

TORAY Group Social Responsibility
2009



Contents




01	Social Responsibility
02	Message from the President
04	Toray Group's Corporate Social Responsibility
07	CSR Guideline
11	CSR Initiative Reporting Policies
12	Chronology of CSR Initiatives
16	External Commendations
19	For our customers
	Initiatives for Developing Environmentally-Friendly Products
20	Pursuing "Environmental Design" to Create Environmentally-Friendly Products
21	Project EcoChallenge Promotion
24	Further Expansion of Environmentally-Friendly Products
26	Promote Recycling
	Product Safety and Quality
30	Product Safety and Quality Policies
31	Providing Quality Assurance
33	Ensuring Product Safety
	Cooperate with Suppliers in Their Environmental and Social Initiatives
35	Toray CSR Procurement and Purchasing
37	Environmentally Conscious Distribution Policies
38	A "Specified Consignor" under the Revised Law Concerning the Rational Use of Energy
41	Distribution Safety Initiatives
42	For our employees
	Occupational Safety
43	Occupational Safety and Accident Prevention Activities
	Train Personnel and Promote Human Rights
46	Efforts to Promote Human Rights
48	Developing Human Resources to Create New Value
50	Development and Promotion of Local Key Staff
52	Initiatives Encouraging Diversity in Employment
54	Creating an Organizational Culture Conducive to the Career Advancement of Women
58	For our stockholders
	Corporate Governance and Management Transparency
59	Toray Group Corporate Governance
61	Promotion of CSR Activities
62	Information Disclosure Principles
	Corporate Ethics and Legal Compliance
63	Corporate Ethics and Legal Compliance Code of Conduct
64	Emphasizing Corporate Ethics and Legal Compliance
67	Efforts to Uphold Corporate Ethics and Maintain Legal Compliance
69	Antitrust Law Compliance Education
	Risk Management
70	Promoting Risk Reduction Activities
73	Promoting the Business Continuity Plan (BCP)
74	Initiatives to Protect Personal Information
75	For society
	Communication
76	Toray Group Stakeholder Dialogue Aims
79	Communications with Customers
80	Communications with Stockholders and Investors
83	Communication with Business Partners
84	Communication with Employees
85	Communications with Local Communities
86	Communications with NPOs
87	Communication with Citizens
88	Communications with the Media
	Social Contribution Activities
89	Toray Group Social Contribution Activities
91	Development of Science and Technology
92	Helping Nurture Future Generations
94	Support for Culture and the Arts
95	Community-based Initiatives
97	Results of Social Contribution Activities
	Safety and the Environment
101	Ten Basic Environmental Rules
102	Unified Management of Safety, Health, Accident Prevention, and Environmental Preservation Issues


	107	Initiatives to fight global warming
	110	Voluntary Reduction of Atmospheric Emissions of Chemical Substances
	112	Initiatives to Prevent Air and Water Pollution
	115	Initiatives to Reduce Waste
	118	Environmental Risk Management
	119	Environmental Accounting
	123	Environmental Data
	125	Chemical Substance Emissions and Transfer Data
	129	Environmental Data for 12 Toray Plants and Principal Subsidiaries and Affiliates
131		CSR Report 2009 Highlights
	132	Tackling Climate Change
	136	Establishment of Automotive & Aircraft Center and Our Technological Innovation
	140	Initiatives to Mitigate Water Resource Issues
	144	CSR Initiatives Around the World

Toray Group enhances and implements CSR as priority management issues, and seeks to remain a high-value corporate group for all stakeholders.



[For our customers](#)
[For our employees](#)
[For our shareholders](#)
[For society](#)


<p>Message from the President</p>  <p>Contributing to society through the creation of new value with innovative ideas, technologies and products</p>	<p>Toray Group's Corporate Social Responsibility</p> <p>Introduction to the Toray Group Corporate Philosophy and its CSR activities</p> 	<p>CSR Report 2009 Highlights</p> <p>Addressing climate change and water resource issues</p> 	<p>Environmental Activities</p> <p>Environmental preservation, environmentally-friendly products, and recycling initiatives</p> 
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Navigation for First-Time Visitors 

Introduction to our Social Responsibility Website's main features

Development of Science and Technology

Promoting basic research in science and technology as well as educational activities of the Toray Science Foundation

CSR Reports Download 

Download prior year reports here

Contact Us

Subject Index

CSR News [Back Number](#)

Dec. 1, 2009	Information	Social Responsibility web site was updated
Oct. 27, 2009	Information	China Toray BlueStar Membrane Co., Ltd. (TBMC) TBMC Groundbreaking Ceremony (Aug. 24, 2009)
Oct. 27, 2009	Information	Japan Toray Industries, Inc. Toray Awarded by the Japan Institute of Invention and Innovation (Jul. 29, 2009)
Oct. 27, 2009	Information	Japan Toray Industries, Inc. Advanced Technology Award (Jul. 23, 2009)
Oct. 27, 2009	Information	Japan Toray Industries, Inc. Supplying Environmentally-friendly Fibers for Toyota Motor's New Lexus HS250h Model (Jul. 14, 2009)
Oct. 27, 2009	Information	Thailand Thai Toray Synthetics Co., Ltd. (TTS) Receiving Thailand's "National Occupational Safety and Health Award" (Jul. 2, 2009)
Oct. 27, 2009	Information	Thailand Luckytex (Thailand) Public Company Limited (LTX) Environmental Improvement Project (Jun., 2009)

Message from the President

Toray Group consistently strives to make a contribution to society through "Innovation," and seeks to remain a high-value corporate group for all stakeholders.

President, CEO and COO, Representative Director
Toray Industries, Inc.




Introduction

Since its founding in 1926, Toray Industries, Inc. has consistently taken up the challenge to develop new products and new technologies drawing on core technologies in polymer chemistry, organic synthetic chemistry, biotechnology and nanotechnology, acquired in the course of development of synthetic fibers and other materials. The success of these efforts has enabled Toray Group to grow various businesses under its umbrella. In addition to its endeavors in fibers and textiles as well as plastics and chemicals as foundation businesses, it is today engaged in activities earmarked for strategic expansion and development encompassing carbon fiber composite materials, IT-related products, life sciences, including pharmaceuticals, medical and other products, as well as water treatment membranes, and other environmental businesses across a global network that extends over 21 countries and regions.

In addition, Toray Group continues to devote considerable effort to research and development. Toray Group remains committed in its efforts to boost cost competitiveness while strengthening its marketing capabilities, and to stand united in its resolve to attain the highest levels of product safety, quality management and environmental preservation systems. As a group that manufactures advanced materials, Toray Group will work diligently into the future to contribute to society's sustainable development. To this end, we will channel our efforts toward resolving the many global challenges and issues that confront humankind.

The Way Forward

Working to realize sustainable development in partnership with society, Toray Group formulated "AP-Innovation TORAY 21," a new long-term corporate vision, in April 2006. Guided by this vision, we determined the corporate slogan as "Innovation by Chemistry," to become toward a global top company of advanced materials. Driven by this overarching goal, Toray Group is dedicated to addressing "Innovation," in every field of its corporate activities. Toray Group recognizes that fulfilling its corporate social responsibility (CSR) is of equal importance for securing business expansion in order to put these visions principles into practice.

In this context, Toray Group is proactively engaged in CSR activities that draw equally from two distinct, parallel themes. On the one hand, we pursue "defensive CSR," working diligently to address such priority management issues as corporate ethics, legal compliance, safety, accident prevention, and environmental preservation. We promote "proactive CSR," which encompasses technology development and business expansion aimed at delivering solutions to global environmental issues.

Promoting "Proactive CSR"

On a global scale, the environmental issues are fast approaching the point of no return. To address this, Toray Group places "the environment" at the center of all of its management strategies and activities. In the selection of businesses and development of technologies, management is driven by an assessment of the impact of Toray Group's activities in terms of environmental burden reduction and global environment improvement.

To date, Toray Group has been promoting its Ecodream* Activity, expanding its environmentally-friendly product business and recycling activities. In order to further develop new environmental technologies and reduce greenhouse gas (GHG) emissions, we also commenced the Project EcoChallenge. Empowered by our advanced technological capabilities, we will continue to leverage our chemical technology to provide solutions to such global issues as global warming and the depletion of natural resources, energy, and food.

In recognition of its environmentally friendly business activities including its involvement in such areas as seawater desalination, water treatment, and carbon fiber composite material business as well as its CSR activities targeting climate change prevention and sustainable social growth, Toray received the 2008 Humanitarian Award from the

In Closing

This report presents a summary of Toray Group's CSR activities and its results in FY 2008. To the best of our ability we have made efforts to present all material in an easy-to-understand format, and in this context, I am confident that readers will gain a good understanding of how active Toray is in its approach to and promotion of CSR activities.

I kindly request your understanding and continued support of Toray Group as we work toward achieving our established vision and goals.

August 2009

Toray Group's Corporate Social Responsibility

As the director responsible for Toray Group's CSR, I am doing my utmost to ensure that the Group is positioned as a world leader in CSR.

Norihiko Saitou

Senior Vice President, In charge of CSR activities
 General Manager, Investor Relations Department, Corporate Communications Department,
 Internal Control Department, and Advertising Department General Manager,
 General Administration & Legal Division Toray Industries, Inc.



Toray Group recognizes that fulfilling its corporate social responsibility (CSR) is equal in importance to ensuring business expansion, and pursues active CSR efforts group-wide. In spite of these efforts, we regret to report that in March 2009, Toray and Toray Pef Products Inc. received administrative orders from the Japan Fair Trade Commission in relation to price fixing of cross-linked high-foaming polyethylene sheets. Toray Group takes this matter very seriously and will continue to implement thorough measures to prevent similar reoccurrence. At the same time reforms are being implemented on a global level to its business and organizational structures in order to survive the current global economic situation and its severe impact. In promoting these reforms, Toray Group believes that it is important for all employees to be aware of the crisis and to work towards a common objective. Therefore, I am striving harder than ever on a daily basis to push forward with our CSR activities in order to help achieve sustainable growth for Toray Group.

Toray Group's Management Philosophy and CSR

Since its founding, Toray Group has remained committed to making social contributions through its business activities based on a Corporate Philosophy of "contributing to society through the creation of new value with innovative ideas, technologies, and products." Toray systematically promotes CSR activities based on the understanding that these activities are synonymous to the realization of Management Philosophy. The Corporate Missions outlines the company's policies towards its four main stakeholders, while its Corporate Guiding Principles set out conduct objectives for individual employees with the overarching goal of maintaining Toray's standing as a good corporate citizen. The Corporate Ethics and Legal Compliance Code of Conduct provides more specific examples of proper behavior in support of the Management Philosophy. To ensure that CSR activities based on this way of thinking are adopted by all Toray Group companies and employees, a CSR Committee was established in 2003 and the First Road Map was drawn up as a three-year plan. The CSR Guidelines were formulated in 2004. Moreover, the position of overall supervisor for CSR and CSR Operations Department were appointed in 2007. The CSR Guidelines include activities for reduction of environmental impact that were already being undertaken by Toray Group based on its Ten Basic Environmental Rules, while key issues concerning social responsibility were added. This formulates a unique set of CSR guidelines.

Related information

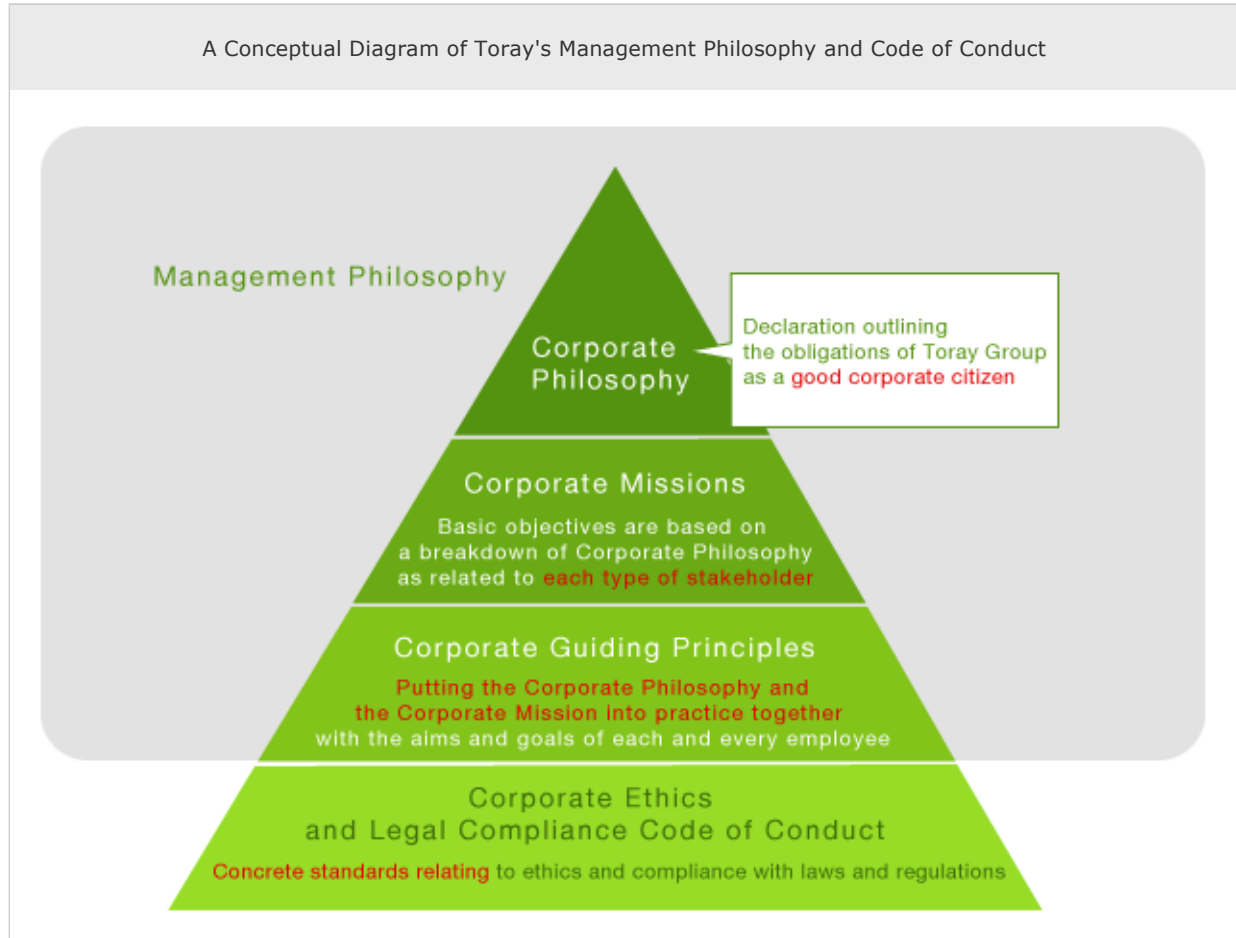
- [Management Philosophy](#)
- [Corporate Missions](#)
- [Corporate Guiding Principles](#)
- [Corporate Ethics and Legal Compliance Code of Conduct](#)
- [Ten Basic Environmental Rules](#)

Special Features of Toray Group CSR Activities

Toray Group CSR activities are characterized by the parallel promotion of CSR guideline activities and CSR line activities. CSR guideline activities are driven by the entire organization based on the CSR Guidelines, which include a comprehensive list of the issues that Toray Group is addressing, while CSR line activities are those being pursued by individual divisions based on their own targets. For the CSR guideline activities, each relevant division establishes an Action Program for the coming year, which is carried out under the direction of a responsible director. Activity progress and results are regularly reported to the

Company--Wide CSR Committee, which are later publicly disclosed through the CSR Report.

CSR line activities, on the other hand, are activities in which all Toray Group employees participate. Since 2005, the key persons appointed among the head office section managers have been in charge of administering these activities. CSR line activities have already been fully implemented at subsidiaries and affiliates in Japan, but are still being expanded to subsidiaries and affiliates outside Japan, based on conditions in the relevant countries. The Company will continue to share examples of CSR line activity expansion within Toray Group, as it aims to further invigorate and firmly establish these efforts.



CSR Road Map

Toray Group shares its overall plan for CSR activity promotion in the form of a CSR Road Map, which it undertakes through continuous PDCA cycles*. FY 2008 marked the first year of the Third CSR Road Map. During the fiscal year, CSR training and full-scale implementation of group-wide risk management were carried out according to plan. Details and progress conditions for the CSR Road Map are shown below.

* PDCA

The management cycle that follows the order of Plan, Do, Check and Act.

Third CSR Road Map (FY 2008-2010)

	Group-wide CSR issues	FY2008	FY2009	FY2010
Establishment of CSR promotion system	1 Establishment of Company-wide Committees and implementing organizations relating to CSR	△	→	
Plan-Act	2-1 Formulation and review of CSR Guidelines and Action Programs	○	→	→
	2-2 Establishment and review of CSR line activity issues	○	→	→
Do	3-1 Implementation of CSR Guidelines and Action Programs	○	→	→
	3-2 Deployment of CSR line activities throughout the Group	○	→	→
	3-3 Development of an enterprise risk management system	○	→	→
	3-4 Implementation of CSR training and dissemination strategies	○	→	→
	3-5 Promotion of CSR-related communications within the Group and externally	○	→	→
Check	4-1 Promotion of stakeholder engagement	△	→	→
	4-2 Consideration on industry standards and international code of conduct	○	→	→
	4-3 Consideration on the use of third party audits			→

Toray CSR Guidelines were established as a foundation for Toray Group management activities in and outside Japan as well as to facilitate its contributions to the building of a sustainable society. The ten guidelines are implemented via concrete annual plans, also referred to as action programs, established specifically for each guideline and carried out using plan-do-check-act (PDCA) management practices. Such Action programs are flexible to changing times and societal needs, and are revised as necessary.

Adopted December 2004 and revised June 2009

1

CSR GUIDELINE

Corporate Governance and Management Transparency

Promote CSR activities with integrity, strive for timely and appropriate information disclosure, and tighten internal controls. Also, continually revise management systems and foster awareness of the company's role in contributing to the development of a sustainable society.

Action Program

Toray Group is implementing the PDCA cycle to build a CSR management system for Toray and its Japanese and overseas subsidiaries and affiliates. The Group will implement risk management in order to establish internal control system in accordance with Japan's Companies Act; it will ensure accountability in corporate governance through its internal control systems, and it will maintain and enhance management transparency.

Implementation Leader

Norihiko Saitou
 Senior Vice President
 In charge of CSR activities
 General Manager, Investor Relations Department, Corporate Communications Department, and Advertising Department
 General Manager, General Administration & Legal Division
 Toray Industries, Inc.

2

CSR GUIDELINE

Corporate Ethics and Legal Compliance

Make the upholding of "Corporate Ethics and Compliance with Laws and Regulations" a top management priority for maintaining the trust of society. Also, ensure that all executives and employees act with fairness and a sense of responsibility while maintaining high ethical standards.

Action Program

Toray Group will conduct ongoing educational activities concerning corporate ethics and legal compliance, while taking actions as necessary to adjust to legal and other changes in the environment in which the Group operates.

Implementation Leader

Kiyoshi Fukuchi
 Senior Vice President, General Manager, Personnel and Industrial Relations Division
 Toray Industries, Inc.

3

CSR GUIDELINE

Emphasize Safety, Accident Prevention, and Environmental Preservation

Give Safety, Accident Prevention, and Environmental Preservation priority as a top management issue, and work to ensure the safety and health of society and employees while protecting the environment in all of our business processes, from procuring raw materials to manufacturing, supplying, and disposing of products.

Action Program

- (1) Fulfilling its responsibilities for promotion, the Safety, Health and Environment Committee will lead the activities in accordance with the 2008 Company-wide Safety, Health, Accident Prevention and Environmental Action Policy.
- (2) Toray Group will undertake activities with "Zero serious accidents" and "World's No.1 in the rate of lost-worktime injuries" (0.05) as the safety targets for Step up 3Z: "Zero Accidents."
- (3) The Group will promote activities towards achieving the goals set under the Third Three-Year Environmental Plan.

Implementation Leader

Osamu Nakatani
Senior Vice President and Representative Member of the Board
In charge of General Administration, Legal Division, (Security Trade Administration Department), Product Safety and Quality Assurance Planning Department

4

CSR GUIDELINE

Product Safety and Quality

Recognize the importance of product safety and quality assurance in supplying safe and highly reliable products, and strive to enhance management systems and disclose appropriate information.

