

Minimizing environmental impact in physical distribution

← P12 CSR Policy 5

● **Improving transportation efficiency**

With a target of reducing CO₂ 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 2007 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 emissions per unit by more than 1% compared with the previous year.

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

In fiscal 2007, the number of vehicles (including forklifts) owned by manufacturing sites totaled 289 on a non-consolidated basis (278 in 2006) and 782 on a consolidated basis (822 in 2006), of which low-pollution vehicles accounted for 19% and 37%, 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



Plastic returnable container for "Photec"

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.

● **Ensuring safe transportation of products and raw materials**

The Hitachi Chemical Group issues "yellow cards" (emergency contact cards) that clearly specify measures to be taken in the event of an emergency during transportation of products. We also use yellow container card labels that display emergency measures to ensure safety during the transportation and use of products containing hazardous and toxic chemical substances as well as to alleviate environmental impact in the event of an accident. In addition, we request that suppliers delivering raw materials also carry yellow cards.

Caring for the environment in offices

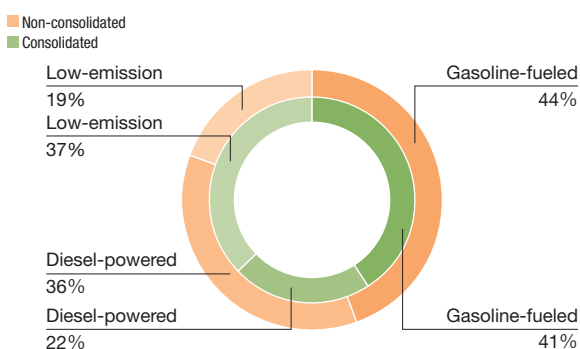
← P12 CSR Policy 5

The Hitachi Chemical Group undertakes green procurement of office equipment, which places priority on purchasing products bearing the Eco Mark or which comply with the Green Procurement Law. In fiscal 2006, the ratio of green procurement* was 70% on a non-consolidated basis and 70% on a consolidated basis.

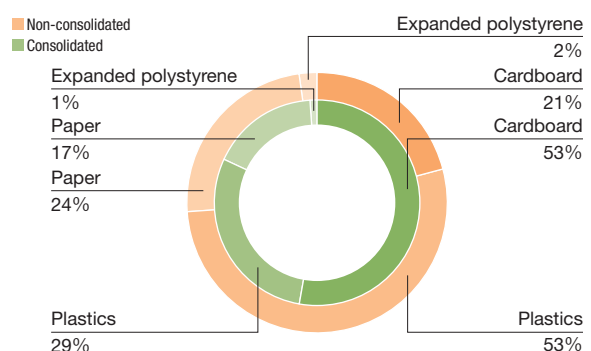
Furthermore, Hitachi Chemical utilizes the "e-sourcing" electronic ordering and purchasing system to raise the efficiency of its green procurement by centralizing purchasing control for the entire company.

* **Ratio of green procurement:** amount of green procurement / total amount of procurement.

Ratio of low-pollution company cars (As of March 31, 2008)



Ratio of packaging materials (FY2007)



Hitachi Chemical Group Environmental Conservation Action Plan for Fiscal 2008 (excerpt of major items)

Category		Long-term target			FY2007			Target for FY2008	Relevant pages
		Indicator	Target value	Target FY	Target value	Result	Rating		
Eco-mind and global environmental management	Promotion of environmental management	Hitachi Chemical and its Group companies will promote Group-wide management of environmental conservation activities, including overseas companies. As a chemicals company, we will also continue activities for reducing the impact on the global environment, enhance the level of control over chemical substances and expand environment-friendly products to strengthen our environmental management and fulfill our social responsibility.							P30-31
	Promotion of GREEN 21 activities	Promotion of environmental activities with expanded GP	1,280 GP	2010	896 GP	987 GP	○	1,024 GP	P31
Next generation products and services	Expansion of green products	Ratio of green product registrations	85% or more	2010	85%	85%	○	85% or more	P33
	Enhancement of environmental efficiency	Global warming factor (one representative product)	20% or more	2010	10% or more (one product per division)	10% or more	○	10% or more	P33
		Resource factor (one representative product)	20% or more	2010	10% or more (one product per division)	10% or more	○	10% or more	P33
	Risk control over chemical substances contained in products	Appropriate information disclosure (labels and MSDS revision)	(1) Industrial Safety and Health Law (2) Chinese RoHS	(1) • 2008 (labels) • 2010 (MSDS) (2) 2007 (labels)	(1) • Labels (1st) • MSDS (1st) (2) Labels	Completed	○	(1) • Labels (2nd) • MSDS (2nd)	P20, 35
		• Compliance with RoHS • Compliance with ELV	Compliance and information disclosure	Continuing	Compliance with Chinese RoHS	Completed	○	(1) Compliance with Korean RoHS (2) Identification of regulatory revisions	P20, 35
		Compliance with REACH Regulation (registration)	Designated export volume to EU by registration (1) 1,000 tons/year or less (2) 100 tons/year or less (3) 1 ton/year or less	(1) 2010 (2) 2013 (3) 2018	• Research on chemical ingredients • Confirmation of export volume of the applicable products	Completed	○	• Research on product applications • Preliminary registry	P20, 35
		Compliance with REACH Regulation (reporting of SVHCs)	0.1%/year or less and 1 tons/year or less	2011 and after	• Research on the products • Confirm regulatory trends	Completed	○	• Ingredient evaluation and consideration • Reporting and consideration for use of alternatives	P20, 35
	High-standard eco-factories and offices	Prevention of global warming	CO ₂ emissions (domestic; compared to FY1990)	93% or less	2010	93% or less	84%	○	93%
CO ₂ unit requirement index (domestic; compared to FY1990)			75% or less	2010	79% or less	69%	○	77%	P36
Reduction of CO ₂ emissions during transportation (energy consumed per actual unit sales; compared to FY2006)			Reduced 4% or more	2010	Reduced 1% or more	Reduced 1% or more	○	Reduced 2% or more	P38
Reduction of wastes		Promotion of zero emission activities	All domestic sites compliant	—	All domestic sites compliant	All domestic sites compliant	○	All domestic sites compliant	P37
		Amount of waste (compared to FY2000)	75% or less	2010	79% or less	79%	○	78%	P37
Reduction of chemical substances during manufacturing		Amount of emissions into the atmosphere (domestic; compared to FY2000)	15% or less	2010	20% or less	11%	○	11%	P34
	Amount of VOC emissions into the atmosphere (domestic; compared to FY2000)	15% or less	2010	25% or less	15%	○	15%	P34	
Environmental collaboration with stakeholders	Promotion of environmental communication	Communication initiatives for each stakeholder • Communication via PR activities, websites, publication of sustainability reports and site reports, briefings with local residents • Environmental activities in local communities							—

Self-evaluation ○ = Significantly above target; ○ = Above target; × = Below