbon society; a resource efficient society; a harmonized society with nature. To achieve such a sustainable society, we established a set of long-term environmental targets called Hitachi Environmental Innovation 2050.

The Environmental Vision and Hitachi Environmental Innovation 2050

As global warming, resource depletion, ecosystem destruction, and other environmental issues grow more serious, companies

Environmental Vision

Hitachi will resolve environmental issues and achieve both a higher quality of life and a sustainable society through its Social Innovation Business in collaborative creation with its stakeholders.

The aim of Hitachi's environmental management



Low-Carbon Society

Climate Change Mitigation/Adaptation



Resource Efficient Society

Saving and Recycling Resources



Harmonized Society with Nature

Preservation of Ecosystems

Long-term Environmental Targets

Hitachi's resolution looking toward 2050 and 2030

Hitachi Environmental Innovation 2050

For a low-carbon society

For a resource efficient society

For a harmonized society with nature

Through the value chain CO₂ emissions

FY 2050
80% reduction

FY 2030
50% reduction
(compared to FY 2010)

Build a society that uses water and other resources efficiently with customers and society

Efficiency in use of water/resources
FY 2050
50% improvement
(compared to FY 2010 in the Hitachi Group)

Impact on natural capital

Minimized

Environmental Action Plan

Set environmental action items and targets every 3 years in order to achieve the long-term targets



Hitachi's Environmental Vision

► **Low-Carbon Society**

We seek to reduce CO₂ emissions by 80% compared to fiscal 2010 levels by fiscal 2050 to realize the drop in global anthropogenic GHG emissions that was deemed necessary in the IPCC's *Fifth Assessment Report*. We will attain this target throughout our value chain. First, this will be achieved by decreasing emissions during the *usage* stage of our products and solutions, which account for a substantial share of emissions in the value chain. We will contribute to our customers and to society by developing innovative technologies and solutions, as well as enhancing the efficiency of our products and supplying low-carbon energy. At the same time, we will also work to cut down on emissions at the *production* stage of our business activities.



► **Resource Efficient Society**

Together with our customers and society, Hitachi will do its utmost through its business operations to help build a society that uses water and other resources efficiently. We will expand circulative uses of water by further advancing the entire range of water treatment technologies involved in water use from seawater desalination and other forms of fresh water generation to sewage treatment.

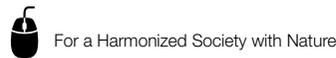
We also aim to improve our usage efficiency of water and other resources by 50% compared to fiscal 2010 levels by fiscal 2050. To achieve this target, we will create products that last longer and use less resources, make thoroughgoing efforts to

collect and recycle used products, reduce the volume of water used in the production process such as through purification and reuse, and engage in other efforts.



► **Harmonized Society with Nature**

We strive to minimize Hitachi's impact on natural capital, which bestows the benefits of nature on humankind by assessing ecosystem impact and advancing measures to minimize the burden at each stage of Hitachi's value chain. Moreover, we are preserving the ecosystem through our products and services, such as our air and water purification systems and environmental monitoring systems. We also endeavor to minimize the environmental burden of our factories and offices.



The Hitachi Action Guidelines for Environmental Conservation

The Action Guidelines for Environmental Conservation were drawn up to show the direction of our business management initiatives for environmental protection as we set out to realize our Environmental Vision.



Environmental Action Plan for 2018

Hitachi is pressing forward with activities in accordance with its Action Guidelines for Environmental Conservation in order to achieve its Environmental Vision and the Hitachi Environmental Innovation 2050 long-term environmental targets. Toward this end, the Environmental Action Plan is drawn up every three years. The Environmental Action Plan for 2018—formulated in fiscal 2016—stipulates detailed activities and targets to tackle by fiscal 2018.

Environmental Action Plan for 2018: Results and Targets

For our performance under the Environmental Action Plan for 2018, marking fiscal 2016 as its first year, we missed a target in one of the item areas, but for every other category, we were able to reach our goals. We will continue to make improvements in each activity aimed for fiscal 2018—our final year—and achieve our targets.

The indicators used in the Environmental Action Plan for 2018 are the main ones in Hitachi's environmental activities overall, and our endeavors in these areas are introduced in the following pages.

Management

Items	Indicators	Fiscal 2016 targets	Fiscal 2016 results	Achievement level	Final fiscal year (2018) targets
Strengthen global environmental management	Voluntary implementation of environmental monitoring by business units and Group companies at overseas business sites (implementing sites/ total targeted)	20%	59%	◆◆◆	80% or higher (cumulative total)
Raise the level of environmental activities	Green points (GPs) under the GREEN21-2018 environmental activity index	240 GPs	265 GPs	◆◆◆	480 GPs

Products and Services

Item	Indicator	Fiscal 2016 target	Fiscal 2016 result	Achievement level	Final fiscal year (2018) target
Improve environmental performance	Rate of reduction in CO ₂ emissions from use of products and services (base: FY 2010)	30%	35%	◆◆◆	40%

Factories and Offices: Prevent Global Warming

Item	Indicator	Fiscal 2016 target	Fiscal 2016 result	Achievement level	Final fiscal year (2018) target
Reduce energy use	Reduction in energy use per unit (base: FY 2005)	15%	12%	◆◆	17%

Factories and Offices: Enhance Efficiency of Water Usage

Item	Indicator	Fiscal 2016 target	Fiscal 2016 result	Achievement level	Final fiscal year (2018) target
Enhance efficiency of water usage	Reduction in water use per unit (base: FY 2005)	23%	27%	◆◆◆	27%

Factories and Offices: Use Resources Efficiently

Item	Indicator	Fiscal 2016 target	Fiscal 2016 result	Achievement level	Final fiscal year (2018) target
Reduce waste generation	Reduction in waste and valuables generation per unit (base: FY 2005)	12%	13%	◆◆◆	14%

Factories and Offices: Manage Chemical Substances

Item	Indicator	Fiscal 2016 target	Fiscal 2016 result	Achievement level	Final fiscal year (2018) target
Reduce emissions of chemical substances	Reduction in atmospheric emissions of chemical substances per unit (base: FY 2006)	34%	34%	◆◆◆	36%

Ecosystem Preservation

Item	Indicator	Fiscal 2016 target	Fiscal 2016 result	Achievement level	Final fiscal year (2018) target
Contribute to ecosystem preservation	New ecosystem preservation activities implemented	30	144	◆◆◆	600

Partnership with Stakeholders

Item	Indicator	Fiscal 2016 target	Fiscal 2016 result	Achievement level	Final fiscal year (2018) target
Make social contributions through environmental activities	Activities implemented in such areas as environmental education, information exchange, ecosystem preservation through afforestation, etc., community contribution through cleanup projects, etc., campaigns to turn off lighting, and community energy-saving activities	800	965	◆◆◆	2,400 (cumulative total)

◆◆◆: Achieved ◆◆: Partially achieved