Action Program

Toray Group will undertake activities with the participation of all departments, including sales, procurement, production, engineering, research, and quality assurance in order to establish a global system covering Japanese and overseas affiliate companies. The Group will continuously and systematically work to improve product quality and quality assurance system through the Product Safety and Quality Assurance Committee, the Product Safety Board Meeting and the Manager's Council of the Quality Assurance Department.

Implementation Leader

Osamu Nakatani
Senior Vice President and Representative Member of the Board
In charge of General Administration, Legal Division, (Security Trade Administration Department), Product Safety and Quality Assurance Planning Department

5

CSR GUIDELINE

Risk Management

Seek to reduce potential risk, develop a system capable of responding quickly to unexpected circumstances and disclosing accurate information, and work to inform all employees about this system.

Action Program

Led by the Risk Management Committee: Toray Group will

- (1) undertake systematic risk reduction activities in each division, department, office and plant,
- (2) continue with Business Continuity Plan (BCP) initiatives to prepare against a major earthquake and promote measures for early recovery of head office functions, information systems, and manufacturing functions, and
- (3) promote Enterprise Risk Management (ERM) and build a foundation for applying the PDCA cycle.

Implementation Leader

Norihiko Saitou
 Senior Vice President
 In charge of CSR activities
 General Manager, Investor Relations Department,
 Corporate Communications Department, and Advertising Department
 General Manager, General Administration & Legal Division
 Toray Industries, Inc.

6

CSR GUIDELINE

Communication

Encourage dialogue and cooperation with stakeholders including employees, stockholders, investors, business partners, consumers, local communities, non-profit organizations, government and administrative agencies, mass media, analysts, and other parties.

Action Program

Toray Group will review its corporate behavior: reforms will be implemented through the practice of CSR line activities that promote dialogue and cooperation with stakeholders. (In addition to the companies in Southeast Asia, which started the activities in fiscal year 2007, the Group will expand the CSR line activities to overseas affiliates in other parts of the world.)

Implementation Leader

Norihiko Saitou
 Senior Vice President
 In charge of CSR activities
 General Manager, Investor Relations Department,
 Corporate Communications Department,
 and Advertising Department
 General Manager,
 General Administration & Legal Division
 Toray Industries, Inc.

7

CSR GUIDELINE

Initiatives for Developing Environmentally Friendly Products

Pursue research and development using new approaches in order to provide solutions from the perspective of product lifecycle management in the areas of environment, natural resources and energy, and contribute to the improvement of the global environment.

Action Program

In addition to the themes and projects that have already been reflected in activities surrounding existing businesses and line activities, Toray Group will set up projects aimed at creating businesses with fresh dimensions and those aimed at GHG emission reduction. At the same time, the Group will promote Project EcoChallenge to address global environmental issues through the concerted efforts of the Technology Center.

Implementation Leader

Chiaki Tanaka
 Executive Vice President and Representative Director
 General Manager, Technology Center
 Toray Industries, Inc.

8

CSR GUIDELINE

Train Personnel and Promote Human Rights

Secure and train personnel and diversify employment while striving to protect employee jobs, respect human rights, and continuously improve workplace environments.

Action Program

Toray Group will initiate Group-wide efforts in areas such as securing and training personnel, promoting human rights, diversifying employment, improving the workplace environment, striking a right balance between work and family, and promoting the advancement of women.

Implementation Leader

Kiyoshi Fukuchi
Senior Vice President, General Manager,
Personnel and Industrial Relations Division
Toray Industries, Inc.

9

CSR GUIDELINE

Cooperate with Suppliers in Their Environmental and Social Initiatives

Cooperate with suppliers, through the supply chain, in promoting CSR activities, including environmental consideration, compliance with laws and regulations, and promotion of human rights.

Action Program

Toray Group will create an environment for applying the PDCA cycle in supply chain management related to procurement and purchased goods to enable constant follow-up of CSR promotion status at suppliers and encourage them to make improvements.

Implementation Leader

Kazuo Morimoto
Vice President
General Manager, Purchasing & Logistics Division

10

CSR GUIDELINE

Social Contribution Activities

Voluntarily conduct promotional programs for science and technology, arts and culture, social welfare, sports, and other activities by allocating an appropriate amount of resources as a good corporate citizen.

Action Program

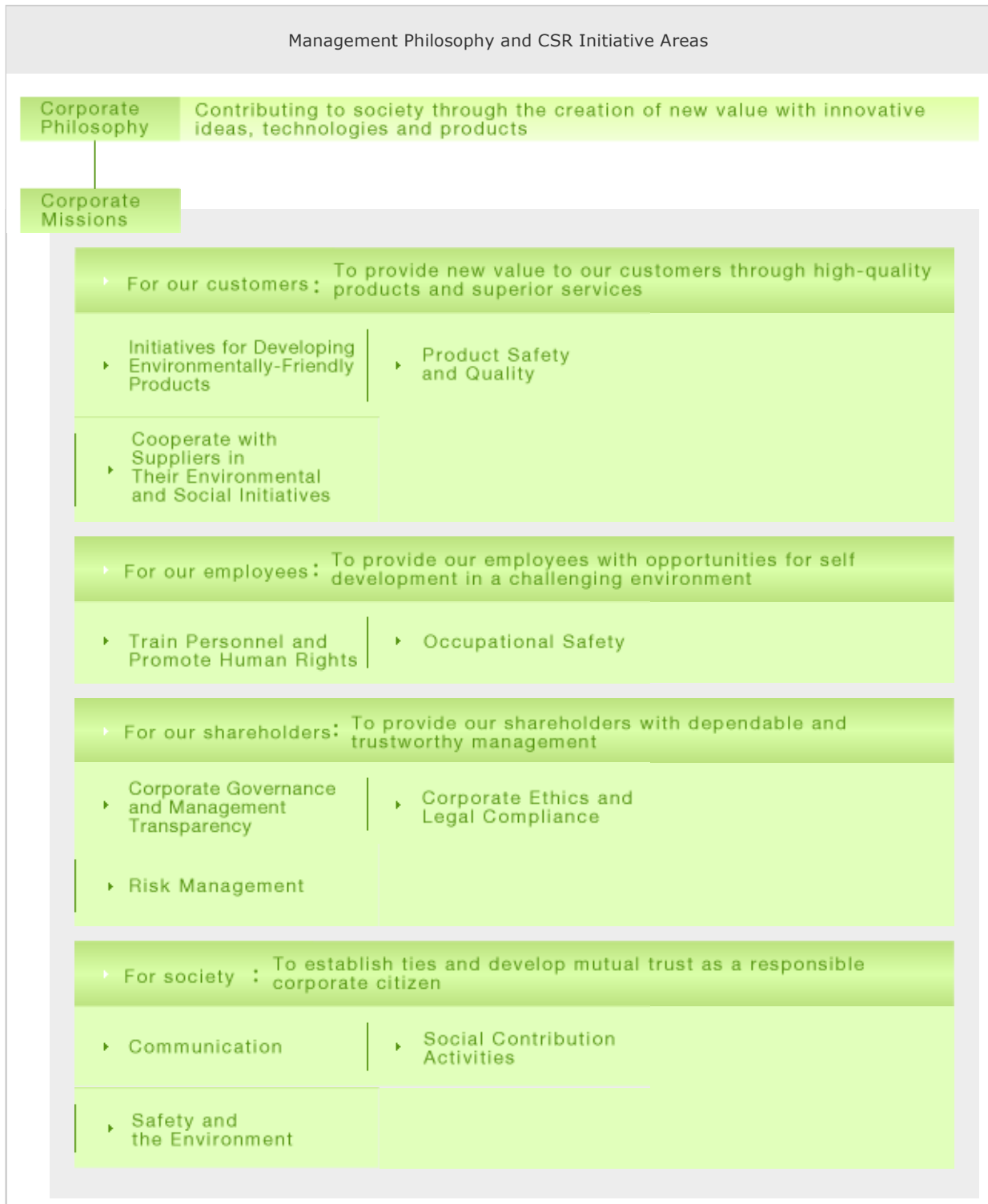
Toray Group will continue its program of social contribution activities in accordance with the Toray Group Social Initiative Policies, mainly through donations to the Toray Science Foundation. The Group will also support employee participation in volunteer activities.

Implementation Leader

Norihiko Saitou
Senior Vice President
In charge of CSR activities
General Manager, Investor Relations Department,
Corporate Communications Department,
and Advertising Department
General Manager,
General Administration & Legal Division
Toray Industries, Inc.

CSR Initiative Reporting Policies

Toray Group is aiming to realize its Management Philosophy through the promotion of CSR activities. Toray Group's CSR initiatives are based on the Toray CSR Guidelines. The purpose of each of these initiative areas and how they relate to the Management Philosophy are shown in the following outline of the Corporate Missions that make up the Management Philosophy Framework.



Social Responsibility

Chronology of CSR Initiatives

Business and CSR Activities		Environment and Responsible Care Activities
CSR Operations Department established	2007	Third Three-Year Environmental Plan started
CSR Operations Group established in the Corporate Planning Department	2006	
CSR Line Activity started	2005	CSR Report published
CSR Guidelines and Action Programs adopted	2004	CSR Annual Report published
CSR Committee established	2003	Second Three-Year Environmental Plan started
Compliance Committee established	2002	
Reemployment system introduced	2001	Recycling Committee established
	2000	Three-Year Environmental Plan started, Ten Basic Environmental Rules a
		Toray Group Environmental Management Standards established
		Environmental accounting results for FY 1999 announced
		All 12 Toray plants acquire ISO14001 certification
	1999	Environmental Report published
		Second Waste Reduction Plan prepared
		Toray Group Domestic Grand Safety Meeting held (first Group meeting)
	1998	Safety, health, accident prevention, and environmental audits start at Japanese subsidiaries and affiliates
		Safety, Health, Accident Prevention, and Environment Conference and Product Safety Conference created for overseas subsidiaries and affiliates
Corporate Ethics Committee established	1997	
Toray Human Resources Development Center opens	1996	
Toray Europe Labor and Management Council established		
Human Rights Promotion Committee		

established		
Management Philosophy (Corporate Philosophy, Corporate Missions, and Guiding Principles) adopted	1995	Joined Japan Responsible Care Council as a founding member
Involved in establishing the Ecological Life and Culture Organization		Safety, health, accident prevention, and environmental audits start at overseas subsidiaries and affiliates
Toray Science Foundation established in Thailand	1994	Safety, Health, Accident Prevention, and Environment Conference and Product Safety Conference created for Japanese subsidiaries and affiliates
		Purchase and manufacturing use of certain chlorofluorocarbons abolished
Started shortening scheduled working hours with the goal of 1,800 hours	1993	Safety, health, accident prevention, and environmental audits start at Toray plants
Toray Science Foundations established in Indonesia and Malaysia		
	1991	Global Environment Committee and Product Safety Committee established
		Industrial Waste Reduction Project started
Admitted into Keidanren's 1% Club	1990	First Grand Safety Meeting of Domestic Subsidiaries and Affiliates held
		Industrial Waste Reduction Project started
English language version of company magazine People first published	1989	Mutual inspections of safety and accident prevention start at Japanese subsidiaries and affiliates
Corporate Philosophy, "contributing to society through the creation of new value by innovative ideas, technologies, and products," adopted	1986	
	1984	Environment, Accident Prevention, Safety, and Health Assessment system established at the equipment planning stage
		First Monday of each month established as a company-wide Safety and Accident Prevention Day
	1983	First Energy Conservation Technology Presentation Meeting held
	1982	First Company-wide Grand Safety Meeting held
		Product Safety Management Regulation enacted
	1981	Energy Technology Department established
		Standard for the Prevention of Earthquake

Toray Welfare Society established	1980	Disasters established
	1979	Chemical Substance Safety Management Guidelines enacted
	1976	Accident Prevention and Safety Management Regulations enacted
Five-day workweek implemented	1974	Accident prevention and safety inspections of chemical plants started (expanded to all plants in 1984)
Child care leave of absence system established		Occupational Safety and Health Management Regulations enacted
	1973	Environment Management Regulations and Basic Policy for Greening adopted;
		Plant greening work started
Company name changed to Toray Industries, Inc.	1970	Environment Technology Section established at all Toray plants (now the Environment & Safety Section)
	1969	Environmental Pollution Prevention Committee established (now the Safety, Health, and Environment Committee)
Mandatory retirement age of 60 adopted	1966	
	1965	Accident Prevention Technology Section established (now the Environment & Safety Department)
Toyo Rayon Science Foundation established (now the Toray Science Foundation)	1960	
English annual report first published		
Central Production Committee convenes (reorganized into the Labor and Management Council in 1965)	1958	
Pension plan established	1956	
Company creed "Toyo Rayon serves society" adopted	1955	
Monthly company magazine Toray Newsletter first published (name changed to People in April 1986)	1953	
Toyo Rayon Labor Union Federation established	1946	
Toyo Rayon Health Insurance Association established	1940	
Toyo Rayon Co., Ltd. founded	1926	

▸ [Click here for information on awards for R&D](#)

Year	Month	Country	Awarding Institution	Commendations	Matters for Commendation
2009	-	Japan	Director of the Ministry of Health, Labour and Welfare, Labour Standards Bureau	Completion of works with no accidents throughout the full term (8 in total)	Toray Engineering Co., Ltd.
			Governor of Ehime Prefecture	Ehime Prefecture Public Transportation Use Promotion Excellent Business Recognition	Toray Fine Chemicals Co., Ltd.
			Kyoto Minami Fire Department	Commissioner's Commendation (Voluntary Fire Prevention Management)	Toray Coatex Co., Ltd.
	3	China	Nantong Economic and Technological Development Zone Administration Committee	2008 Safe Production Leading Company	Toray Fibers (Nantong) Co., Ltd.
			China Chemical Fiber Association	2008 China Chemical Fibers Industry Leading Corporation in Science and Technology Advancement	Toray Fibers & Textiles Research Laboratories (China) Co., Ltd.
		Korea	Minister of Strategy and Finance	Presidential Award	Toray Saehan Inc.
			President	Industry Award	STEMCO, Ltd.
	2	Japan	Ishikawa Prefecture Terai Police Station and Automobile Safety Driving Center (Ishikawa Prefecture Office)	Excellence in Driving Safety Award (Bronze Prize)	Toray Ishikawa Plant
			Minister of Economy, Trade and Industry	19th Energy Conservation Grand Prize "Small and Medium Enterprise Agency Director-General's Award"	Toray Seta Plant Functional Materials & Products Development Center
	1	Japan	Ministry of Health, Labour and Welfare	2009 Health Ministry Citation for Safety Excellence Supervisor	Toray Shiga Plant
12	Japan	Japanese Red Cross Society	Silver Medal for Merit	Towa Orimono Co., Ltd.	
		Japanese Red Cross			

2008	11	Japan	Society	Silver Medal for Merit	Toray Gifu Plant
			Japanese Olympic Committee	JOC Sports Award Top Athlete Supprot Award	Toray Allows Men's Volleyball Team
		China	China Petrochemical Corporation	Exemplary Individual Award (Pan Ruisheng)	Toray Allows Women's Volleyball Team
	10	Japan	Fukushima Labour Bureau, Ministry of Health Labour and Welfare	Excellence Award	Toray Advanced Film Co., Ltd. (Fukushima)
			United Nations Association of New York	2008 Humanitarian Award ▪ Click here for details	Toray
		Korea	Korea Management Association Registration & Assessment Inc.	Korea Green Management Excellence Awards	Toray Saehan Inc.
		United States	Morgan County, Alabama State	"Heart of the Community" Award ▪ Click here for details	Toray Fluorofibers (America), Inc.
	9	Thailand	Ministry of Labor and Social Welfare, Thailand	Award for Excellence in Labor Relations and Labor Welfare, Thailand	Luckytex (Thailand) Public Company Limited (Mill-1, Mill-2, and Mill-3)
	7	Japan	Ministry of Health, Labour and Welfare	Ministry of Health, Labour and Welfare Award at the 44th National Convention for Promotion of Blood Donation	Dow Corning Toray Co., Ltd. (Fukui)
	5	Thailand	Ministry of Labor and Social Welfare, Thailand	Award for Excellence in Safety, Occupational Health and Work Environment, Thailand.	Thai Toray Textile Mills Public Company Limited
					Luckytex (Thailand) Public Company Limited (Mill-1, Mill-2, and Mill-3)
				Nantong City Environmental	

		China	Protection Committee,China	Green Enterprise	Dyeing(Nantong) Co., Ltd.
	4	Japan	Ministry of Education,Culture, Sports,Science and Technology(Shiga Prefecture Commerce, Industry, and Tourism Employment Department)	Award for Innovative Contribution by Minister ECSST	Toray Seta Plant Textile Development Center Ikuko Watanabe (reassigned to a different department)

For our customers

To provide new value to our customers through high-quality products and superior services



In order to provide safe and high-quality products to customers, Toray Group promotes R&D related to recycling and environmentally-friendly products. The Group is striving to strengthen its product safety and quality assurance control systems, while disclosing appropriate information. It is also promoting CSR procurement initiatives in cooperation with suppliers.

FOR CUSTOMERS

Initiatives for Developing Environmentally-Friendly Products

Toray Group aims to reduce its environmental impact by providing customers with product solutions to meet their needs, while promoting R&D related to recycling and environmentally-friendly products.

FOR CUSTOMERS

Product Safety and Quality

Ensuring product safety and quality is becoming increasingly more important for both companies and society. With the aims of "Quality" and "Customer-focus," Toray Group is further strengthening its product safety and quality assurance.

FOR CUSTOMERS

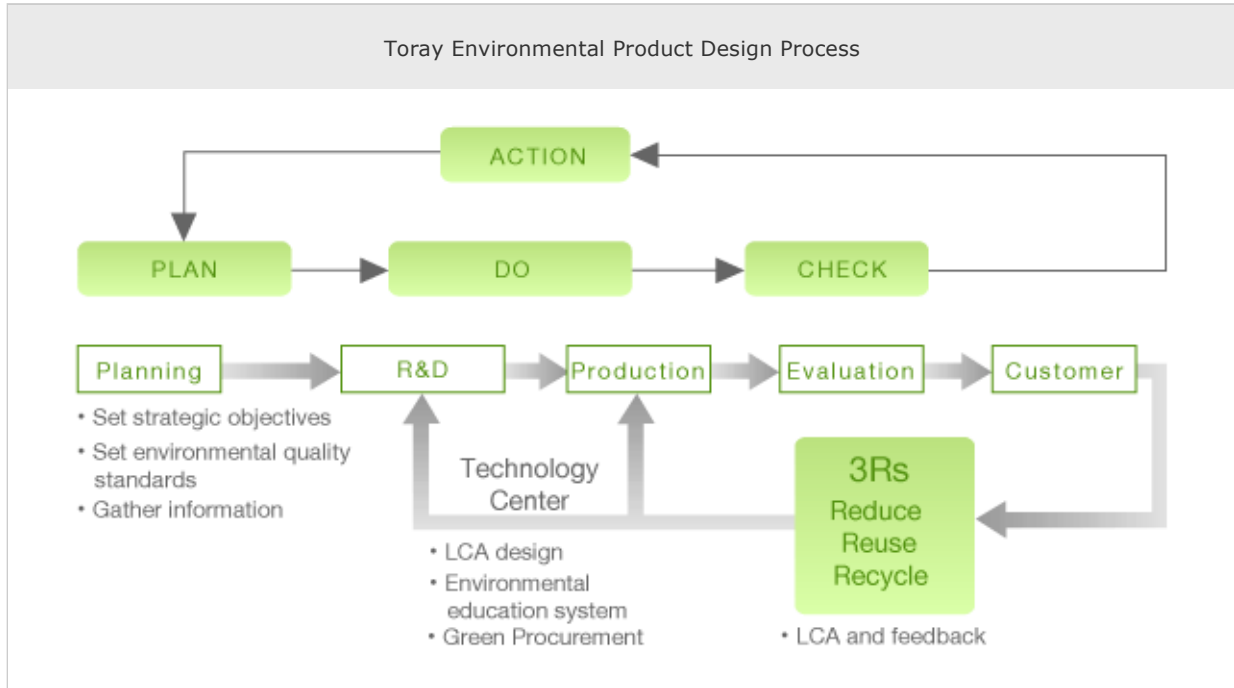
Cooperate with Suppliers in Their Environmental and Social Initiatives

In order to fulfill its social responsibilities, a company must consider not just its own operations, but also the entire value chain. With a commitment to CSR Procurement, Toray Group is promoting cooperative initiatives with suppliers.

