## **Sumitomo Heavy Industries Group**

# 4th Medium-Term Environmental Plan

At the Sumitomo Heavy Industries Group, we aim to realize the "Excellent Eco Factory" that contributes to the realization of a sustainable society by holding fast to the "Sumitomo Business Spirit" and setting our sights on achieving a low-carbon society in 2020.

## Contributing to the Prevention of Global Warming in Both Product Use and Production

— 4th Medium-Term Environmental Plan Focuses on the amount of contribution to reducing CO<sub>2</sub> emissions from product usage —

Our Group's 4th Medium-Term Environmental Plan has the achievement of a low-carbon society as a major component. We are aiming for a 22% reduction in CO<sub>2</sub> emissions from global production and a 15% reduction in CO<sub>2</sub> emissions from product use.

We have been taking measures for some time to reduce CO2 emissions during production, and now we are putting additional focus on the amount of contribution to reducing CO2 emissions from product usage. This will further reinforce our CO2 reduction activities working through both products and services.

"The amount of contribution to reducing CO2 emissions from product usage" refers to the size of the CO2 reduction that we anticipate from the development of new products with greater energy-conservation performance than the older products (FY2008 standard). In order to increase the amount of contribution to reducing CO<sub>2</sub> emissions from product usage, we are setting fiscal year targets for the increase of the number of our proprietary environmentally friendly products and the expansion of our sales of those products. An overwhelmingly large part of lifecycle CO2 emissions for our Group's products comes during product use, at 96%. This amount must be reduced. We will take steps to develop and popularize products with greater energy efficiency. Our aim is to contribute to the realization of a low-carbon society.

Meanwhile, our efforts to reduce CO<sub>2</sub> emissions during production are lowering CO<sub>2</sub> from our factories in Japan every year. Our actual records show a 33% reduction from 2004. There was also a slight reduction at our overseas factories, so when results in Japan and other countries were added together, we achieved our target. The 4th Medium-Term Environmental Plan sets a global reduction target of 25% in FY2020, and calls for energy conservation at our factories outside Japan.

Basic Policies of the 4th Medium-Term Environmental Plan

Promote environmental risk management

We will take steps to reduce environmental risks and aim to achieve zero environmental accidents.

We will expand our environmental risk assessments to all our business establishments, including factories outside Japan, take steps to prevent environmental accidents, and maintain our zero accident record.

Contribute to the achievement of a low-carbon society

We have long been taking measures to reduce CO2 emissions during production, and in addition we are reinforcing our activities to reduce CO2 emissions during

Realize a resource-recycling society

We will continue to reduce the amount of waste we generate and pursue zero

Contribute to local communities and take measures for biodiversity

We will participate in local community activities in every region, and contribute to the protection of a diversity of organisms by afforestation at our factories and

### Contribute to low-carbon society with environmentally friendly products and "first-class products"

#### All-electric injection molding machines

This is a device for producing plastic products. The group has special expertise in high-precision, high-cycle work, and has one of the top market shares domestically. We deliver products that are outstanding not just for their performance but also for their economy. That is why, for example, we have won the Minister of Economy, Trade and Industry Award at the Outstanding Energy Conservation Equipment Awards of the Japan Machinery Federation



This circulating fluidized bed (CFB) boiler is capable of efficiently burning even flame-retardant fuels. In response to the demand from small-scale power generation facilities that use biomass as fuel, we developed a compact boiler in the 5-MW class. This is contributing to the effective utilization of global resources.



#### Hybrid hydraulic excavator

The rotation is used to generate electricity, providing support for engine output that enhances the excavator's fuel economy. The hydraulic excavator model used as the base for this system is also a prize-winner for energy conservation, and this further energy-conserving effect is contributing to the

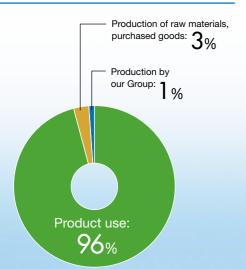


#### Steam turbine

This is a device used primarily for private power generation at factories. It receives steam from a boiler and uses it to run an electric generator. Recent years have seen increasing use for biomass power generation, and we have an overwhelmingly large worldwide share in this application.



#### CO<sub>2</sub> emissions during production and during product use



**Changes in Environmental Management Activities** at the Sumitomo Heavy Industries Group

Heavy Industries Group

## FY2000-2004

Established Sumitomo Heav Industries Environmental Policy (1997)Established Sumitomo Heavy Industries Group Environmental Policy (1999)

From FY 1995

Pollution prevention activities

ISO 14001 acquisition and support Waste reduction and recycling

1995 2000 Activities to reduce CO<sub>2</sub> emissions (raise energy productivity)

Expand to Group companies outside Japan Toxic chemical substance control, biodiversity

FY2008-2010

## FY2005-2007

2005

Start global warming prevention activities (Reduce use of electricity, reduce use of paper, green logistics)

## FY2011-2013

Expanding "first-class products" that are environmentally friendly

The amount of contribution to reducing CO2 emissions from product usage

> Medium-Term <u>-nvironmental</u> Plan

Excellent Eco Factory

2015