

## Reducing waste generation and waste to landfill

### P16 CSR Policy 5

#### Reducing waste generation and promoting recycling

**2008 Result:** Waste generation: 69% of 2000 levels  
(Target: 78% or less)  
Recycling rate: 84% (Target: 88% and above)

**2009 Target:** Waste generation: 76% or less of 2000 levels  
Recycling rate: 88% and above

The Hitachi Chemical Group established a Waste Committee to review and exchange information associated with the action plans of major works and Group companies to systematically promote waste reduction and recycling.

In fiscal 2008, we moved forward in our development of manufacturing processes that generate less waste, such as improving material yield and reducing the use and disposal of process liquids by reviewing manufacturing conditions. In addition, we increased the recycling rate through better waste separation.

These efforts along with decreased production brought down waste generation in fiscal 2008 to 28,000 tons on a non-consolidated basis and 71,100 tons on a consolidated basis, or 54% and 69% of 2000 levels, respectively. The recycling rate was 99% on a non-consolidated basis and 84% on a consolidated basis. Going forward, we intend to achieve further progress in eliminating waste and introducing innovations in specific production processes to generate less waste.

In addition, the Hitachi Chemical Group in fiscal 2008 also introduced a waste manifest-based management system to all production sites of Hitachi Chemical and several Group companies to further strengthen waste management, and going forward it will promote conversion to an electronic manifest system.

#### Decreasing waste to landfill

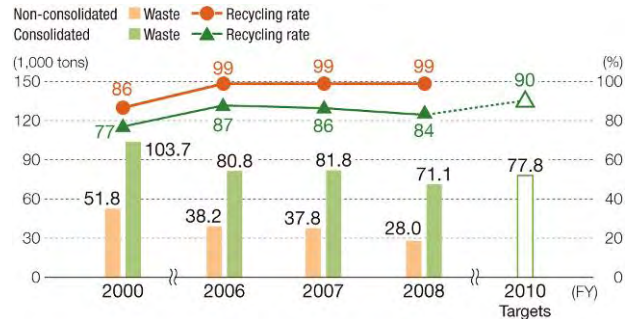
The Hitachi Chemical Group has been promoting new production methods and recycling to reduce waste to landfill. As a result of these activities, we achieved zero emissions\*<sup>1</sup> at all 28 domestic sites in fiscal 2006.

Generation of landfill waste in fiscal 2008 amounted to 1.4 tons on a non-consolidated basis and 3,900 tons on a consolidated basis (22 tons in Japan), while the waste to landfill ratio\*<sup>2</sup> was 0.0045% on a non-consolidated basis and 5.5% on a consolidated basis (0.083% in Japan). Waste to landfill on a consolidated basis increased as a result of a reexamination of the treatment status at some overseas sites conducted in fiscal 2008. We will continue to monitor actual conditions at overseas sites while striving to further reduce the amount of waste we generate.

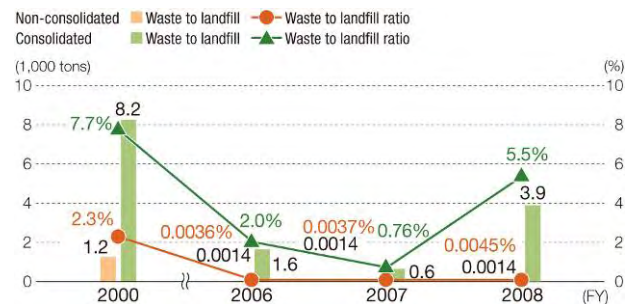
\*<sup>1</sup> The Hitachi Chemical Group defines "zero emissions" as reducing the ratio of waste to landfill to no more than 1% and less than 5 tons in volume at each site.

\*<sup>2</sup> Ratio of waste to landfill: amount of waste to landfill / amount of waste generated.

#### Amount of waste and recycling rate



#### Waste to landfill and waste to landfill ratio



- **Promoting recycling in overseas Group companies**

The Hitachi Chemical Group is also pursuing recycling abroad by exchanging ideas and sharing information at annual Overseas Block Environmental Safety Conferences held in Southeast Asia and China.

For example, Hitachi Chemical (Dongguan) Co., Ltd. (China) and Hitachi Chemical (Johor) Sdn. Bhd. (Malaysia) are engaged in an initiative involving the repeated use of secondary materials, such as the center core of photosensitive film, in cooperation with customers, as we do in Japan.

## Minimizing environmental impact in physical distribution

### P16 CSR Policy 5

- **Improving transportation efficiency**

With a target of reducing CO<sub>2</sub> emissions per unit of production by 1% every year, the Hitachi Chemical Group seeks to save energy through greater transportation efficiencies and the promotion of modal shifts based on an analysis of energy consumption in physical distribution.

In fiscal 2008, Hitachi Chemical and Shin-Kobe Electric Machinery Co., Ltd., which are designated as specified shippers under the Law Concerning the Rational Use of Energy, reduced emission per unit by more than 1% compared with the previous year, calculated on the basis of how the two companies report emissions to the Japanese government.

- **Reducing the number of company cars and introducing low-pollution vehicles**

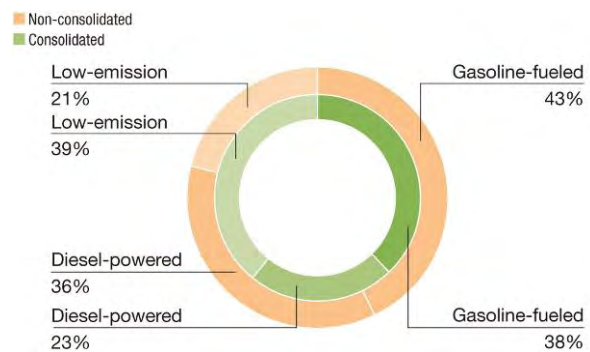
In fiscal 2008, the number of vehicles (including forklifts) owned by manufacturing sites totaled 295 on a non-consolidated basis (289 in 2007) and 768 on a consolidated basis (782 in 2007), of which low-pollution vehicles accounted for 21% (19% in 2007) and 39% (37% in 2007), respectively.

We will continue to reduce the overall number of company-owned cars and promote conversion to low-pollution vehicles such as hybrid vehicles.

- **Scaling back on packaging materials**

The Hitachi Chemical Group is reducing the consumption of packaging materials to lower the environmental burden of product shipping. As part of this effort, we are actively adopting the use of returnable plastic containers and recyclable packaging materials both at home and abroad.

**Ratio of low-pollution company cars (as of March 31, 2009)**



**Ratio of packaging materials (FY2008)**