Initiatives for Developing Environmentally-Friendly Products

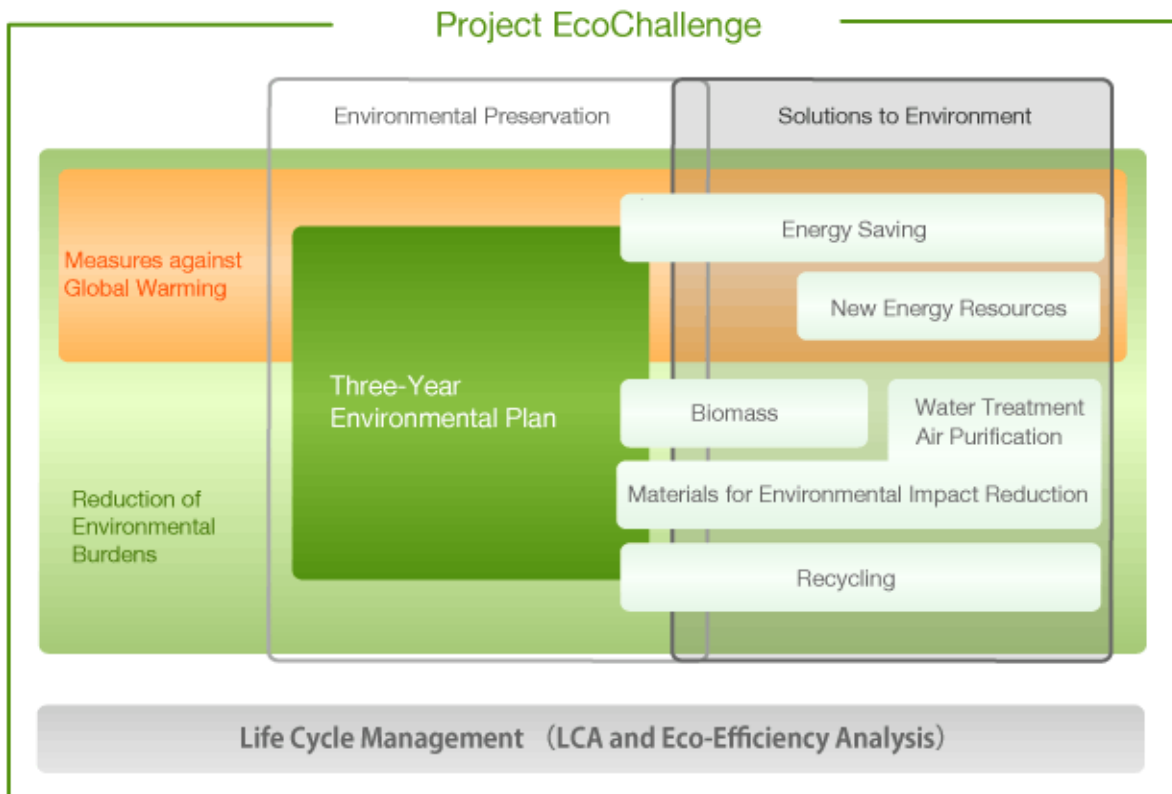
Pursuing "Environmental Design" to Create Environmentally-Friendly Products

Toray Group is pursuing Environmental Design in order to develop environmental consciousness of its products and implements Life Cycle Assessment (LCA) methods to assess the environmental impact of each product at every stage through product design, research and development (R&D), and production. Toray also requires relevant divisions to create an Environmental Assessment Checklist as part of the product safety review before launching new products in the marketplace. Environmental data as well as product safety data are subject to review and verification before products are commercialized.



Initiatives for Developing Environmentally-Friendly Products
Project EcoChallenge Promotion

Project EcoChallenge was launched in FY 2007 to further promote activities based on the approach that all business strategies must place priority on the global environment. Project EcoChallenge is being carried out under the following framework, as general practice for Toray Group activities that place priority on resource conservation and global environmental protection. The project takes a comprehensive approach to ecology, and aims to help realize a sustainable low-carbon society. It is being promoted by dividing business activities into environmental preservation and providing solutions, and by separating environmental goals into global warming prevention and environmental impact reduction, while simultaneously incorporating life cycle management.



In FY 2008, the following long-term targets were established to realize a sustainable low-carbon society.

- Target 1** Contribution Factor of CO₂ Abatement: 20 times (currently 1.3) by around 2020
- Target 2** Sales of Environmentally-friendly Products: 1 trillion yen by around 2020 (214 billion yen in FY 2007)

Contribution Factor of CO₂ Abatement

With an understanding that global warming is the most serious issue facing the global environment today, Toray is aiming to realize a sustainable low-carbon society by providing solutions that contribute to CO₂ abatement, while striving to reduce CO₂ emissions during manufacturing. In order to better envision the contribution of Toray products towards CO₂ abatement, Toray has set a new definition "Contribution Factor of CO₂ Abatement" as follows, and has started appropriate measures.

$$\text{Contribution Factor of CO}_2 \text{ Abatement} = \frac{\text{Effect of CO}_2 \text{ Emission Reduction in entire Life Cycle}}{\text{CO}_2 \text{ emission in Feedstock, Production and Disposal}}$$

Expansion of Environmentally-Friendly Products

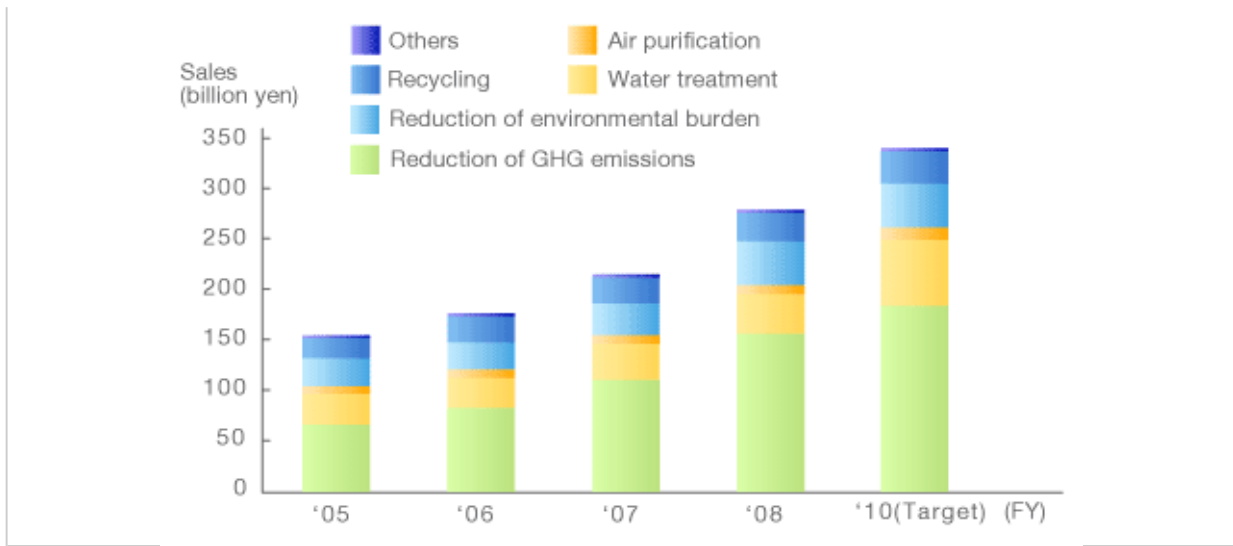
Environmentally-friendly products which provide solutions to customers are defined as those that contribute to environmental burden reduction and global warming prevention over the entire product life cycle.

Environmentally-Friendly Products (List)

Environmentally-Friendly Products (List)		
Expected results		Product
Reduction of GHG emissions	Energy saving	“Torayca” - Carbon flame for use in transportation equipment, engineering plastics, capacitor films for hybrid cars
	New energy resources	Components for wind turbine generators, components for fuel cells, films for solar cells
	Biomass	PLA (Polylactic Acid: textiles, plastics, film), 3GT fibers (PTT: polytrimethylene terephthalate) & textiles, bamboo composite fibers, cellulose fibers, soy bean protein fibers, flexible heat-resistant films
Environmental preservation	Water treatment	RO membranes, UF/MF membranes, MBR submerged membranes, water treatment system businesses, “Torayvino”
	Air purification	Heat resistant bag filters (polyphenylene sulfide (PPS), polytetrafluoroethylene (PTFE) textiles), air filters
	Reduction of environmental burdens	Non-halogen flame retardants (fibers & textiles, plastics, films), waterless CTP (computer-to-plates) plates, non-halogen circuit materials, heavy-metal-free color filters Recycling of materials Recycling Polyethylene terephthalate (PET), Nylon-6, polybutylene terephthalate (PBT), acrylonitrile-butadiene-styrene copolymer (ABS), PPS, carbon fiber reinforced plastics (CFRP), dimethyl sulfoxide (DMSO) collection
Recycling of materials	Recycling	Polyethylene terephthalate (PET), Nylon-6, polybutylene terephthalate (PBT), acrylonitrile-butadiene-styrene copolymer (ABS), PPS, carbon fiber reinforced plastics (CFRP), dimethyl sulfoxide (DMSO) collection

Toray Group has been working on a plan to more than double the scale of its environmentally-friendly products in comparison to FY 2005 by around FY 2010. In FY 2008, net sales of environmentally-friendly products totaled 272.1 billion yen. This represented an increase over the previous year despite a drop in overall sales for Toray Group, due to the launch of new environmentally-friendly products.

Expansion Plan for Sales of Environmentally-Friendly Products



In FY 2008, a long-term target for business expansion was established, calling for one trillion yen in Toray Group sales of environmentally-friendly products by around 2020. Moreover the Company will continue to seek further progress in this area.

Promotion of Life Cycle Management

Toray is promoting life cycle management that includes LCA and eco-efficiency analysis, while receiving guidance from academics and other experts, based on an awareness of the importance of regular scientific and quantitative assessment of the Company's environmental initiatives.

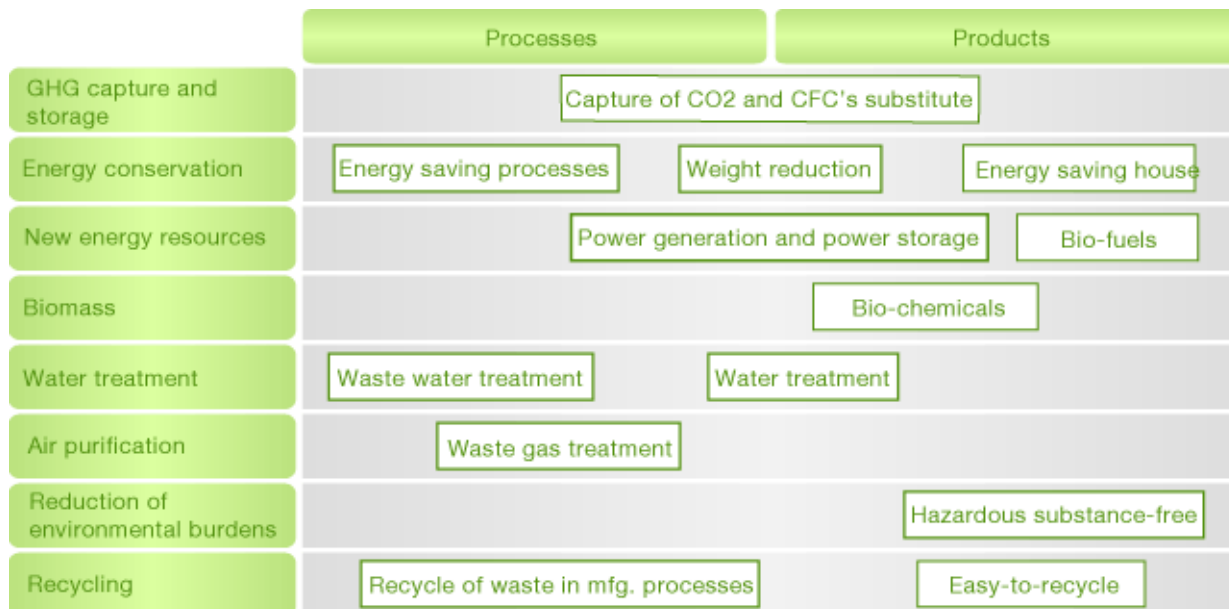
As a result of these efforts, in November 2008 Toray received the 5th Life Cycle Assessment Society of Japan Award, for its LCA of Carbon Fiber Reinforced Plastics (CFRP) for use in automobiles and aircraft.



5th LCA Society of Japan Award ceremony

Initiatives for Developing Environmentally-Friendly Products Further Expansion of Environmentally-Friendly Products

Toray is pursuing wide-ranging technology and product development for the further expansion of its environmentally-friendly products. In the area of technology development, the Company aims for innovation, and is promoting technology fusion through tie-ups with other firms and organizations. Technology development is currently being pursued within the following framework.



| New Energy Resources : Organic Thin-Film Solar Cells

Solar cells technology is attracting worldwide attention amid intensifying global warming and energy problems, and R&D in organic thin-film solar cells has been gaining momentum around the world as one of the promising candidate for next-generation of solar cells technology. The organic thin-film solar cells using organic semiconductors can offer low-cost advantages because they can be processed on plastic films. Further improvement in energy conversion efficiency is required before practical application.

Addressing this issue, Toray has developed a new polymer-based electrical-generation material, which is a key for this technology, by combining Toray's core technologies, polymer chemistry and organic synthetic chemistry. As a result, the Company has achieved the world's highest level of energy conversion efficiency at 5.5% and aims to further improve the performance of this material in order to quickly realize product applications in near future. Toray has already been producing and supplying solar module back sheet with the largest market share. The Company will continue to provide a wide range of materials and solutions for overcoming energy issue.

| Biomass : Expanding Usage of PLA Resin

Toray regards PLA as the next key polymer and is developing a wide range of applications by utilizing its own polymer alloy technology and nanotechnology. In October 2008, Toray and Canon Inc. succeeded in the development of biomass plastic with at least 25% of its content by weight consisting of plant material, which also has the world's best flame retardant properties for this type of plastic. This biomass plastic is expected to reduce CO₂ emissions during manufacturing by about 20% compared to conventional plastics made from fossil fuel. Canon has decided to use the new material in exterior components for its office copiers.

| Biomass : Development of New Cellulose-Based Fiber

In addition to PLA, Toray is bringing out a new fiber called Foresse*, recycled from biomass and manufactured using the world's first application of the melt spinning technique. Since Foresse* does not require organic solvents, which are essential for manufacturing conventional cellulose fibers, the environmental impact is low. With this

Environmental Burden Reduction: PICASUS* Metallic Sheen Resin Film

In August 2008, Toray began full-scale sales of PICASUS*, a metallic sheen resin film with low environmental impact developed through a combination of nano-layering and polymer design technologies. PICASUS* is a polyester film with precision layering of several hundred to several thousand layers of dissimilar polymers, making it highly reflective to light. As a result, the film has the look and sheen of metal, without the actual use of any metal. The use of this film can contribute to the reduction of environmental impact, by eliminating the need for plating or painting processes that require hazardous substances.

<COLUMN>

Showcasing Environmentally-Friendly Products at the Hokkaido G8 Summit

At the Toyako G8 Summit held in Japan in 2008, Toray provided products made from the biomass material PLA resin, such as jackets and t-shirts for volunteer interpreters, as well as banners, and red carpets. The Company also showed its environmentally-friendly products at Summit-related events, including the 2008 Integrated Exhibition of the Environment, and the International Media Center Environmental Showcase. Toray also promoted awareness of its environmental initiatives by using waterless printing for its PR posters.

Initiatives for Developing Environmentally-Friendly Products
Promote Recycling

As a manufacturer of a wide range of materials, Toray has been taking on the challenge of recycling various resources including fibers and textiles. The basic principle underpinning Toray's recycling is "Less Energy," and it promotes this effort based on its Recycling Vision established in 2006 and on its Recycling Activity Principles put into place in 2004. Particular emphasis is being placed on working with customers to provide them with product solutions.

Recycling Activity Principles (adopted in March 2004)

1. We shall design, produce, and sell products that reduce our impact on the environment.
2. We shall purchase and use materials and products which will help reduce our impact on the environment
3. We shall disclose information related to recycling programs and recycled goods.
4. We shall voluntarily cooperate with customers to recycle or otherwise appropriately dispose of our products.

Recycling Vision	
Company-wide	<ul style="list-style-type: none"> • Approach recycling based on the concept of "Less Energy" • Pursue sustainable recycling through partnerships with customers
Fibers & Textiles recycling	<ul style="list-style-type: none"> • Approach recycling based on the concepts of "Less Energy" and "Total Recycling" • Expand efforts through partnerships with users
Plastic recycling	<ul style="list-style-type: none"> • Approach recycling based on the concept of "Less Energy" • Focus on profitable material recycling using the life cycle inventory (LCI) technique
Composite materials recycling	<ul style="list-style-type: none"> • Demonstrate a pilot recycling plant as part of a national project • Lead the carbon fiber industry by establishing recycling methods

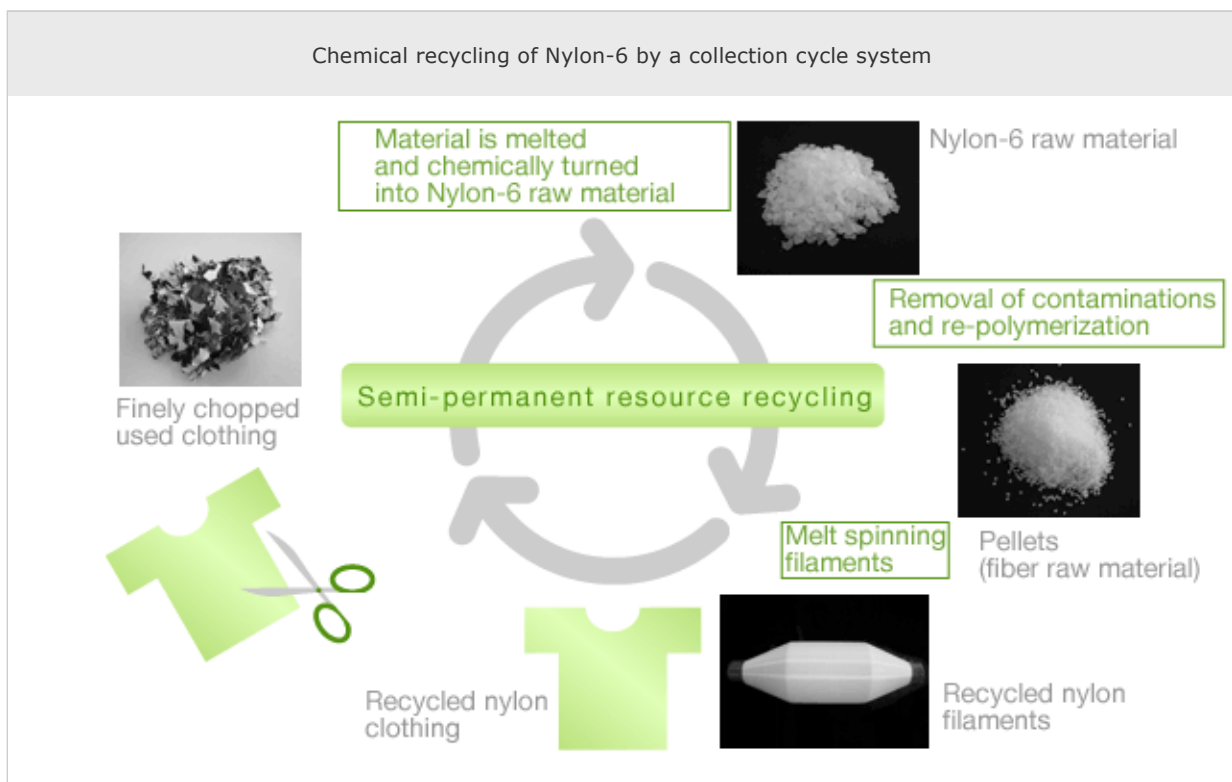
Fibers and Textiles Recycling

In FY 2008, Toray created new brands for fibers and textiles recycling in order to accelerate the strengthening of brand power and global product development based on the Ecodream* initiative for Group-wide environmental and recycling activities. The brand names are ECOUSE* and CYCLEAD*, which will be common for both Japanese and overseas markets, with the former referring to products made from recycled raw materials, and the latter referring to products that can be collected and recycled.

