### **Helping Resolve Environmental Issues Toward 2050**

The world's population, which was 7.3 billion in 2015, is projected to grow to 9.7 billion by 2050 and to 11.2 billion by 2100.\*1 Global GDP is also continuing to expand—led by emerging economies—aggravating a host of environmental problems, including global warming caused by higher CO<sub>2</sub> emissions from fossil fuel consumption, the depletion of resources due to increased demand, and ecosystem destruction. Global-scale efforts are being made to develop approaches that lighten the burden on the environment so that a prosperous planet can be passed on to future generations.

Hitachi strives to achieve a more sustainable society by addressing environmental problems, which pose a major challenge for society, based on its corporate mission of contributing to society through the development of superior, original technology and products.

\*1 According to World Population Prospects: The 2015 Revision, published by the United Nations.

#### Hitachi's Environmental Vision

As global warming, resource depletion, ecosystem destruction, and other environmental issues grow more serious, the international community is working together to tackle these problems, such as by adopting the Paris Agreement that includes a target to keep global warming to below 2°C. From an environmental-management perspective, Hitachi, which promotes the Social Innovation Business, has established the Environmental Vision and defined the kind of society we envision in the long term in contributing to the resolution of global environmental issues.

## Long-Term Environmental Targets: Hitachi Environmental Innovation 2050

Our Environmental Vision envisions a low-carbon society; a resource efficient society; a harmonized society with nature. To achieve such a sustainable society, we have newly established a set of long-term environmental targets called Hitachi Environmental Innovation 2050.

To create a low-carbon society, we aim to achieve 80% reductions in  $CO_2$  emissions by fiscal 2050 across the value chain in line with ambitious targets set in the Paris Agreement. Toward that end, we will enhance the efficiency of our products and services, supply low-carbon energy, and develop innovative technologies and solutions.

To achieve a resource efficient society, we will do our utmost through our business operations, together with our customers and society, to help build a society that uses water and other resources efficiently. We will also improve our usage efficiency of water and other resources in our business operations by 50% by fiscal 2050.

To achieve a harmonized society with nature, we will strive to minimize Hitachi's impact on natural capital, which bestows the benefits of nature on humankind.

#### **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.

#### **Hitachi Environmental Innovation 2050**

**Low-Carbon Society** 

• Achieve **50% reductions** 

in CO<sub>2</sub> emissions by fiscal 2030

and **80% reductions** by fiscal 2050

across the value chain (compared to fiscal 2010)

**Resource Efficient Society** 

- Build a society that uses water and other resources efficiently
- Achieve 50% improvement in usage efficiency of water and other resources by fiscal 2050 (compared to fiscal 2010 in the Hitachi Group)

**Harmonized Society with Nature** 

• Minimize the impact on natural capital

### Reducing the Environmental Burden of Our Business Operations (Fiscal 2015 Results)

The Environmental Action Plan for 2013 to 2015 encompassed many themes, such as promoting Eco-Products, reducing  $CO_2$  emissions, and using resources efficiently. Three years of improvement activities were concluded in fiscal 2015 with many positive results.

#### Environmental Action Plan for 2013 to 2015: Achievements

Category	Items	Indicators	Fiscal 2015 targets	Fiscal 2015 results
Establish Environmental Management Systems	Raise the level of environmental activities	GPs (green points) in GREEN 21 Environmental Activity Evaluation System	640 GPs	646 GPs
	Ecosystem (biodiversity) preservation	Implementation of ecosystem preservation assessment	Completion of ecosystem preservation assessment	Completed ecosystem preservation assessment
Promote Eco-Products	Expand Hitachi Eco-Product	Percentage of Hitachi Eco-Product sales	90%	95%
	lineup	Number of models in Eco-Products Select program	340 models	409 models
Build Industry's Most Advanced Factories and Offices	Promote Eco-Factories & Offices Select certification	Eco-Factories & Offices Select certification	Average of at least 1 certifica- tion per in-house or Group company	New certifications: 15 Renewed certifications: 58 Total: 73
Prevent Global Warming	Reduce energy use per unit	Reduction in energy use per unit (base: FY 2005, global)	15%	16%

For details about initiatives to address major indicators other than those above, please refer to the CSR section of our website.

# Calculation of GHG Emissions Throughout the Value Chain

We calculate greenhouse gas (GHG) emissions throughout the entire value chain to more effectively reduce these emissions. As over 90% of emissions come from use of the products we have sold, we are working to reduce emissions by developing Eco-Products that meet environmentally conscious criteria throughout their life cycle.

#### GHG Emissions Throughout the Hitachi Value Chain

Procurement of Raw Materials and Parts 3.2%



#### Increasing the Ratio of Eco-Products

We promote the development of environmentally conscious products called Eco-Products as part of our initiative to reduce the environmental burden of our products and services as much as possible.

Eco-Products must meet criteria used in the design and development stages, when we evaluate the extent to which their environmental burden can be reduced. Until fiscal 2015, we promoted the development of Eco-Products by setting targets for raising the Eco-Product sales ratio, a figure measuring Eco-Product sales against total product sales. In fiscal 2016, we will launch new initiatives with the aim of helping to resolve environmental issues by developing and expanding the use of products and services with high environmental value.

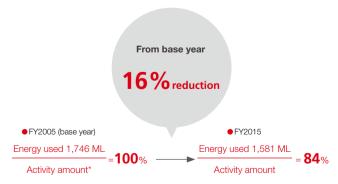
► [Key Indicators] Eco-Product Sales Ratio (Please refer to page 55.)

### Global Warming Countermeasures in Factories and Offices

We are promoting ways to use energy more efficiently and reduce GHG emissions during production and transportation, in both manufacturing and nonmanufacturing divisions, to help prevent global warming.

We are working to reduce the energy use per unit as one way to use energy more efficiently. In fiscal 2015, we achieved a reduction of 16% (from fiscal 2005, the base year), surpassing the target of 15%. We are systematically working to improve the energy efficiency of individual lighting equipment and facilities by installing high-efficiency equipment and devices, from LED lighting to inverter air conditioners. In pursuit of more efficient energy use, moreover, we are actively harnessing the control technologies and IT systems that are our forte to conserve energy at our factories and offices.

#### Reduction in Energy Use per Unit



- \* A value closely related to the emission factor numerators (environmental burden) of energy use from business activities (for example, production quantity, output, building floor space, and number of employees).
- ► [Key Indicators] CO₂ Emissions (Please refer to page 55.)