

Environmental Vision and the Decarbonization Business

The Environmental Vision and Hitachi Environmental Innovation 2050

As climate change, resource depletion, ecosystem destruction, and other environmental issues grow more serious, the responsibilities and contributions of companies are growing, given the increasing demands and expectations for reductions in the environmental burden of their business activities.

In response to global demands for a reduced environmental burden, we created a management strategy called the Environmental Vision, which declares, "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." We aim to achieve a low-carbon society, a resource efficient society, and a harmonized society with nature in accordance with this Vision. To guide our efforts toward 2030 and 2050, in September 2016 we established long-term environmental targets called Hitachi Environmental Innovation 2050. To achieve these long-term goals, we have been updating our Environmental Action Plan every three years. We are strengthening and promoting our environmental activities under the Environmental Action Plan for 2021 (covering fiscal 2019–21), created in line with the 2021 Mid-term Management Plan.

Hitachi's Environmental Vision

<http://www.hitachi.com/environment/vision/index.html>

Efforts to Achieve a Low-Carbon Society

Hitachi Environmental Innovation 2050 sets targets for reducing CO₂ emissions to help the world meet the challenge of climate change. In line with a scenario to keep the increase in global temperatures below 2°C, we have established reduction targets of 50% by fiscal 2030 and 80% by fiscal 2050 (compared to fiscal 2010 levels) throughout the value chain.

Approximately 90% of the value-chain emissions of our products and services—from the procurement of raw materials and parts to production, transportation, use, disposal, and recycling—result from the use of our products and services after they were sold. For this reason, reducing CO₂ emissions during the stage of use is crucial to reducing emissions across the value chain.

We will further enhance the energy efficiency of our products and services to reduce CO₂ emissions during their use. We will also seek to expand our decarbonization business, utilizing IT and other innovative technologies to offer system solutions that collectively contribute to decarbonization.

We are advancing reduction measures for CO₂ emissions during production and other stages as well, introducing the Hitachi Internal

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

Through the value chain CO₂ emissions

FY 2050
80% reduction

FY 2030
50% reduction
(compared to FY 2010)

For a resource efficient society

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)

For a harmonized society with nature

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

Carbon Pricing (HICP) framework in fiscal 2018 to provide incentives for raising production efficiency at factories and offices and making energy-saving investments. And we are taking a variety of steps to accelerate the shift to renewable energy sources at our business sites both in and outside Japan.

In light of heightening investor interest in the financial impact of climate change on corporate operations, in June 2018 we announced our support for the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). We are actively disclosing climate-related information in accordance with these recommendations and conducting dialogues with investors.

■ Expanding the Decarbonization Business to Address Climate Change

To help build a sustainable society through the Social Innovation Business, the 2021 Mid-term Management Plan cites the goal of simultaneously increasing social, environmental, and economic value for our customers by supplying solutions in the five sectors of IT, energy, industry, mobility, and smart life. It also sets a reduction target of more than 20% for our value-chain CO₂ emissions by fiscal 2021 compared to fiscal 2010.

We are utilizing Lumada to expand our decarbonization business. Through collaborative creation, we will help the world mitigate and adapt to climate change.

In the IT sector, we are contributing to building a low-carbon society by transforming social systems and lifestyles by providing innovative digital solutions.






With regard to energy, we are contributing to CO₂ emission reductions through the provision of power generation systems using non-fossil energy, such as renewable energy and nuclear power, and creating smart grids that transmit and distribute power efficiently and stably and can optimize local supply and demand.

In the industry sector, along with improving the overall efficiency of clients' factories through the provision of high-efficiency industrial products, we are using IoT and AI to optimize entire factory operations and helping our customers reduce their CO₂ emissions.

In the mobility sector, we are promoting energy savings by making trains lighter and introducing operating systems that use cutting-edge IT technologies to improve overall efficiency.

For smart life solutions, we are providing clean-energy vehicles, smart home appliances, and other highly efficient, energy-saving products and services to make people's lives safer, more convenient, and comfortable by improving connectivity through the use of IT. In addition, we are working with our business partners to build smart cities and smart mobility systems that bring those technologies together, thereby helping to create decarbonized cities that improve the lives of all residents.

Decarbonization Business: A Hitachi Focus

 IT solutions	 Energy solutions	 Industry solutions	 Mobility solutions	 Smart Life solutions
<ul style="list-style-type: none"> ■ Finance and public-oriented solutions <ul style="list-style-type: none"> • Promoting digital solutions ■ Data center <ul style="list-style-type: none"> • Developing smart data centers ■ Servers/storage <ul style="list-style-type: none"> • Enhancing energy-saving features of servers and storage 	<ul style="list-style-type: none"> ■ Power grid solutions <ul style="list-style-type: none"> • Enhancing efficiency of power transmission/distribution ■ Energy management <ul style="list-style-type: none"> • Advancing smart energy management to reduce peak electricity demand ■ Power generation <ul style="list-style-type: none"> • Promoting power generation systems using wind and other non-fossil energy sources 	<ul style="list-style-type: none"> ■ Smart logistics <ul style="list-style-type: none"> • Improving energy-saving features through fully IT-enhanced logistics ■ Factory automation <ul style="list-style-type: none"> • Enhancing energy efficiency through shorter lead times ■ Water business <ul style="list-style-type: none"> • Enhancing efficiency of water and sewage systems ■ Industrial products <ul style="list-style-type: none"> • Enhancing efficiency of industrial products 	<ul style="list-style-type: none"> ■ Railways <ul style="list-style-type: none"> • Enhancing energy-saving features of rolling stock • Developing smart operating systems ■ Elevators <ul style="list-style-type: none"> • Enhancing energy-saving features of elevators and escalators through replacement • Enhancing energy efficiency through total building solutions 	<ul style="list-style-type: none"> ■ Smart cities <ul style="list-style-type: none"> • Reducing CO₂ through comprehensive urban energy management solutions ■ Vehicle electrification <ul style="list-style-type: none"> • Promoting electrification through electric powertrain systems ■ Home appliances <ul style="list-style-type: none"> • Enhancing energy efficiency of home appliances • Promoting connected home appliances ■ Smart therapies <ul style="list-style-type: none"> • Enhancing energy-saving features of medical devices