	Made from Recycled Raw Material	Collected and Recycled
	ECOUSE*	CYCLEAD*
Japan		

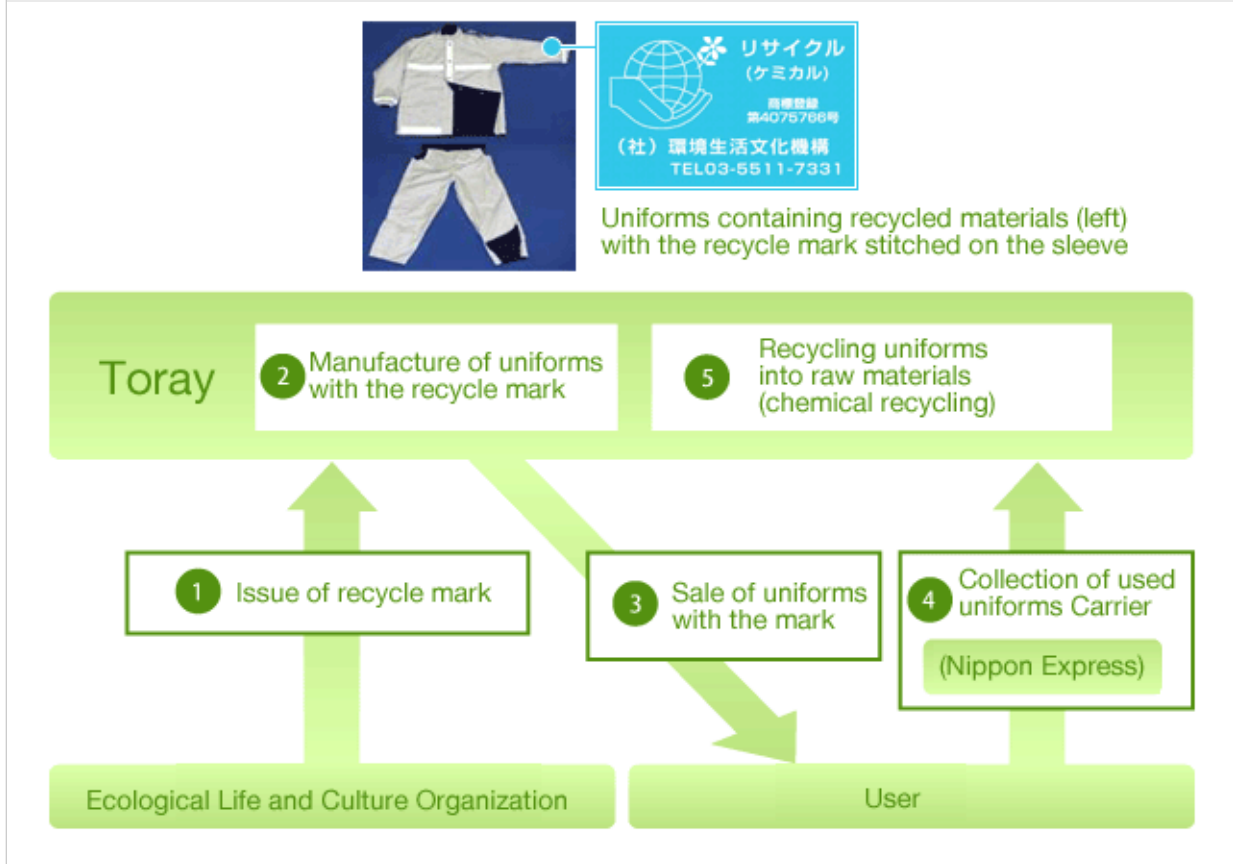


In FY 2008, Toray began the collection of Nylon-6 products for chemical recycling in partnership with several companies. Under this initiative, Ryohin Keikaku Co., Ltd. collects shopping bags, ponchos, and pouches, while Ito-Yokado Co., Ltd. recovers shopping bags and Goldwin Inc. collects standard edition 'THE NORTH FACE' compact jackets for recycling. Chemical recycling of Nylon-6 involves chemically turning the collected textile products back into Nylon-6 raw material, which is then re-polymerized and made into new filaments. This recycling process helps to conserve resources.



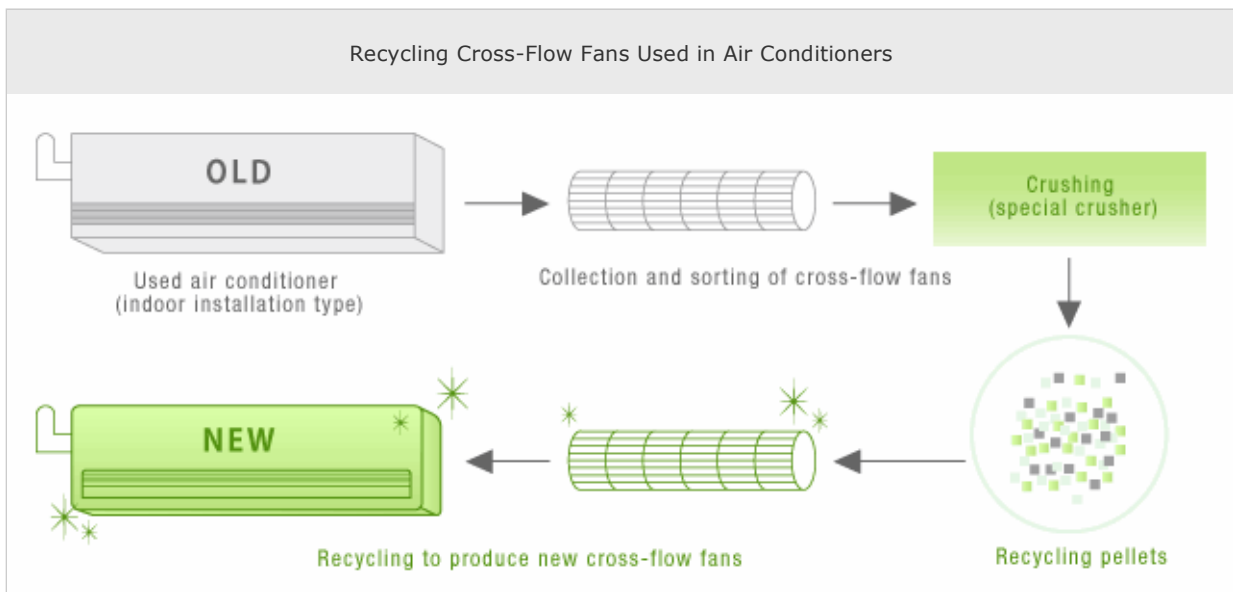
Uniform Recycling Through "Wide-Area Certification"

Toray obtained "Wide-Area Certification" from the Ministry of Environment in Japan, and began full-scale collection and recycling of uniforms and industrial nets. Under this system, uniforms are endorsed with the Ecological Life and Culture Organization's recycle mark, and are recovered and recycled after use via the Nippon Express Co., Ltd. logistics network.



Plastic Recycling

Toray commercially develops the recycling of plastics such as ABS, nylon, PBT, PET and PPS resins, and many other types of polymer through material recycling. The Company is promoting joint efforts to create collection and recycling systems together with customers.



CFRP Recycling

Since the CFRP production and business is expected to significantly expand in the future, recycling CFRP is becoming an important issue. As a member of the Recycling Committee of the Japan Carbon Fiber Manufacturers Association, Toray engages in recycling initiatives along with other CFRP manufacturers.

With the support of the Ministry of Economy, Trade and Industry, in April 2008, the Japan Carbon Fiber

Manufactures Association completed its recycling test plant in Omuta City for the “Experimental Study of Carbon Fiber Recycling Processes.” The quality and performance of recycled products is now being evaluated and trial cost calculations are being carried out through verification testing.

Product Safety and Quality Policies

With the aim of achieving the “Quality” and “Customer-focus” aspects of its corporate image in the 21st century, as defined by its long-term corporate vision “AP-Innovation TORAY 21”, Toray Group has established policies for product safety and quality assurance, and drives both activities synergistically.

Quality Policy (revised June, 2007)

We give top priority to the product quality offered to our customers as well as to safety and to the environment in our corporate activities. We work on quality assurance with the stance of “Customer First”.

1. We make our best efforts to meet our customers' expectations with products and services of high satisfaction
2. We commit ourselves to abide by the “Quality First” principle, and to improve the quality and reliability of our products, in all our divisions, including sales, manufacturing and research and development.
3. We meet quality requirements at the stage of design and development, and ensure and enhance these in the manufacturing process.
4. We continuously strive to organize, maintain and improve our quality management system.

Product Safety Management Basic Policy (established January, 1992)

1. We shall place priority on the various measures required to ensure product safety.
2. We shall conduct adequate safety evaluations prior to marketing a new product.
3. For products already on the market, we shall take note of feedback from customers and the general public and always remain attentive to safety.

Related Information

- [Long-term corporate vision, “AP-Innovation TORAY 21”](#)

Product Safety and Quality
Providing Quality Assurance

Perfecting Systems in Support of Quality Assurance Activities

Under the Group-wide quality assurance system that Toray introduced in December 2006, the Product Safety and Quality Assurance Planning Department is responsible for developing the relevant policies and strategies for Toray Group. Individual business divisions' Quality Assurance Departments are responsible for ensuring that these policies and strategies are reflected in the Group's business activities.

In February 2008, Toray established Quality Assurance Control Regulations that serve as the basis for its promotion of cross-organizational plant management quality assurance, and also of quality assurance for both internally and externally manufactured products that are distributed globally by Toray.

Acquiring Quality Assurance Certification

Toray Group quality assurance framework is being continually strengthened through efforts such as the acquisition of quality assurance ISO 9001 certification at Toray production plants. Japanese and overseas subsidiaries and affiliates are also taking positive steps to obtain ISO 9001 certification. In FY 2008 Ichimura Sangyo Co., Ltd. received certification for its industrial materials division.

Toray Group has also obtained the various certifications of quality management systems required for a diverse range of industries. In FY 2008, Toray received ISO/TS16949 *1 certification for its man-made suede automotive textile products. It also expanded the scope of its JIS Q 9100 *2 certification, from plant-only applicability to the inclusion of sales, for advanced composite materials used in the aerospace field.

*1: ISO/TS16949
 Quality management system standards for automotive applications

*2: JIS Q 9100
 Quality management system standards for aerospace applications

<VOICE>

Tomoyuki Fujii

Electronic & Information Related Products Quality Assurance Department
 Shiga Plant
 Toray Industries, Inc.

Quality Management in anticipation of future needs

Toray's Shiga Plant produces materials for plasma displays used in flat-panel TVs. These are important materials for creating vivid colorful TV images. As a person in charge of quality assurance, my goal is to achieve zero quality defects. We constructed and launched a system for sharing quality assurance data, including raw material manufacturers, supported by the Product Safety and Quality Assurance Planning Department, and I was glad to be able to utilize the knowledge gained by achieving a Green Belt in the Six Sigma* program in 2008. By being able to share information and perform precise and instant data analysis, it is possible to spot quality trends and thereby prevent problems and ensure quick recovery. In the future, I want to support Toray's product creation through the improvement of quality assurance in a way that prioritizes customer needs, while further developing this system horizontally within the Company.

*Six Sigma

A technique that seeks to make improvements to eliminate the root causes of various mistakes and errors involving products and services. At Toray, those that have achieved a Green Belt in this program can be put in charge of project promotion within their departments.



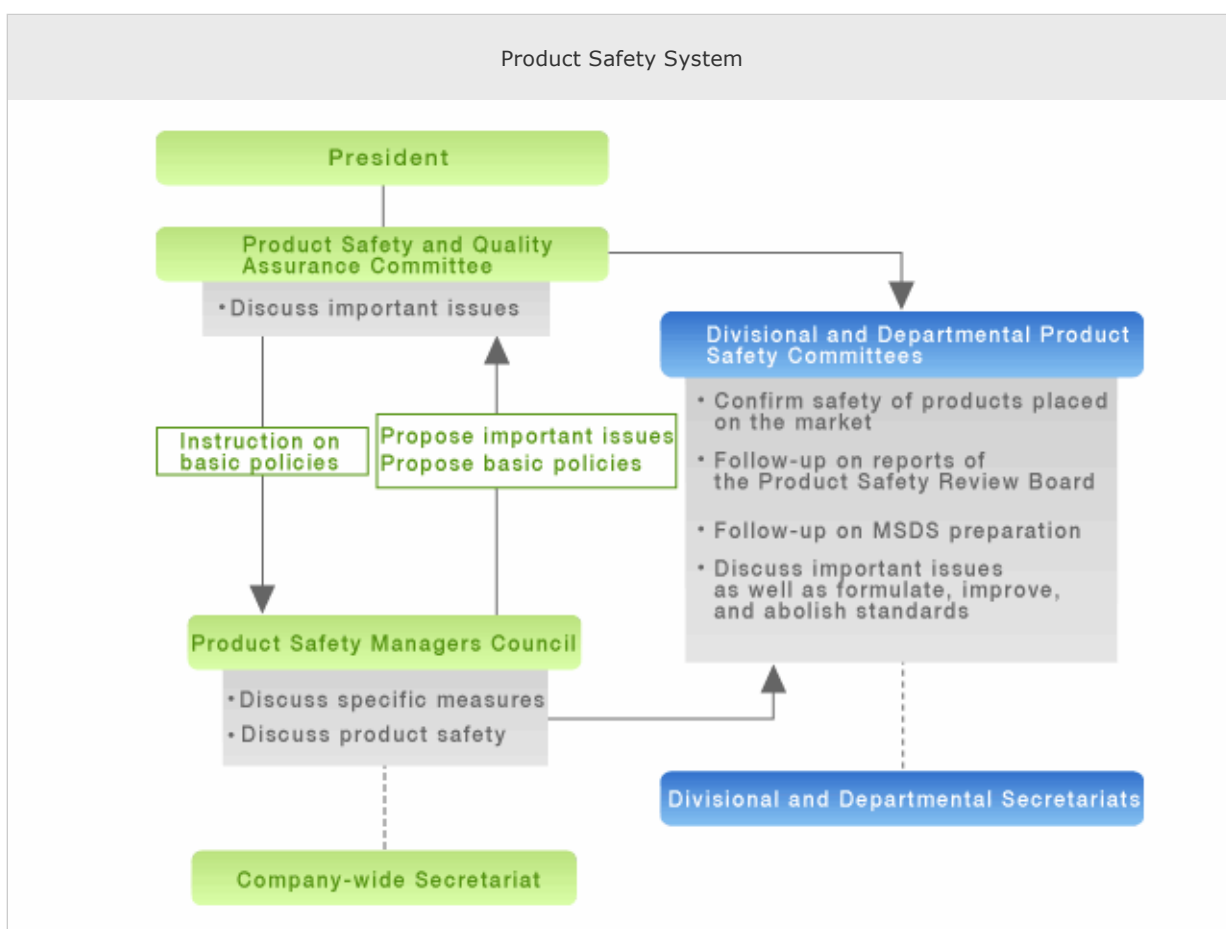
A plasma display used in flat-panel TVs

Product Safety and Quality
Ensuring Product Safety

Implementation of Product Safety Activities

Toray's Product Safety System is shown in this diagram. Based on its Product Safety Control Regulations, Toray's "Product Safety Managers Council" promotes and implements annual Group-wide product safety themes that are established by the Product Safety and Quality Assurance Committee.

Each Divisional and Departmental Product Safety Committee further breaks down Group-wide product safety themes, based on the deliberations of the Product Safety Managers Council. Under this arrangement, issues for implementation are established by each relevant division and department every year, and the production, engineering, and sales divisions cooperate in efforts to thoroughly implement and improve product safety management.



To ensure that all Japanese and overseas subsidiaries and affiliates have the same safety management as Toray, the Product Safety Control Regulations are adopted in each company. Relevant divisions and departments take the lead in providing support and guidance to improve product safety levels Group-wide.

Product Safety Education and Training

At Toray, newly appointed departmental and section managers are trained by the Product Safety and Quality Assurance Planning Department. Toray divisions in charge of guidance provide assistance in product safety training to subsidiaries and affiliates.

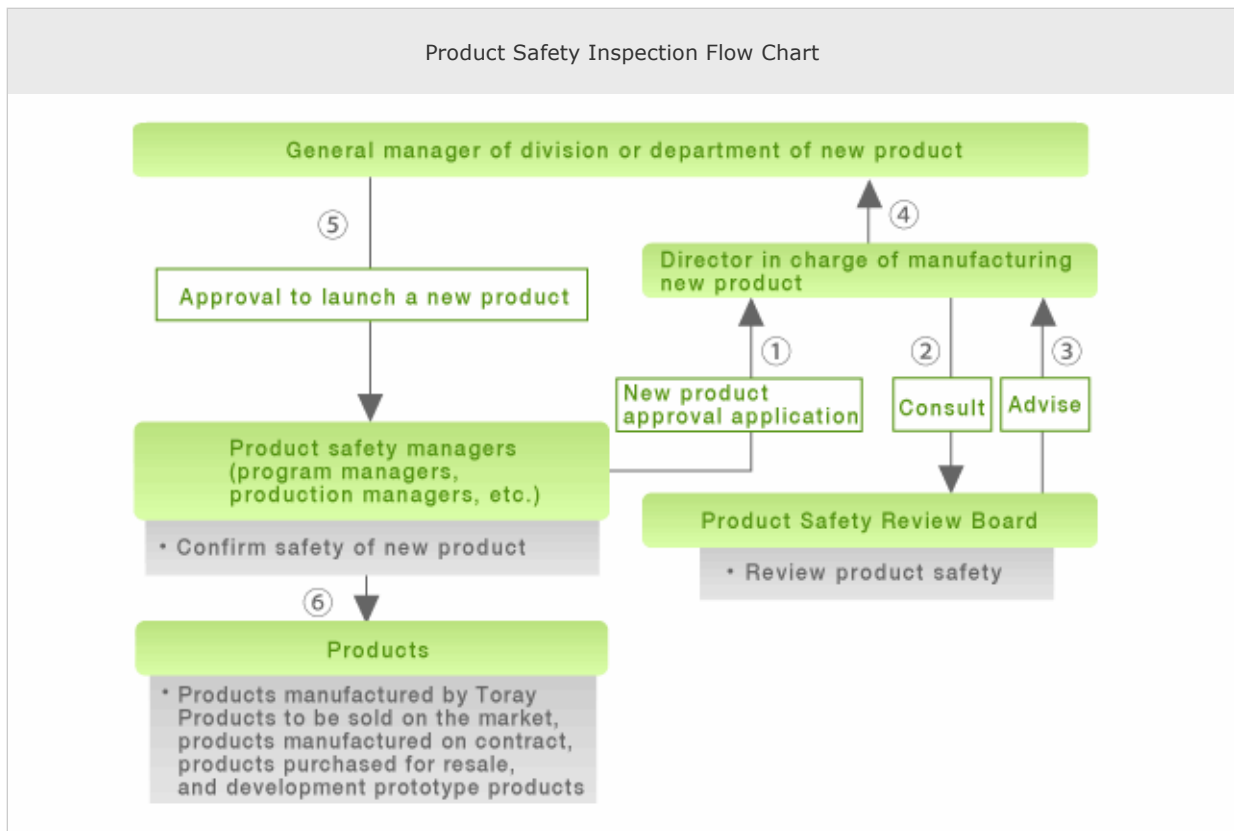
Expanded Scope for Accident Response Standards

Toray has established Product Safety Accident Response Standards and has been working to minimize any damage caused by product accidents and to prevent reoccurrence of such incidents. In FY 2007, for example, there was an

overheating incident caused by an electrically heated floor mat manufactured more than 20 years ago. In response, Toray in FY 2008 expanded the scope of its standards to cover all products, past and present, manufactured and sold by the Company, in order to strengthen its management system regarding product accidents.

A Stronger Product Safety Review System

New product safety evaluations are undertaken by the director in charge of manufacturing the product. The evaluations include a safety check of the product, Material Safety Data Sheets (MSDS), an examination of product instruction manuals (including warning labels), the production of catalogs and other useful safety information resources for customers, as well as an assessment of the environmental impact of the product. When any doubts about product safety are identified, a meeting of the Product Safety Review Board (consisting of a group of impartial experts from in and outside the Company) is held, and the product must pass this review before launch. There are also follow-ups on safety after the product is delivered. In FY 2008, Toray constructed mechanisms at each business for confirming these necessary items at the product development stage onward, in order to ensure reliable and efficient implementation of these reviews.



Providing Product Safety Information

Toray Group provides product safety information along with its many products and services, in ways that match the characteristics of each business. Toray Group's respect for the Eight Basic Consumer Rights is fundamental in its dealings with customers. Toray Group strives to ensure product safety and quality by undertaking major programs and initiatives.

As such, it strives to improve its accessibility to users of its most popular consumer goods, by, for example, manning a toll-free product inquiry phone line in Japan.

