

Eco-Products—3

Reducing Environmental Impacts in Physical Distribution

Promoting modal shifts and improving transportation efficiency

In order to reduce CO₂ emissions, the Hitachi Chemical Group collaborates with physical distribution service companies that carry our products and raw materials in promoting modal shifts and boosting the efficiency of logistics.

We are also conducting a survey of transportation efficiency at all our sites.

Ensuring the safe transporting of products and raw materials

The Hitachi Chemical Group has issued “yellow cards” (emergency contact cards) that clearly specify emergency measures and applied “container yellow levels” that display emergency measures during the transporting and using of products including hazardous and poisonous chemical substances, and applied “container yellow labels” which display emergent measures. The Group also asks its partners to carry these cards when delivering products and raw materials.

Reducing CO₂ emissions by converting commercial vehicles

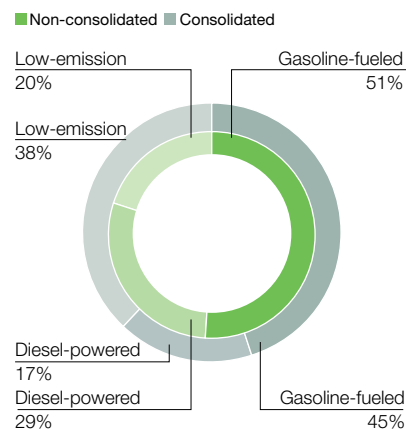
The Hitachi Chemical Group is working to reduce the number of company cars^{*1} and increase the ratio of company cars represented by low-pollution vehicles. As a result, there were 258 company cars on a non-consolidated basis and 769 on a consolidated basis, with low-pollution vehicle^{*2} ratios of 20% and 38%, respectively, in 2005.

Every sales office is converting to hybrid commercial vehicles to reduce CO₂ emissions. A hybrid vehicle emits just 50% of the CO₂ of gasoline-fueled cars.

***1. Company car:** passenger cars, buses, minibuses, trucks, station wagons, fire trucks, forklifts, etc.

***2. Ratio of low-pollution vehicles:** Number of low-pollution vehicles including electric vehicles and hybrid vehicles/number of company cars

Ratio of low-pollution vehicles in company cars (as of March 31, 2005)

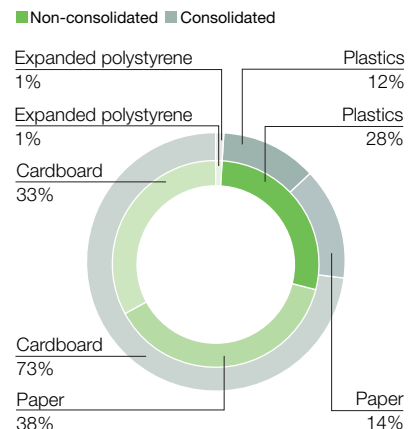


Reducing packaging materials

As a part of our efforts to reduce the consumption of packaging materials across the entire supply chain, we encourage the use of dedicated containers, including returnable plastic containers and recyclable packaging materials, to minimize the disposal of product packaging materials.

In 2005, overseas Group companies also intensified their own related efforts. For instance, Hitachi Chemical Electronic Materials (Korea) Co., Ltd. discontinued the use of plastic separators for packaging film products. In 2006, with the goal of reducing the consumption of packaging materials by 1% from the level in 2005, the Group encouraged the broader use of returnable containers and simplified product packaging.

Ratio of packaging materials (FY 2005)



Technology to recycle expanded polystyrene

In response to the enforcement of the Containers and Packaging Recycling Law, Hitachi Chemical launched a new technology for recycling expanded polystyrene in 2003. The recycled expanded polystyrene beads exhibit mechanical properties equivalent to virgin material and presents a superior appearance as a molded product while conforming to Eco Mark standards and reducing manufacturing-related energy consumption and CO₂ emissions by approximately 40% compared with virgin material. The beads are now manufactured by recycling expanded polystyrene for packaging. We conducted research and verified that it is,

in practice, technically possible to manufacture these products by processing styrene resin parts from discarded home electronics, such as racks, spacers, and trays from used refrigerators, which are being generated in larger volume due to

the enforcement of the Home Electronics Recycling Law. We will proceed to establish an environmentally and economically sound system for collection and recycling in collaboration with home electronics makers and recycling companies.

Schematics of the system for recycling expanded polystyrene

