

Realizing a Sustainable Society For the Global Environment

Promoting environmental management

← P5 CSR Policy ⑤

● Environmental Conservation Action Plan

The Hitachi Chemical Group established Hitachi Chemical's Action Guidelines for Environmental Conservation in 1993 to guide environmental conservation activities related to the business activities of the Group as a whole. Each fiscal year, we formulate a concrete Environmental Conservation Action Plan based on the Hitachi Group's roadmap, Environmental Vision 2015.

In the Environmental Conservation Action Plan for 2007 (see p. 36), we categorized our activities into

Hitachi Chemical's Action Guidelines for Environmental Conservation

Purpose

In order to realize an environmentally harmonious and sustainable society through products and services, Hitachi Chemical is committed to meeting its social responsibilities by promoting a globally applicable *Monozukuri* (designing, manufacturing and repairing products) for reducing the environmental impact of products throughout their entire life cycles, thereby ensuring environmental conservation.

Please see our website for details.

URL <http://www.hitachi-chem.co.jp/english/csr/environment/guidelines.html>

eco-mind (awareness) and global environmental management, next-generation products and services, high-standard eco-factories and offices, and environmental collaboration with stakeholders. We set action targets and target values for each category. As a chemicals manufacturer, we will further strive to reinforce Group-wide environmental management, reduce environmental impact, improve control over chemical substances, and expand green products based on this action plan.

● System for promoting environmental conservation activities

Environmental conservation activities for the entire Group, including the Environmental Conservation Action Plan, are determined by the Across-the-Board CSR Conference (see p. 8) chaired by the President and CEO and attended by the heads of operating divisions, works and Group companies. The Committee for Environmental CSR-compliant *Monozukuri* (see p. 16) and other committees have been set up to respond to regulations on chemical substances and promote cross-sectional information sharing encompassing the works, sales offices and Group companies.

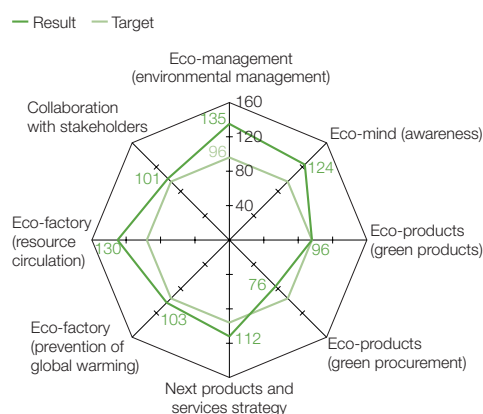
● Development of an environmental management system

The Hitachi Chemical Group has been developing an environmental management system based on ISO 14001, and major Group companies in Japan and

GREEN 21 evaluation criteria

Category	Principal performance indicators
Eco-management (environmental management)	Action plan, environmental accounting
Eco-mind (awareness)	Employee education
Eco-products (green products)	Eco-design management system, green products
Eco-products (green procurement)	Green procurement, green purchasing
Next products and services strategy	Business and product strategy, sustainable business, external advertising
Eco-factory (prevention of global warming)	On-site energy conservation, environmental consideration in distribution
Eco-factory (resource circulation)	On-site energy conservation, environmental consideration in distribution
Collaboration with stakeholders	Information disclosure, communication activities, global citizen activities

Evaluation radar chart (consolidated) (FY2006)



abroad obtained certification by 2002 (68 sites have been certified as of March 2007).

In a consistent effort to improve our environmental activities, these sites conduct self-assessment through an internal audit and undergo an audit by an external ISO 14001 certification body. To ensure an objective and fair audit, internal auditors selected from outside the targeted section, and from other sites, conduct the audit based on a check sheet.

● GREEN 21 evaluation system for environmental activities

2006 Result: 876 GP (Target: 768 GP)
2007 Target: 896 GP

In 1998, the Hitachi Chemical Group adopted the Hitachi Group's GREEN 21 self-evaluation system, which assesses environmental conservation activities in accordance with a set of specific standards.

Under GREEN 21, our activities and level of accomplishment for each year are evaluated in terms of Green Points (GP), which provide us with an overall measurement of accomplishments. This objective analysis of strengths and weaknesses is useful in promoting environmental activities.

In 2006, we earned 876 GP. While we exceeded our target in eco-management (environmental management), eco-mind (awareness) and eco-factories (resource circulation, 96 GP), we fell significantly short of our target in eco-products (green procurement). In response to

these results, we will further urge business partners to adopt materials with less environmental impact in 2007. We will also address weaknesses at each site by analyzing their GP.

● Environmental accounting system

The Hitachi Chemical Group introduced an environmental accounting system in 1999 to continuously enhance our environmental investments and conservation activities and to deepen stakeholder understanding of our corporate stance by disclosing information on the allocation of management resources to environmental activities and the value generated by environmental technologies and eco-friendly products.

In 2006, we invested ¥5.6 billion on a non-consolidated basis and ¥10.9 billion on a consolidated basis in R&D for eco-friendly products and the management and maintenance of equipment for reducing environmental impact. We also invested ¥1.0 billion on a non-consolidated basis and ¥2.1 billion on a consolidated basis in fuel conversion to natural gas to reduce CO₂ emissions and to introduce regenerative deodorizing equipment for effluent gas treatment to reduce emissions of volatile organic compounds (VOCs).

We define the impact in monetary terms as economic effects, whereas amount is defined as volume effects; economic effects totaled ¥4.3 billion on a non-consolidated basis and ¥4.6 billion on a consolidated basis.

Results of environmental accounting

Category	Non-consolidated		Consolidated		Category	Non-consolidated		Consolidated	
	2005	2006	2005	2006		2005	2006	2005	2006
1. Total costs (millions of yen)	57.2	56.1	115.5	108.7	1. Total economic effects (millions of yen)	36.0	43.0	41.3	45.7
(1) Direct costs for production	32.3	32.0	53.6	55.6	(1) Net income effect	2.2	4.0	4.5	5.8
(2) Upstream/downstream costs	0.3	0.3	0.6	1.3	(2) Effect of reducing expenses	2.3	2.5	3.7	3.1
(3) Management activity costs	3.5	3.7	9.2	8.5	(3) Effect of reducing materials	31.5	36.5	33.1	36.7
(4) Research and development costs	20.5	19.5	50	42.5	2. Volume effects				
(5) Social activity costs	0.5	0.5	0.5	0.6	(1) Reduction of wastes landfilled (tons/year)	0.5	0	381	41.8
(6) Environmental damage costs	0.1	0.1	1.6	0.2	(2) Reduction of chemical substances emitted into the atmosphere (tons/year)	80	369	383	791
2. Environmental investment (millions of yen)	4.3	10.0	22.4	21.2					

Data is compiled from 32 domestic sites.