Basic Purchasing Policies and CSR Procurement Guidelines

As a manufacturer and supplier of advanced materials and material products, Toray places importance on upstream management that reflects the needs of its end users, including management of production facilities as well as raw materials and materials purchased by the Company. In addition to its Basic Purchasing Policies for ensuring fair transactions, Toray has established CSR Procurement Guidelines that take into account the environmental and social aspects of the Company's procurement needs.

Basic Purchasing Policies

1. Toray does its best to select suppliers and determine actual purchases fairly and on the basis of economic rationality, with consideration for price, quality, capability to provide stable supplies, technological capabilities, reliability, and other factors.
2. In selecting suppliers, Toray opens its doors to a wide range of companies inside and outside Japan. Toray does not rely solely on vendors it has existing or past relationships with, or on members of its corporate group.
3. In making purchases, Toray complies with relevant laws and regulations while taking environmental preservation and fulfilling corporate social responsibility (CSR) issues into account. Toray actively pursues green procurement and purchasing as part of its environmental efforts.
4. Toray works to maintain and improve the quality of purchased products through cooperation with its suppliers.
5. Toray works to uphold its corporate social responsibilities on a company-wide basis.

CSR Procurement Guidelines

1. Establish an internal CSR organization and be committed to CSR
2. Work to enhance corporate ethics and comply fully with all laws and regulations
3. Position safety, accident prevention, and environmental preservation as a management priority and practice green procurement and purchasing whenever and wherever possible
4. Put crisis management systems into place, including capabilities for responding swiftly in unexpected situations, and disclose accurate information
5. Encourage dialogue and cooperation among all stakeholders
6. Ensure product safety as a precondition for supplying products
7. Respect human rights, eliminate discrimination, and improve workplace environments; prohibit forced labor, slave labor, child labor, and unfair low-wage labor
8. Maintain the confidentiality of information and respect others' intellectual property rights

PDCA Cycle in CSR Procurement

Toray employs a PDCA cycle as shown below in its CSR procurement activities. The Company also registers its suppliers who comply with the CSR Procurement Guidelines as CSR procurement partners.

PDCA Cycle in CSR Procurement



Building a CSR Supplier Management System

In FY 2008, Toray introduced a CSR Supplier Management System in order to confirm the progress made by procurement partners in CSR initiatives. In September 2008, Toray held a CSR Procurement Questionnaire System Briefing for suppliers to promote understanding of its CSR initiatives. Fiber Frontier Co., Ltd., an electronic commerce service provider, offers this questionnaire system through its procurement website, enabling CSR procurement questionnaires to be conducted efficiently as part of its daily operations. The site is jointly used by Teijin Ltd. with the aim of making the questionnaire system into a common infrastructure component throughout the industry.



CSR Procurement Questionnaire System Briefing

Cooperate with Suppliers in Their Environmental and Social Initiatives
Environmentally Conscious Distribution Policies

Enhancing Communication with Distribution Partners

Toray's Basic Distribution Policies place importance on environmental preservation, together with fair and equitable transactions. While continuing to work to improve quality and reduce environmental impact, Toray also promotes understanding of its distribution policies. It does this by holding Basic Distribution Policy Briefings every year for distribution-partner companies, with the aim of improving distribution performance. The briefings seek to enhance overall quality by sharing examples of successful initiatives with all distribution partners. In FY 2008, one of the initiatives taken by Toray with its distribution partners was adopted by the Japanese government as a Green Logistic Partnership Promotion Project.



Basic Distribution Policies Briefing

Basic Distribution Policies

1. We shall select our transport and warehousing providers and determine individual agreements impartially and based on factors such as economic rationality with consideration given to price, quality, supply stability, technological capabilities, reliability, and efforts to reduce environmental impacts.
2. We shall be open in selecting our transport and warehousing providers, rather than relying exclusively on companies with which we have done business in the past or companies affiliated with Toray Group.
3. We shall comply with relevant laws and regulations, consider environmental preservation, and fulfill our corporate social responsibilities in outsourcing our transport and warehousing operations.
4. We shall cooperate with our transport and warehousing providers in gauging and reducing the environmental impact of our transport and warehousing operations.

Related Information

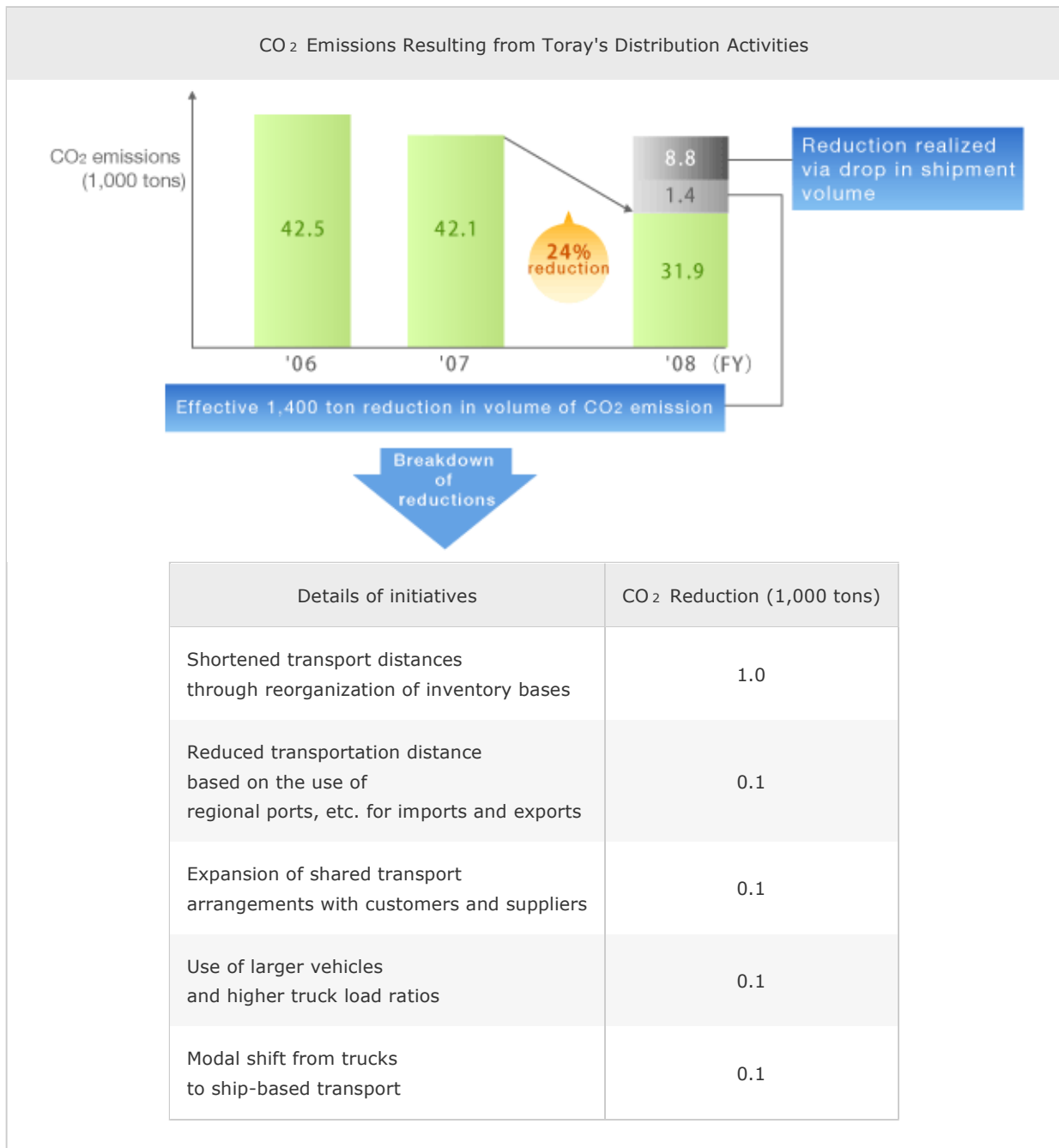
- [Initiative for Increasing Truck Capacity Adopted as a Green Logistic Partnership Promotion Project](#)

Cooperate with Suppliers in Their Environmental and Social Initiatives

A "Specified Consignor" under the Revised Law Concerning the Rational Use of Energy

In order to reduce the environmental impact of its cargo shipping and transport, Toray has set a goal to reduce transportation CO₂ emissions by 5% compared with its emission levels in FY 2006, to be achieved by 2010. CO₂ emissions from Toray's distribution activities totaled 31,900 tons in FY 2008, which was a reduction of 24% compared to the previous year. This was a result of modal shifting, the shortening of transport distances through the adjustment of inventory locations, and an 8,800-ton reduction in transport volume caused by lower production. These initiatives have led to a 1,400 ton reduction in CO₂ emissions. Toray is promoting unified initiatives with its distribution partners, by encouraging the acquisition of environmental management certifications (such as ISO14001, and other green management certifications) * .

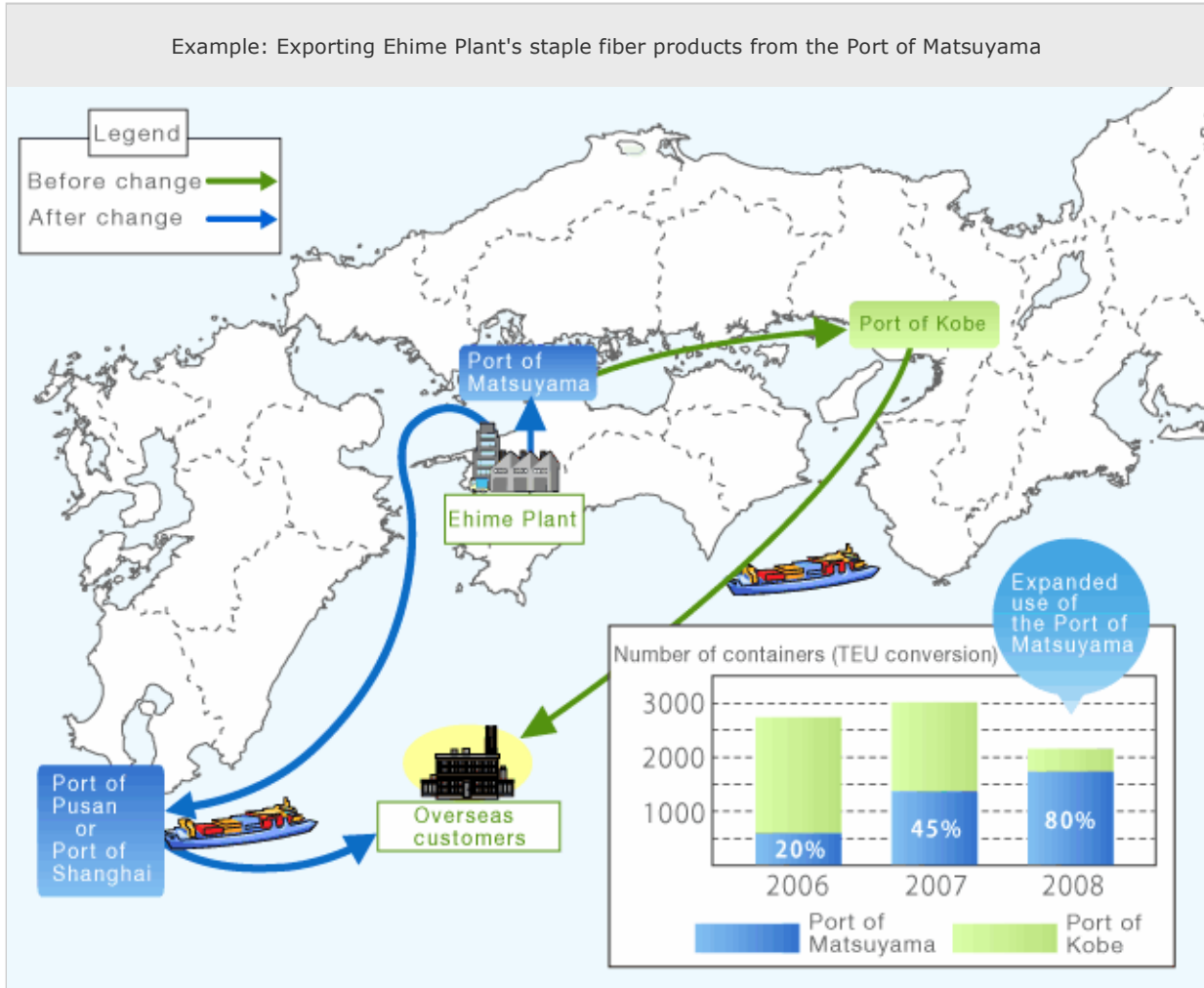
* : Environmental management certification
ISO 14000, Green Management Certification, and Eco Stage, etc.



Utilizing Regional Ports for Exports and Imports

In the past, Toray used the major Port of Kobe to conduct its daily export shipping of staple fiber products produced at Toray Ehime Plant. After negotiating delivery dates with the involved customers, the Company began

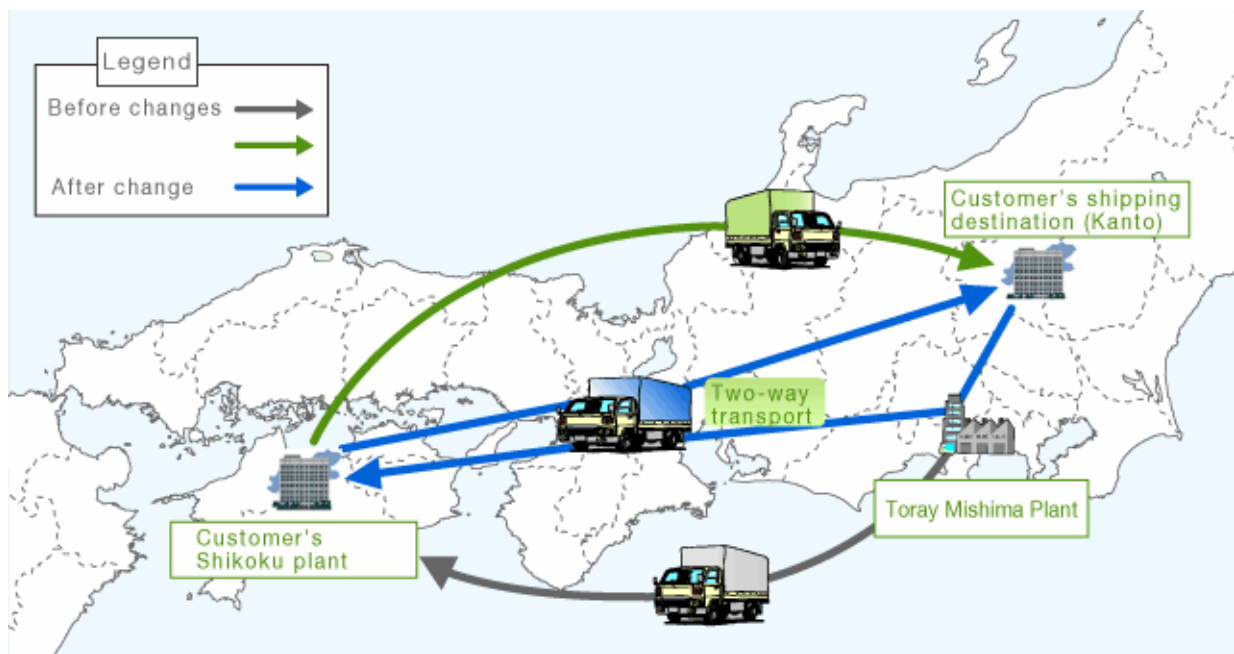
using the smaller but closer Port of Matsuyama, which was not used due to the limited number of shipments (twice a week). As a result, the transport distance within Japan was shortened, thereby greatly reducing CO₂ emissions. By implementing similar measures at other plants, Toray reduced its annual CO₂ emissions by a total of about 60 tons.



Expansion of Shared Transport Arrangements with Customers and Suppliers

A customer in Shikoku was transporting products to the Kanto region, but was left with empty trucks for the return trip to Shikoku. In order to resolve this problem, the customer and Toray began a joint distribution scheme in FY 2008, which enabled the two companies to improve their distribution efficiencies and reduce CO₂ emissions at the same time. This was achieved by sending products from the Toray Mishima Plant near Kanto to the customer's Shikoku plant, and then using the same truck to send the customer's products to Kanto on the return trip. By implementing similar measures with other customers and suppliers, Toray reduced its annual CO₂ emissions by 86 tons in total.

Example: Sharing Trucking Services with a Customer through Two-way Transport



Initiative for Increasing Truck Capacity Adopted as a Green Logistic Partnership Promotion Project

Toray is promoting CO2 emission reduction initiatives with its distribution partners. The Company switched from regular trucks to special large capacity trucks for transporting chips from Toray Mishima Plant to its Shiga Plant, to realize more energy efficient transportation. The Japanese government adopted this initiative as a "FY 2008 Green Logistic Partnership Promotion Project." The Company also received a subsidy from NEDO* to cover part of the investment costs.



Large truck for chip transport

* NEDO:
New Energy and Industrial Technology Development Organization

Safety and Energy Conservation Initiatives

Toray is encouraging its distribution partners to install digital tachographs* in their vehicles for reasons such as energy conservation and safety. The driving data obtained from digital tachographs is used to give guidance on safe driving to the drivers. This results in improved driving skills, better safety awareness, prevention of dangerous driving, reduction in the number of accidents, and improvements in mileage from more fuel-efficient driving.

*: A device that records and outputs truck operation data

Expanded Collection and Reuse of Packaging Materials

Toray designs its packaging materials based on the 3R* approach, and has developed a system for collecting and reusing packaging materials sent to customers. In FY 2008, Toray implemented an initiative to collect pallets used to import film from overseas, and enabled some of its plants in Japan to reuse the pallets for shipping other products. Through efforts like these, the Company is working to respond to the global business environment.

* 3R:
Reduce, Reuse, and Recycle

Cooperate with Suppliers in Their Environmental and Social Initiatives
Distribution Safety Initiatives

Initiatives to Prevent Overloading

An overloaded transportation vehicle is not only a danger on the roads but also causes damage to road surfaces, or to the road structure itself, as well as being a source of noise and vibration. Toray is working to fulfill its social responsibilities in shipping by actively working to prevent vehicle overloading. In order to ensure more reliable overloading prevention, in FY 2008 measuring instruments were installed in mechanical loaders used to fill trucks with powder substances at the Nagoya Plant. This enables workers to confirm the weight of a truck's cargo, and prevent overloading.



Measuring instruments installed on a loader

Yellow Card Emergency Response Measures

Drivers of shipping vehicles carry a yellow card* detailing emergency measures to be taken to minimize damage in the event of an accident. Toray also has established an emergency communication system and carries out emergency training, which provides against an accident during transportation. In the unlikely event of such an accident, Toray has procedures in place enabling the necessary staff to be dispatched as quickly as possible to the site of the accident to support the clean up process.

* Yellow Card:

Cards summarizing the names of any hazardous substances, applicable laws and regulations, hazardous properties, emergency accident procedures, emergency reporting and contact information, methods for minimizing the spread of damage, and other accident response information.



Compliance and Security Measures for Importing and Exporting

As a measure to ensure the legality and safety of imports and exports as part of Toray Group's expanding global operations, US subsidiary Toray International, Inc. enrolled in C-TPAT*¹ with the aim of strengthening global supply chain compliance. In order to realize more efficient imports and exports and to strengthen supply chain compliance and security measures, Toray is also encouraging its worldwide distribution partners to obtain AEO*² status.

*1: Customs-Trade Partnership Against Terrorism

Customs-Trade Partnership Against Terrorism: A voluntary program introduced by United States Customs and Border Protection in November 2004. The aim of the program is ensure and strengthen security through the global supply chain, based on international cooperation with private operators importing goods into the US.

*2: Authorized Economic Operator

A status implemented by the EU in December 2006 that gives priority in customs procedures to importers and exporters with a high level of compliance for cargo security. The Japanese Customs Act was also revised in 2007, and a similar qualification system was established to provide priority in customs procedures to highly compliant operators.

For our employees

To provide our employees with opportunities for self development in a challenging environment



In order to create supportive workplaces for employees, Toray Group actively promotes initiatives that seek to instill the concepts of balancing work and family lives, as well as respecting individual rights and diversity. Such initiatives are carried out through various company activities such as human rights promotion and recruitment. Toray Group also widely promotes its objective of achieving zero accident, in order to maintain safe and healthy workplaces.

FOR EMPLOYEES

Train Personnel and Promote Human Rights

Toray Group values every one of its employees as a valuable human resource, and aims to create a vibrant corporate group that provides its members job satisfaction, and encourages them to take on challenges.

FOR EMPLOYEES

Occupational Safety

With the aim of creating safe workplaces for employees, Toray Group is united behind its Safety Slogan and is working to achieve zero accident.

Occupational Safety and Accident Prevention Activities

Toray Group places the utmost priority on safety, accident prevention, and environmental preservation based on the first item of its Corporate Guiding Principles. All employees are united in their efforts to achieve zero accidents. In order to promote unified safety management, Toray establishes and implements annual Group-wide safety slogans and priority activities. Once a year, the Company holds the Toray Group Safety Meeting, which includes attendance by overseas subsidiaries and affiliates. At the meeting, the president himself addresses safety activity directives to ensure that the safety efforts of each company, office and plant are coherent and united.

2008 Safety Slogan

IT-2010 We should achieve "Zero Accident"
We surely make "Safety Action" by ourselves!

Principal 2008 Initiatives

- Improve hazard awareness through alertness training
- Strengthen safety management of non-routine work
- Strengthen safety management of contract work
- Enhance safety measures for rotating parts, moving parts on machinery, and heavy objects



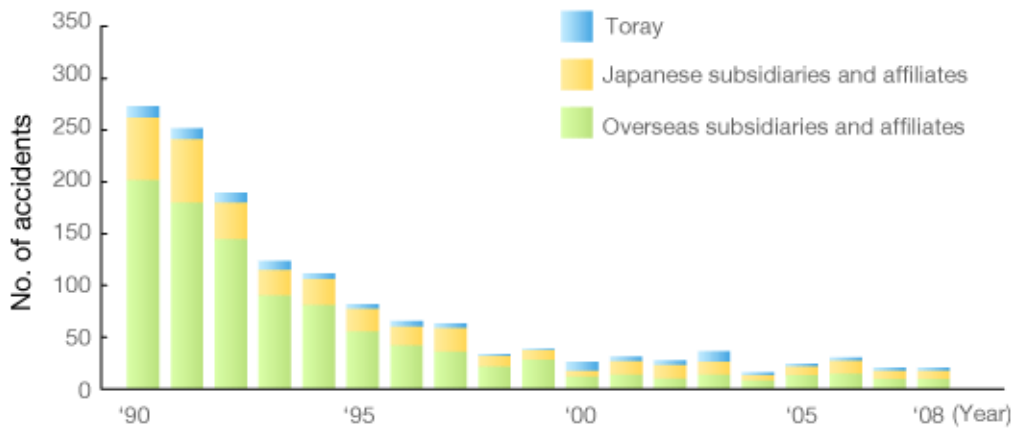
The 27th Annual Toray Group Safety Meeting

Since 1990, Toray Group, including its Japanese and overseas subsidiaries and affiliates, have been gathering and managing safety statistics. This information on occupational labor accidents is shared Group-wide, and is used to prevent similar accidents from occurring in the future.

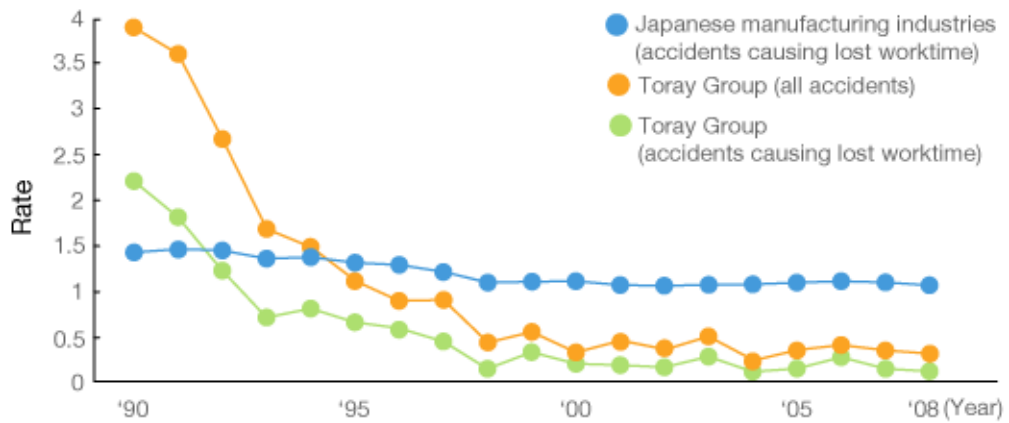
The Toray Group labor accident frequency rate* in 2008 resulting in lost or non-lost worktime stands at 0.22 (Toray 0.36, Japanese subsidiaries and affiliates 0.33, and overseas subsidiaries and affiliates 0.13), which compares well with the rate for the manufacturing industry as a whole.

* Labor Accident Frequency Rate:
Casualty toll per million man-hours worked

Number of Labor Accidents:Toray Group



Labor Accident Frequency Rate: Toray Group



Direct Safety Training

Toray Group carries out various kinds of specialist and level-specific organizational training related to occupational safety and accident prevention. Direct safety training is one method used, and is effective for raising hazards sensitivity by having employees physically experience crisis situations. At each Toray affiliate company, office, and plant, various simulation methods are used to show dangers, such as how fingers can get caught in moving parts and how devices can cause electric shocks, and experiments are conducted to demonstrate fires and explosions.



Direct safety training to prevent staircase accidents



A fire and explosion demonstration experiment

Accident Prevention Initiatives

Toray Group has prepared a Fire Prevention (FP) Checklist used in fire and explosion hazard inspections. The checklist consists of 906 items and is incorporated into accident prevention training. Each company, office and plant uses this checklist to inspect its own facilities. In 2008, inspections were carried out with a focus on pressurized gas cylinders.

Toray Group also conducts fire prevention drills such as reporting, evacuation, firefighting, and other accident preparation activities. In 2008, the chemical-producing Tokai Plant participated in an Aichi Prefecture Petrochemical Complex Disaster Prevention Drill, and strengthened cooperation with the local community. Toray also began introducing an emergency earthquake notification system to minimize damage in the event of a major earthquake. Full implementation of the system at all Toray plants is expected in FY 2009.



Aichi Prefecture Petrochemical Complex Disaster Prevention Drill (Tokai Plant)

Distribution Safety Initiatives

As part of its safety management efforts in the transportation of hazardous substances, Toray signs security agreements with transporters, raw material manufacturers and customers in order to outline specific safety responsibilities and roles.

Related Information

- [Cooperate with Suppliers in Their Environmental and Social Initiatives > Distribution Safety Initiatives](#)

Health Effects and Response to Asbestos

Toray Group has manufactured and imported building materials containing asbestos in the past, and some of its buildings and facilities were constructed using building materials and thermal insulation containing asbestos.

Starting in FY 2005, when the health hazards of asbestos became a social concern in Japan, Toray took action to address the problem of its own asbestos-containing facilities. The health program offers medical examinations to any of the approximately 3,700 current and past employees who had handled even small amounts of asbestos in years gone by and wish to undergo examination. Toray Group is working in good faith with individuals diagnosed with asbestos-related health issues by helping them apply for workers' compensation and providing an ongoing program of medical examinations. The health effects on past and present Toray Group employees as of March 31, 2009, are described in the table below. Toray Group has not been contacted about health issues by residents living near affected facilities.

	Number of individuals (Fatalities)
Certified occupational accidents (Toray Group)	32 (21)
Certified health victims based on the Asbestos Law (Toray Group)	4 (4)

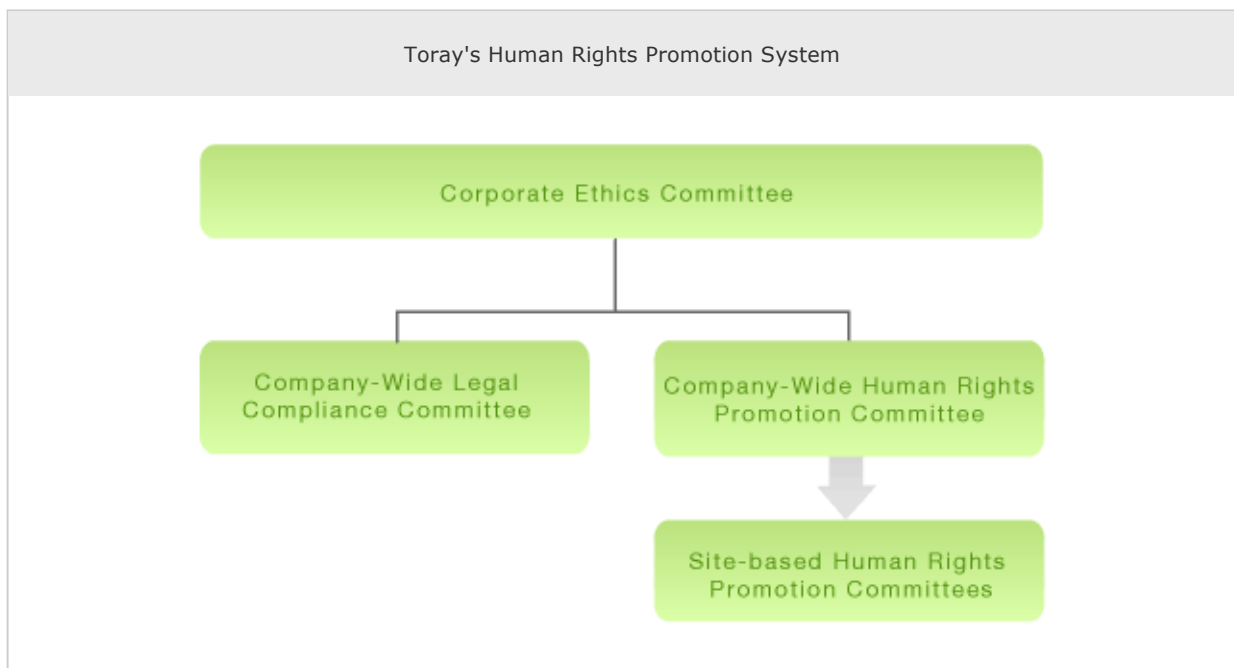
Train Personnel and Promote Human Rights
Efforts to Promote Human Rights

Toray Group believes that respect for human rights is a fundamental principle, essential to the management of the company. The Group therefore strives to promote and increase awareness of human rights issues, while prohibiting discrimination in any form based on factors such as race, creed, gender, academic background, nationality, religion or physical characteristics in the areas of recruiting, hiring, positioning, compensation, education, and retirement. In addition, Toray Group respects international standards such as the United Nations Universal Declaration of Human Rights, the ILO Treaty, and the United Nations Global Compact, prohibiting forced labor and child labor under any circumstances, and complies with the laws and regulations of each country and region in which it operates.

Human Rights Promotion System

Under the Corporate Ethics Committee, Toray has established a Company-Wide Human Rights Promotion Committee, along with sub-committees at the office and plant level. In addition, the Company has appointed Human Rights Promotion Officers to each workplace; some 300 such officers dedicate themselves to making the work environment more pleasant and productive. Toray has also established a Human Rights Promotion Section in its Industrial Relations Department.

In FY 2008, the Company pursued initiatives to strengthen employee communication for the creation of pleasant and energetic workplace environments, while also taking thorough measures to prevent problems such as sexual and power harassment.



Implementation of Human Rights Training Workshops

To help increase awareness and promote a clear understanding of human rights issues, Toray holds human rights promotion campaigns each year. The action plan for the FY 2008 campaign called on employees to respect their own personal rights, as well as those of their coworkers. The aim was to prevent harassment by heightening employees' sensitivity and awareness toward others. As part of this effort, workplace solidarity was strengthened by promoting communication and creating networks of open-minded individuals to create vibrant work environments.

In an initiative to raise employees' awareness of human rights issues, Toray held training sessions for operational and administrative managers at the head office and each office and plant, and also conducted workshops in conjunction with workplace study groups. In FY 2008, the Human Rights Promotion Section Manager visited all 15 Toray offices, plants and laboratories as part of the campaign and held workshops for the Human Rights Promotion Officers.

FY 2008 Human Rights Training and Seminars

Type of training	Number of sessions	Number of participants
Training at head office	25	1,468
Training held at offices and plants	1,351	25,598
Training at outside company	68	155

Train Personnel and Promote Human Rights
Developing Human Resources to Create New Value

Based on the following three goals, Toray Group is promoting human resource development as one of its most important management issues.

- Cultivation of fair-minded members of society who act with high ethical standards and a sense of responsibility
- Training of professionals who solve problems with advanced expertise, technical skills and originality
- Cultivation of leaders who act with foresight and a sense of balance

Rational and Well-Organized Training System

The Toray Group employee education system represents a rational, systematic approach to human resources responding to various needs in every field. The Group conducts many types of training for employees of all levels and in all areas to improve management performance, sales performance, production management skills, professional skills, and international operations. For example, the voluntary Challenge Training Program helps motivated employees develop their own talents while the Overseas Junior Training Program develops employees with a global mindset. Beginning in FY 2007, Toray has implemented a human resources training program based on consistent training objectives to strengthen the development of sales personnel. Personnel receive training for a designated initial period spanning their first three years at the Company.

Company-Wide Training Course Enrollment	
Training Category	Persons enrolled
Management	1,074
Technical	880
Sales & Marketing	378
International	92
General	449
Total	2,873

Early Leadership Development

To promote unified management across Toray Group, courses at the Toray Management School, designed for middle-ranking managers to develop into future executives, have been held since 1991.

Toray is currently seeking to give section and unit managers coaching skills*1 and to boost their problem-solving skills using logical thinking.*2 The Company has also established the Toray School of Technology and Business for training mid-level employees at plants. This initiative offers selected employees a year's full-time education in a live-in schooling environment.

In FY 2007, Toray also established a new higher-level management training program for managers and senior administrators, with full-scale implementation beginning in FY 2008.

*1: coaching skills

Communication skills designed to promote a greater degree of autonomous action by staff.

*2: logical thinking

Skills and techniques that foster the detection and resolution of problems using coherent logic.

A Personnel System that Prizes Employee Motivation and Accomplishment

Toray's Personnel System	
Management-by-objectives system	Each employee establishes annual objectives under this system. At the end of the fiscal year, employees and their supervisors meet to review accomplishments and the extent to which they were able to meet their objectives.
Personnel appraisal system	This system is designed to facilitate a fair appraisal of employee contributions in terms of duties, responsibilities, capabilities, and performance.
Individual meeting system	Under this system, employees meet with their supervisors twice a year in a one-on-one setting. Supervisors work to develop their subordinates' skills and ensure that the latter accept the validity of their evaluations.
Self-assessment system (for managers, occupational specialists, and general staff)	This system surveys employees annually on topics concerning work experience and desires for interdepartmental transfer. Surveys can then be linked to individual personnel transfers and placement.
Career assessment system (for general staff)	Employees participate in a regular review consisting of presentations of daily operations and personnel interviews in order to focus on the direction of their future growth.
Job opening system	The system gives employees an opportunity to apply for jobs inside the Company and proactively develop their career, while ensuring optimal staff assignment.
Bonus system for employee inventions	Toray revised this system in April 2005 to boost incentives from past levels in an effort to accelerate the creation of exceptional inventions.

Train Personnel and Promote Human Rights

Development and Promotion of Local Key Staff

Toray Group encourages the development of human resources at overseas subsidiaries and affiliates, including the promotion of local employees to executive positions. This approach-localization of management personnel at overseas subsidiaries and affiliates-is one of the Group's key business challenges.

Infrastructure for Developing and Promoting Local Personnel

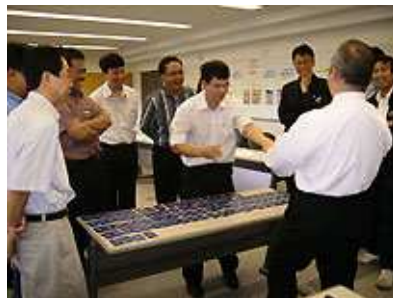
Positions deemed critical for the global management of Toray Group have been classified into four levels based on a Group-wide common standard. Toray head office is working with overseas subsidiaries and affiliates to develop and promote local staff in these positions. These employees are known as National Core Staff.

Toray has specified the Group-wide skill requirements and code of conduct expected of National Core Staff in the form of the Toray Global Competency Model. Based on this, the Company pursues career development by creating individually focused long-term career development plans. To facilitate information sharing Toray also established the Toray Global Database, allowing employees worldwide to have access to the same information related to the Company.

Development and Training of Key Local Employees

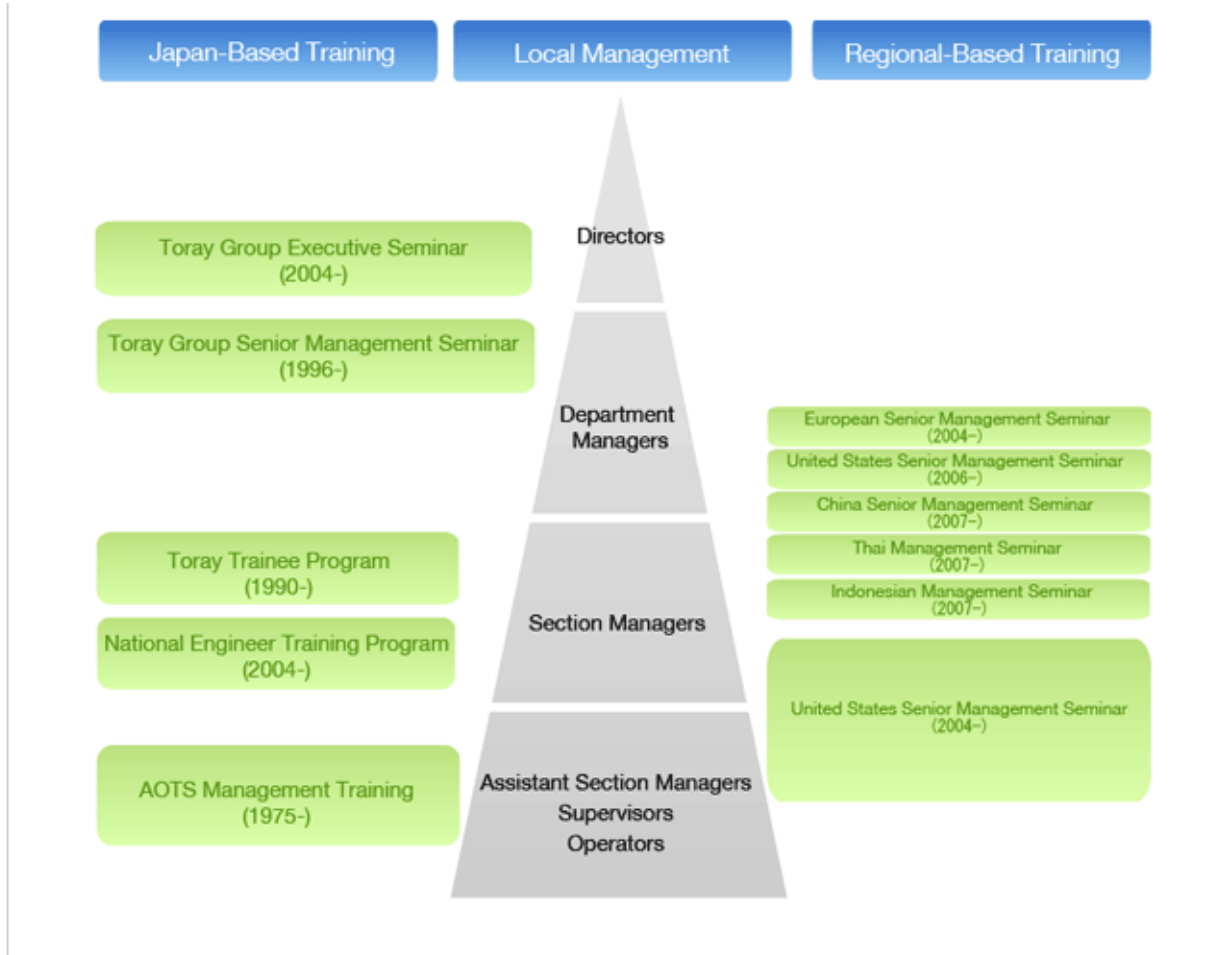
To ensure that key local employees are able to develop a strong appreciation of Toray's management philosophy and objectives, they participate in training programs in Japan, organized according to managerial rank. These training programs are linked with individually focused long-term career development plans.

In FY 2008, the third Toray Group Executive Seminar was held in Japan for overseas executive-level employees. Toray's head office also participates in planning training programs conducted in each country and region, and strives to support personnel development efforts. In FY 2008, a second round of management training was carried out in China, Thailand, and Indonesia in the respective local language with enhanced training content.



Training local overseas personnel

Training System for Local Managers



Training Courses held for Overseas Employees during FY 2008 (Toray Group)

Japan-Based courses	Toray Group Executive Seminars	12
	Toray Group Senior Management Seminar	12
	Toray Group Managers' Seminar	25
	National Engineer Training Program	3
	Toray Group Supervisors' Seminar	15
Courses held overseas	5th Europe Senior Management Seminar	17
	3rd U.S. Senior Management Seminar	18
	2nd China Senior Management Seminar	20
	2nd Thailand Management Seminar	28
	2nd Indonesia Management Seminar	25

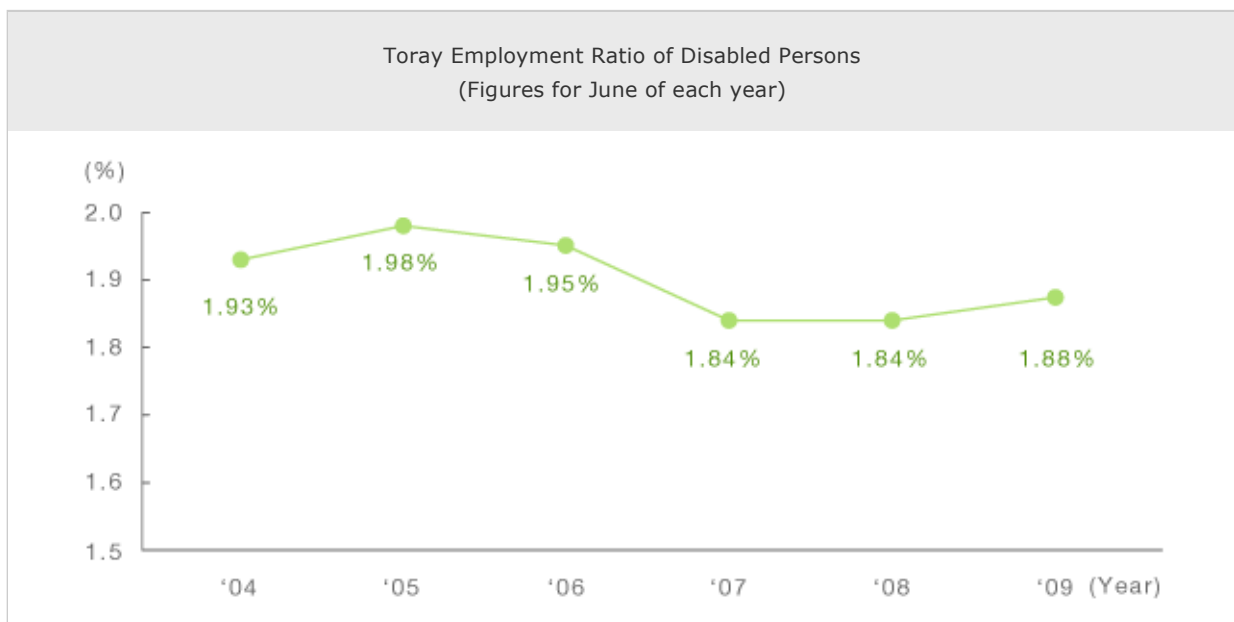
Train Personnel and Promote Human Rights

Initiatives Encouraging Diversity in Employment

Toray Group's approach to diversity in employment is one that gives full play to the individual talents of employees from many different backgrounds. The approach aims to create workplaces where everyone can perform their duties in a lively and enthusiastic manner.

Employment of Disabled Persons

Toray has taken seriously its social responsibility to employ disabled persons and has achieved the legally required employment ratio of 1.8%. Toray's initiatives to provide a work environment in which disabled individuals find it easy to perform their jobs encompass "hardware" steps such as providing barrier-free spaces, as well as "software" aspects such as training at the time of hiring and ensuring an appropriate working environment based on suggestions and requests from disabled employees.



Reemployment System

As part of its initiatives to encourage full utilization of the labor of individuals over age 60, Toray concluded a labor-management agreement for union members in FY 2001, and introduced a reemployment system for all employees who wish to continue working. The labor-management agreement concerning this reemployment system was revised in December 2005 to expand coverage to include employees in management and occupational specialist categories.

In November 2006, the Company concluded a new labor-management agreement to progressively increase the maximum age for reemployment, based on the Revised Law concerning the Stabilization of Employment of Older Persons. The reemployment period will be extended to age 65 by April 2013. The Company offers counseling to employees prior to reemployment.

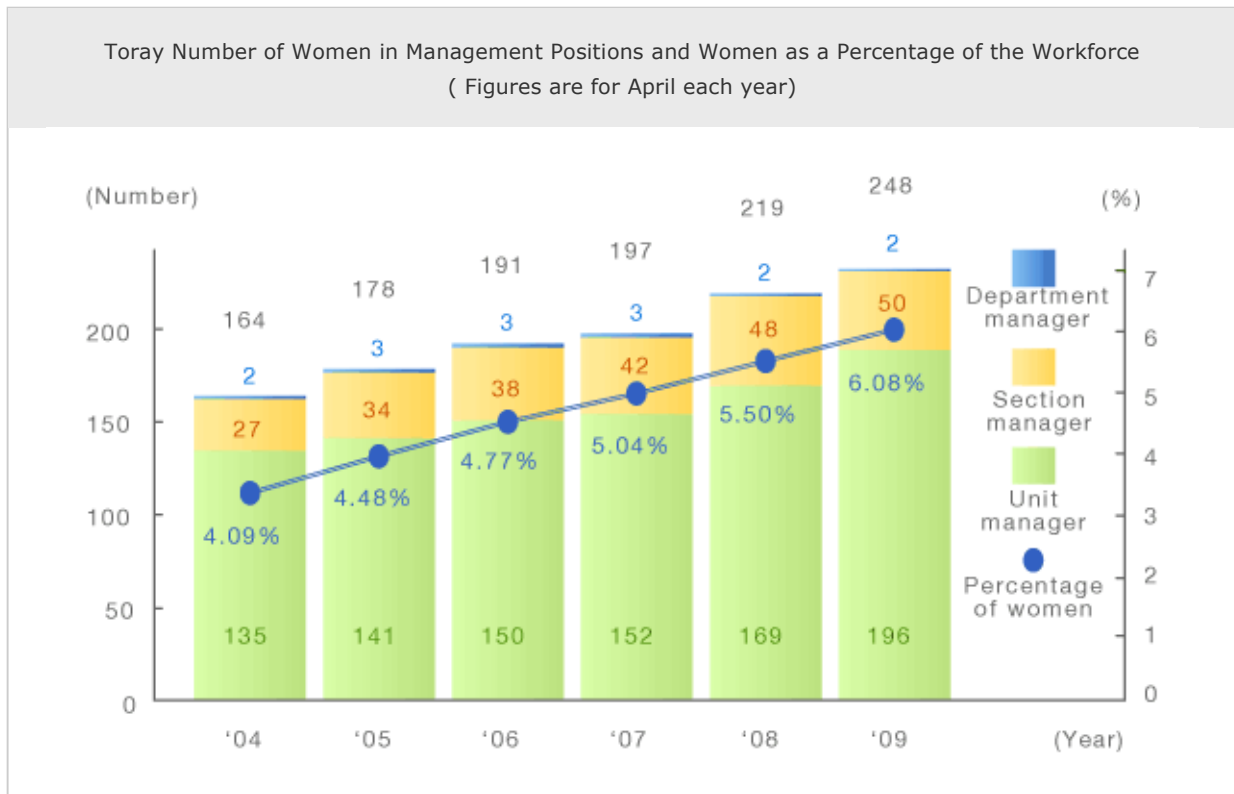
Mid-Career Recruitment and Employment of International Students

Toray promotes the mid-career recruitment of experienced individuals with specialized knowledge and skills, and the employment of international students who have graduated from Japanese universities and Japanese students who have graduated from overseas universities. Company workplaces provide opportunities for these graduates to make the most of their skills and personal qualities.

Train Personnel and Promote Human Rights

Creating an Organizational Culture Conducive to the Career Advancement of Women

Toray appointed its first female manager in 1958, and introduced a childcare leave program in 1974, almost 20 years before it became law. Accordingly, the Company has led the way in implementing measures that ensure the affirmative employment of women and offer women a work environment that meets their needs. In 2003 a Toray affiliate appointed a woman as president. Furthermore, in 2004 Toray initiated its Advancement of Women Project, and has been improving its advancement systems and programs in order to make it easier for women to find fulfillment in their careers. As a result of the ongoing implementation of such initiatives, the ratio of unit manager level positions or higher held by women continues to rise each year, reaching 6.08% in April 2009.



Toray Assists Employees in Achieving a Balance between Work and Family Life

Toray has been working to further improve systems that can assist employees in achieving a harmonious balance between work and family life. These systems serve as a foundation for a corporate culture conducive to the career advancement of women, and also permit both men and women to choose from a wider variety of lifestyles. In particular, Toray provides support systems that go beyond those legally mandated for childcare, family-care, and maternity protection based on its commitment to make the systems as accessible as possible and responsive to a diverse range of employee needs. In May 2007, Toray was granted certification as a General Corporate Entity Meeting the Requirements of the Phase 1 Action Plan to Maintain Compliance with the Next Generation Law.



Toray Utilization of Childcare and Family-Care Leave Systems					
Fiscal Year	2004	2005	2006	2007	2008
Employees taking childcare leave	70 (0)	80 (4)	78 (3)	73 (0)	91 (0)
Employees taking family-care leave	2 (1)	4 (0)	3 (1)	4 (0)	2 (1)

In April 2008, Toray set up a "Labor-Management Committee to Promote Balanced Work and Family Life." The committee's efforts have resulted in the setting of "Work-Life Balance" as an initiative for workplace innovation, while labor and management have become more unified in their decision to promote this initiative. The aim is to increase the productivity of each employee and workplace by revising work methods and to further energize Toray's work environments.

Toray Assists Employees in Achieving a Balance between Work and Family Life

Changing awareness

Discussions are held in each workplace on how to revise work methods as well as ensuring thorough management of working hours and striving to create a workplace culture that aims for efficient and highly productive work methods, based on individuals improving their own work habits.

(2) In principle, prohibiting work late at night and on holidays

Turning all lights off at 10 p.m. (head office/all floors)

Expanding company-wide no overtime days (one day per month)

Note: Since April 2009, Toray has increased efforts to meet the goal of zero overtime and holiday work.

<COLUMN>

Time Management Study Group for Balancing Work and Family life

In March 2009, Toray's Environment and Amenity Products Division held a study group on the topic of time management. Over 100 people, including managers and regular employees working at Toray and its affiliates, participated in this study group held at the Second Head Office in Urayasu. During the event, participants learned efficient time-usage and work methods through workshops and lectures given by President Tsuneo Sasaki of Toray Corporate Business Research, Inc. Utilizing his own experiences, President Sasaki has written numerous books on work techniques and on balancing work and family life. Afterwards, the participants gave considerable positive feedback, some of which is shown below. Future study groups are planned for FY 2009 in Tokyo and Osaka.

Participant comments

- Since the other participants included both managers and general employees, it was nice to be able to see different perspectives for improving organizational efficiency being shared.
- I realized the importance of managing both work and personal time, given limited hours in a day.
- I learned how to effectively report to, contact and consult with my superiors.
- After learning specific methods and techniques for filing and keeping things in order, I look forward to trying them out.



President Sasaki's lecture



Participants working in groups

Support Systems for Employee Work and Family Life Balancing (Main Changes)

(3)

Action	Description of changes	Before changes

<p>Established new system to help employees pay for childcare services. (From April 2007)</p>	<p>The Company signed a contract to give employees access to childcare services at a discounted rate (employees can use services for 900 yen per hour, that typically cost individuals 2,000 yen per hour). Employees (male and female alike) are eligible to participate until the end of the fiscal year in which their children enter the third grade of elementary school. Among the 52 employees that signed up, 14 of them are using the system (as of March 2009).</p>	<p>-</p>
<p>Reviewed the system for registering employees seeking reemployment.* (From April 2007)</p>	<p>The registration period for reemployment was extended to ten years. Reemployment as full-time employees is now available for some employees depending on the nature of their job, their desired role, and their personal circumstances. Among the 14 employees that registered, one was reemployed (as of March 2009).</p>	<p>The registration period had been three years, and compensation was limited to non-regular employee levels for six months, after which individuals could become full-time employees.</p>
<p>Enabled concurrent use of short-time work systems designed to give employees time off for childcare, family-care, and maternity protection with flextime systems. (From April 2007)</p>	<p>All short-time and flextime work systems can now be used concurrently.</p>	<p>Employees were unable to use these systems in combination.</p>
<p>Extended period of employees' eligibility for childcare short-time work systems, flextime systems, overtime/holiday work limits, and night work limits. (From April 2007)</p>	<p>The period of time over which employees are eligible for these systems was extended until the end of the fiscal year in which their children enter the third grade of elementary school.</p>	<p>These systems had been available only until children began elementary school.</p>
<p>Introduction of an infertility treatment support system (From July 2007). Loan system introduced in October 2007.</p>	<p>Enables employees or their spouses to undergo infertility treatments under the following provisions: 1. Up to 30 half days leave (total 15 days) granted per year. 2. Special leave granted. 3. Up to 2 million yen as a loan (Toray Welfare Society).</p>	<p>-</p>
<p>Extended period of eligibility for leave to care for sick children. (From July 2007)</p>	<p>Leave to care for sick children available until the end of March of the year in which children enter the third grade of elementary school.</p>	<p>These systems had been available only until children began elementary school.</p>
<p>Provided leave for employees serving jury duty. (From July 2008)</p>	<p>Granting the necessary number of days off, if an employee is summoned for jury duty (paid leave).</p>	<p>-</p>

*The System for registering employees seeking reemployment provides reemployment opportunities for employees who leave the Company to get married, have children, care for children, care for sick or elderly family members, or accompany a spouse who has been transferred.



For our shareholders

To provide our shareholders with dependable and trustworthy management

To ensure the confidence and support of society, Toray strives to remain a company of integrity based on its own governance structure. Toray Group carries out various activities under the guidance of top management, in order to maintain a high level of employee awareness for corporate ethics and legal compliance.

FOR SHAREHOLDERS

Corporate Governance and Management Transparency

Toray Group is improving its corporate governance and internal control systems, while working to strengthen management transparency. Through its CSR activities, Toray Group is aiming to become an "Excellent Company" with global reach.

FOR SHAREHOLDERS

Corporate Ethics and Legal Compliance

Corporate ethics and legal compliance is one of Toray Group's most important management objectives. Toray Group is earning the confidence of society by ensuring that all its executives and employees carry out their daily activities based on an awareness of these social responsibilities.

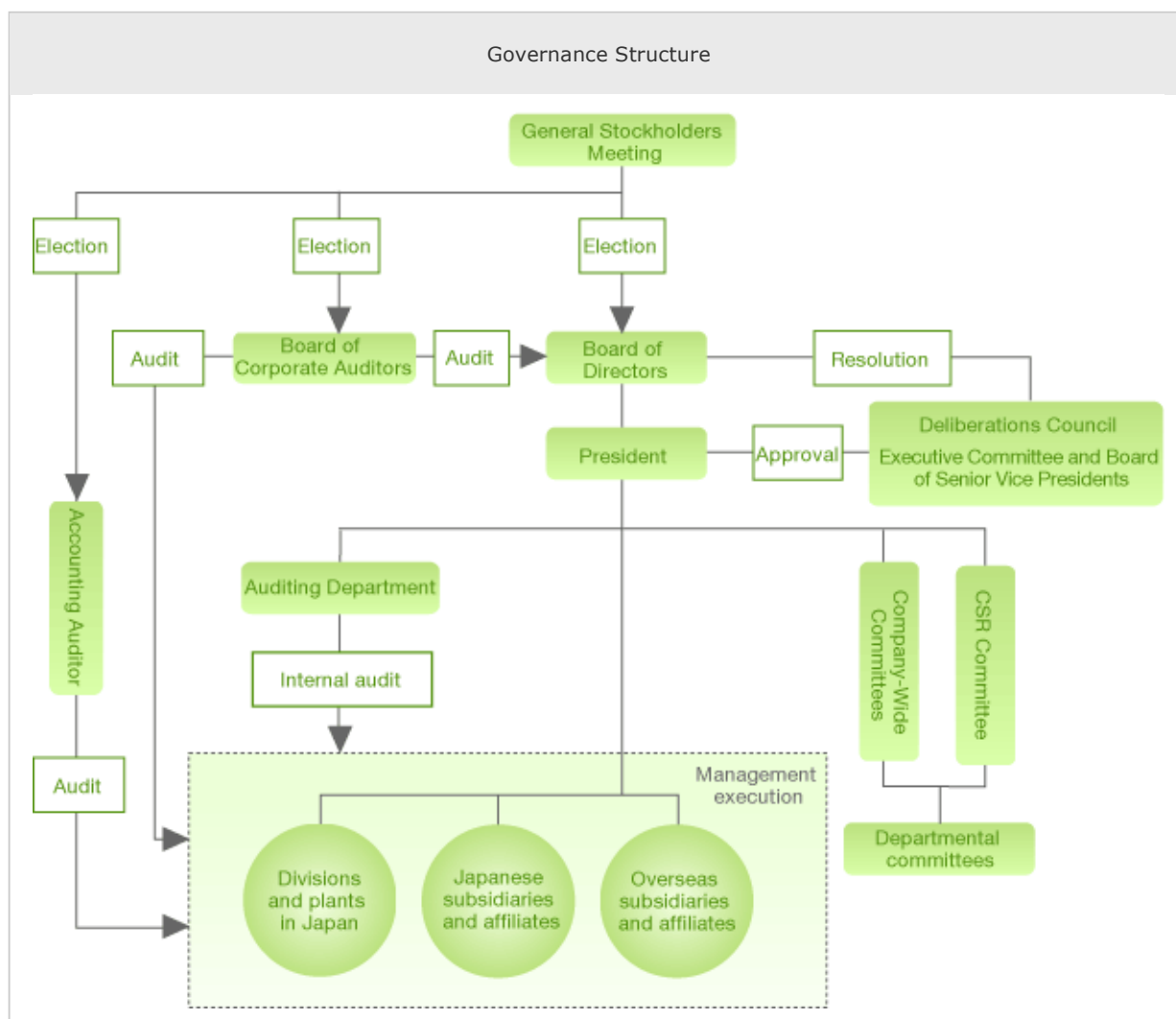
FOR SHAREHOLDERS

Risk Management

Companies face diverse and complex risks, and corporate management involves dealing with these risks effectively. That is why Toray maintains a system of risk management extending from the identification and prevention of possible risks, to mechanisms for major crisis response.

Toray Group Corporate Governance

In pursuit of its fundamental objective of deserving the trust placed in it by society and its stakeholders, Toray Group has developed a governance structure characterized by sincerity and transparency.



Toray supplies basic materials to a wide range of industries. The Company believes that decision-making, management and supervision by the Board of Directors, all of whom are thoroughly familiar with these industries, will result in responsible, transparent management. As such, the Company follows an autonomous approach to governance, strictly adhering to approval authority as stipulated by its Top Management Authority regulations. The Executive Committee and the Board of Senior Vice Presidents efficiently deliberate matters for the approval of the president and Board of Directors. Management is further supplemented by special company-wide committees in charge of important management issues.

Comprising four auditors including two external auditors, the Board of Corporate Auditors meets at least once every three months, and provides a thorough management oversight function.

In FY 2008, the auditors attended all the meetings of the Board of Directors. They also performed regular audits of business offices, plants, subsidiaries and affiliates in and outside Japan, as well as meetings involving all directors and general managers. This was carried out according to the plans and auditing policies for the current fiscal year decided by the Board of Corporate Auditors.

Internal Controls for Financial Reporting based on Japan's Financial Instruments and Exchange Act

As required under Japan's Financial Instruments and Exchange Act as of the fiscal year ending March 31, 2009, Toray established an internal control system for financial reporting, and began its full-scale implementation in April 2008. The implemented financial reporting controls for FY 2008 were confirmed as effective, and the accounting

| Basic Policy for Internal Control Systems

In March 2008, Toray reviewed its Basic Policy for Internal Control Systems- a policy which is required under Japan's Corporate Law. Some changes were made following a decision by a meeting of the Board of Directors in May 2006.

The main changes were as follows: (1) thorough implementation of security trade administration, (2) cutting all ties with antisocial forces, (3) promoting the establishment and operation of internal control systems for financial reporting. Details of these changes were described in the "Corporate Governance Report," submitted to the Tokyo Stock Exchange, and published on the company's website.

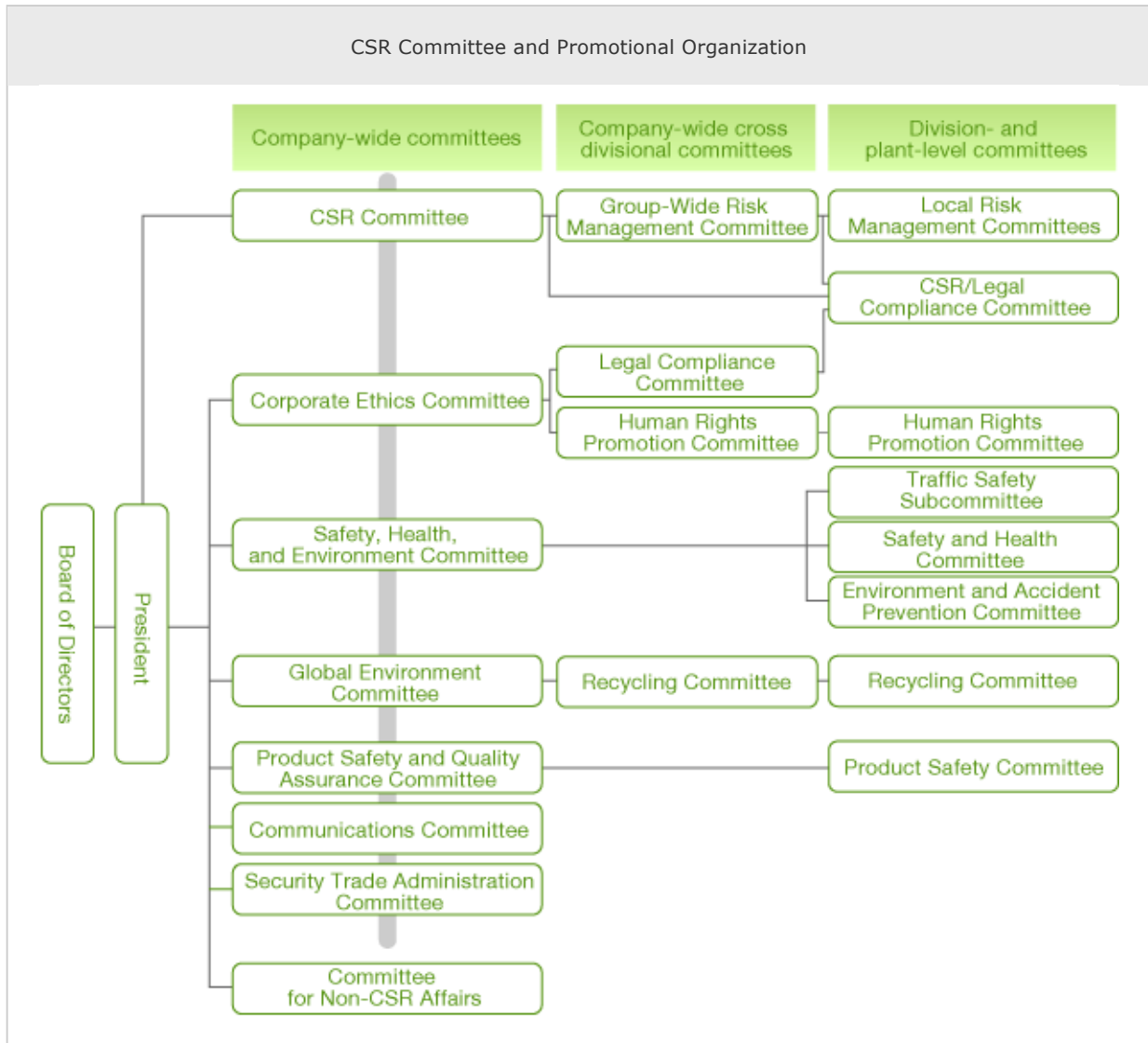
| Dialogue with Labor Unions

Toray holds meetings of the Central Labor and Management Council twice a year. The meetings are attended by directors at the senior vice president level and higher and labor representatives at the union head level and above. At these meetings, management-related information is shared, and there is an ongoing dialogue with the labor union. Resolution of labor issues is undertaken at separate Labor and Management Council meetings, and these have resulted in such initiatives as a system for helping improve employees' balance between work and family life, a system that was revised in April 2007.

Corporate Governance and Management Transparency
Promotion of CSR Activities

Toray Group believes that CSR is an important issue for corporate management, and applies its Management Philosophy in its CSR activities group-wide.

The CSR Committee, which reports directly to the president, coordinates the activities of six company-wide committees. Furthermore, CSR/Legal Compliance Committees have been established at each subsidiary and affiliate, division, and plant to help promote CSR activities. In June 2008, a newly established director in charge of overall CSR supervision was put in charge of group-wide CSR promotion as the chairperson of the CSR Committee.



Improving CSR Education

Toray Group promotes CSR education by incorporating in its employee training systems. In FY 2008, CSR lectures were begun as part of training for those promoted to management positions, while CSR course content was prepared for an intranet e-learning* training system to be launched in FY 2009.

* e-learning training provided through PCs connected to the company's intranet

Corporate Governance and Management Transparency
Information Disclosure Principles

Being fully aware of the importance of corporate social responsibility, Toray strives to become an "open company," in pursuit of management transparency, on the basic principle of not only complying with disclosure rules designated by law but also making fair, timely and appropriate disclosures, which exclude those pertaining to socially-accepted corporate secrets and nondisclosure agreement.

The social responsibilities affecting information disclosure must be fairly fulfilled for our stakeholders including customers, suppliers, employees, stockholders, investors and local communities, on the following principles.

Information Disclosure Principles (adopted January 2004)

1. Information Disclosure Principle:
Do not avoid reality, conceal facts, or like when disclosing information.
2. Voluntary Disclosure Principle:
Comply with legal disclosure requirements and voluntarily disclose information that can be disclosed.
3. Timely Disclosure Principle:
Disclose information that can be disclosed as quickly as possible.
4. Fair Disclosure Principle:
Disclose information to all stakeholders fairly and without bias.
5. Information Management Principle:
Employees responsible for disclosure shall strive to maintain strict information management until disclosure.

Corporate Ethics and Legal Compliance Code of Conduct (Adopted October 2003)

1. **Contribute to society**
As a company aspiring to be a New Value Creator, provide trustworthy products and services that satisfy our customers.
2. **Communicate with society**
Communicate with the various parties associated with the company, including its customers and shareholders as well as members of the local community. Actively and fairly disclose pertinent information about the company.
3. **Behave as a good corporate citizen**
Comply with laws and regulations, respect human rights, and actively contribute to society as a good corporate citizen.
4. **Play an active role in preserving the global environment**
Recognize that playing an active role in preserving the global environment is an important management issue, and strive to coexist with the environment in all corporate activities by conserving energy, reducing emissions and waste, promoting recycling, and so forth.
5. **Prioritize fairness and trust in corporate activities**
Engage in proper trade based on free, fair, and transparent market competition, and conduct corporate activities that earn the deep trust of society.
6. **Comply with national laws and regulations**
Pursue management reform from a global perspective, comply with the respective national laws and regulations in overseas operations, and be self-disciplined with high ethical standards. Conduct corporate activities with respect to the culture and customs of each country and contribute to the advancement of local communities.
7. **Raise motivation and create a corporate culture that lets employees demonstrate their ability**
Strive to create a corporate environment that allows each and every employee to be motivated to demonstrate their ability, respect individual human rights, character, and personality, and maximize creativity and professionalism.
8. **Break off relations with antisocial forces**
Always work for the good of society, break off relations with antisocial forces that threaten the order and safety of civil society, and take a resolute stand as a unified company.

Emphasizing Corporate Ethics and Legal Compliance

Toray Group considers corporate ethics and legal compliance to be among its most important management issues. Based on a clearly defined stance and the leadership of top management, the Group works to optimize its conduct in this area.

Promoting Corporate Ethics and Legal Compliance

The Corporate Ethics Committee, which is chaired by the president, discusses policies related to corporate ethics and the employee code of conduct while simultaneously encouraging labor and management to work together in their efforts to improve CSR. The Company-Wide Legal Compliance Committee, which is primarily comprised of section managers, has an open operational framework, placing considerable importance on direct communication with top management. The Committee also plays a key role in facilitating various activities initiated by the employees themselves: comprehensively addressing Group-wide issues and ensuring legal compliance. At the division- and plant-level, CSR/Legal Compliance Committees also encourage each employee to practice on-site activities based on his/her awareness of related issues.

CSR/Legal Compliance Committees have also been established at every domestic subsidiary and affiliate with appointed executives and section managers in charge of legal compliance. Furthermore, a Corporate Ethics and Legal Compliance Group has been established at Toray's Affiliated Companies Division as a point of contact for legal and compliance issues.

At overseas subsidiaries and affiliates, steps are being taken to establish proactive CSR/Legal Compliance Committees. This initiative is based on a strategy coordinated by Toray's International Division, the CSR Operations Department and relevant decision-makers at each company. Companies worldwide that will undertake activities to strengthen CSR/legal compliance have been targeted and as of March 31, 2009, 57 companies were implementing such activities.



Corporate Ethics and Legal Compliance Code of Conduct and Handbook

The Corporate Ethics and Legal Compliance Code of Conduct is a concrete set of standards that must be strictly observed by all Toray Group executives and employees in relation to all corporate activities both in Japan and abroad.

Violations of these rules that are upheld by an inquiry conducted by the Rewards and Sanctions Committee are penalized strictly. Proven violations also result in disclosure of relevant information, an investigation of the cause, and action to prevent a recurrence.

All Toray executives and employees (including part-time and temporary personnel) receive a copy of the Corporate

Ethics and Legal Compliance Handbook, which contains the Code of Conduct with a detailed explanation. The second edition of the Handbook was published in April 2007 in response to revisions of the Toray Group's Management Philosophy, changes in applicable laws and regulations, and other new information. Toray Group also publishes similar codes of conduct, guidelines, handbooks, and other information for Japanese employees and those at overseas subsidiaries and affiliates which have CSR/Legal Compliance Committees.

Main Content of the Corporate Ethics and Legal Compliance Handbook

- Carrying out proper transactions based on free, fair, and transparent market competition (compliance with Japan's Antitrust Law, Subcontract Act, and Act against Unjustifiable Premiums and Misleading Representations)
- Respecting local laws and regulations in all countries where Toray Group operates
- Respecting human rights and prohibiting all forms of discrimination
- Using proper accounting practices (complying with all relevant laws including Japan's Corporate Law, Tax Law and Financial Instruments and Exchange Act)
- Complying with Japan's Foreign Exchange and Foreign Trade Act, Political Funds Control Act, and Public Offices Election Act
- Prohibiting any form of bribery involving stakeholders



Corporate Ethics and Legal Compliance Handbook

Related Information

- [Corporate Ethics and Legal Compliance Code of Conduct](#)

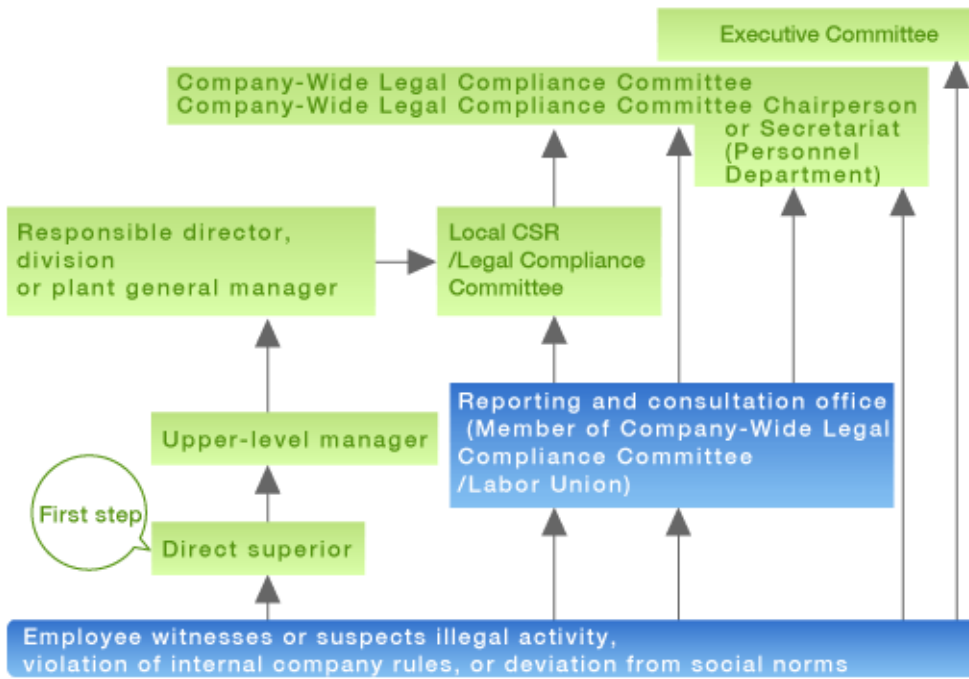
Fostering a Corporate Culture Based on Ethics and Legal Compliance

Toray Group strives to ensure a thorough understanding and acceptance of its corporate ethics and legal compliance standards. One way in which it does this is by having each workplace devise and implement a range of educational activities. For example, corporate ethics and legal compliance issues are taken up at monthly meetings, study groups are organized, and public reports of instances of corporate misconduct are reviewed. The Group has introduced a Legal Reform Information Distribution System, under which bulletins relating to amendments to laws relevant to administration within Toray Group are emailed to all Toray departments and Japanese subsidiaries and affiliates on a weekly basis. The System includes a Toray Group intranet that allows employees and managers to check items in detail. The Company-Wide CSR/Legal Compliance Bulletin Board has also been set up on the company intranet, which enhances Toray Group's ability to distribute information on legal compliance issues.

Establishing and Operating Reporting and Consultation Channels

Any actions that might be subject to Corporate Ethics and Legal Compliance Code of Conduct should, in the first instance, be reported to and discussed with a direct supervisor. Should that avenue present difficulties, several alternative options have been created. These include reporting or discussing matters at consultation offices that have been established in each division, plant and labor union. Employees can also use a dedicated hotline or email service to directly report to or consult with the chairperson or secretariat of the Company-Wide Legal Compliance Committee. In addition, the Executive Committee attended by representative directors welcomes a wide range of proposals and opinions from employees.

The confidentiality of employees using these reporting and consultation channels is strictly maintained. Labor contracts and company regulations specifically prohibit discrimination against employees making reports or seeking advice, and they clearly stipulate disciplinary action against those attempting to illegally seek gains through false accusations. Current operation conditions for the internal hotline system are now being investigated, and improvements will be made as necessary based on investigation results.



Company-Wide Activities in FY 2008

In FY 2008, Toray established or undertook the following company-wide activities:

Company-Wide Activities in FY 2008

- Continued legal compliance education in the area of security trade administration
- Executed an internal control review system for financial reporting and evaluated its operating results
- Improved the information distribution system for legal reforms and related issues
- Held employee study groups at each workplace on legal compliance
- Renewed and ensured thorough awareness of the Antitrust Law
- Raised and ensured thorough awareness of insider trading regulations

Strengthening Compliance, Internal Controls, and Auditing

Toray analyzes the general background and causes of improper activities, and through workplace improvement, the construction of a checking system and the prevention of recurrence, steadily promotes the following measures to prevent non-compliance.

1. Promoting workplace environments that help prevent improper activity
 - (1) Improving the checking ability of executives at subsidiaries and affiliated companies based on the cultivation of knowledge of and awareness for the early detection of non-transparent accounting from financial statements
 - (2) Ensuring thorough training through e-learning and improving training for newly appointed executive students of the Toray Management School and common training for group leaders by updating the program content, improving the practicality of the training and presenting more examples of non-compliance
 - (3) Preventing managers and employees from holding any one position for too long service through the rotation of personnel in key posts (sales, purchasing, and finance, etc.)
 - (4) Fostering open workplaces with positive communication between superiors and subordinates
2. Construction of mechanisms for early detection of non-compliance
 - (1) Steadily implementing measures from the Basic Policy for Internal Control Systems
 - (2) Ensuring proper inventory management (physical inspection by dedicated teams and advice from retired accounting employees)
 - (3) Verifying the operating conditions of the internal hotline system (condition ascertainment and investigation of whether to use a third-party provider for the system)
3. Deterrence of any future non-compliance
 - (1) Steadily implementing measures from the Basic Policy for Internal Control Systems
 - (2) Ensuring impartial disciplinary action in the case of non-compliance
4. Enhancement of audit functions at Japanese subsidiaries and affiliates
 - (1) Preparing audit manuals for our corporate auditors
 - (2) Strengthening internal audits by Toray's Auditing Department

Strengthening Security Trade Administration

In response to a warning issued by Japan's Ministry of Economy, Trade and Industry (METI) to Toray and Toray International, Inc. in May 2006 relating to an application to export certain products to Taiwan (see page 23 of the 2007 CSR Report), Toray strengthened management systems and implemented countermeasures at its Japanese and overseas subsidiaries and affiliates to prevent a recurrence. As a result, in November 2007 Toray and Toray International regained the METI general approval certificates. In FY 2008, this issue was incorporated into the

common training of group leaders in order to renew awareness. Toray will continue to ensure that directors and employees are thoroughly aware of Security Trade Administration requirements and will ensure strict implementation of internal management procedures.

Corporate Ethics and Legal Compliance
Antitrust Law Compliance Education

Training for Antitrust Law Compliance

In order to ensure thorough compliance with the Antitrust Law, Toray Group has prepared an Antitrust Law Compliance Program and an Antitrust Law Red Card to highlight specific examples of violations. Accordingly, employees are being provided with comprehensive training in various settings. In October 2008, the Company launched an e-learning program for all employees in marketing and sales department, as well as people in production, development and research positions (a total of about 3,600 employees). Each of these employees took an oath to comply with the Antitrust Law. This training will be continued in the future and expanded throughout the entire Toray Group.



E-learning training program

Administrative Orders by the Japan Fair Trade Commission

In March 2009, Toray was issued a cease and desist order by the Japan Fair Trade Commission (JFTC) for suspected price fixing activities of cross-linked high-foaming polyethylene. Toray's subsidiary, Toray Pef Products, Inc., was also issued a cease and desist order as well as an order for surcharge payment. Toray thoroughly regrets this occurrence, especially as it had taken various measures to ensure compliance with the Antitrust Law. It has since worked to raise the awareness of all directors and employees concerning corporate ethics and legal compliance as a top-priority management issue. While viewing this incident with great seriousness and sincerity, Toray intends to strengthen measures to prevent reoccurrence via regular audits, refresher training for sales employees and other efforts to ensure thorough understanding of the Antitrust Law Compliance Manual across the entire Toray Group. In doing so, Toray will strive to regain the public's confidence.

Implementing Risk Reduction Activities

For Toray, risk management is viewed as a fundamental pillar of corporate management. In January 2004, Toray established a set of Crisis Management Regulations. By pinpointing potential risks in its operations, the Company strives to proactively prevent and also reduce the effects of risk events before they occur. Toray also prepares and maintains an Emergency Quick Response System to be deployed in the event of a major crisis.

Developing a Risk Management System

The activities of Toray Group's risk management system are administered by a Group-Wide Risk Management Committee established under the CSR Committee. The Group-Wide Risk Management Committee monitors the company-wide risk management situation in all Group companies, and it is responsible for the integrated planning of company--wide policies. Each division, department, office, and plant has also organized Local Risk Management Committees. Each of these committees works to minimize the specific risks relevant to the particular business area or plant, while taking measures to prevent incidents from occurring. The activities of each local committee are first conveyed to the Group-Wide Risk Management Committee, before being periodically reported to the CSR Committee.



Promotion of Enterprise Risk Management

Toray evaluates management risk from a company-wide perspective, and promotes risk management by investigating measures for the entire Group.

In FY 2008, Toray promoted specific risk reduction measures after determining nine priority risk areas, based on a comprehensive identification and evaluation of relevant risks conducted in FY 2007. Working groups were established for the following three of the nine risk areas that were not already covered by any one responsible department, and comprehensive risk reduction measures were promoted.

1. A New Influenza Virus Outbreak Countermeasures Plan

2. A New Influenza Virus Outbreak Countermeasures Plan was established as a basic plan to deal with potential global new influenza pandemic.

Maintaining information security

Security measures were further strengthened for document, data, and facility management.

Supply chain risk reduction

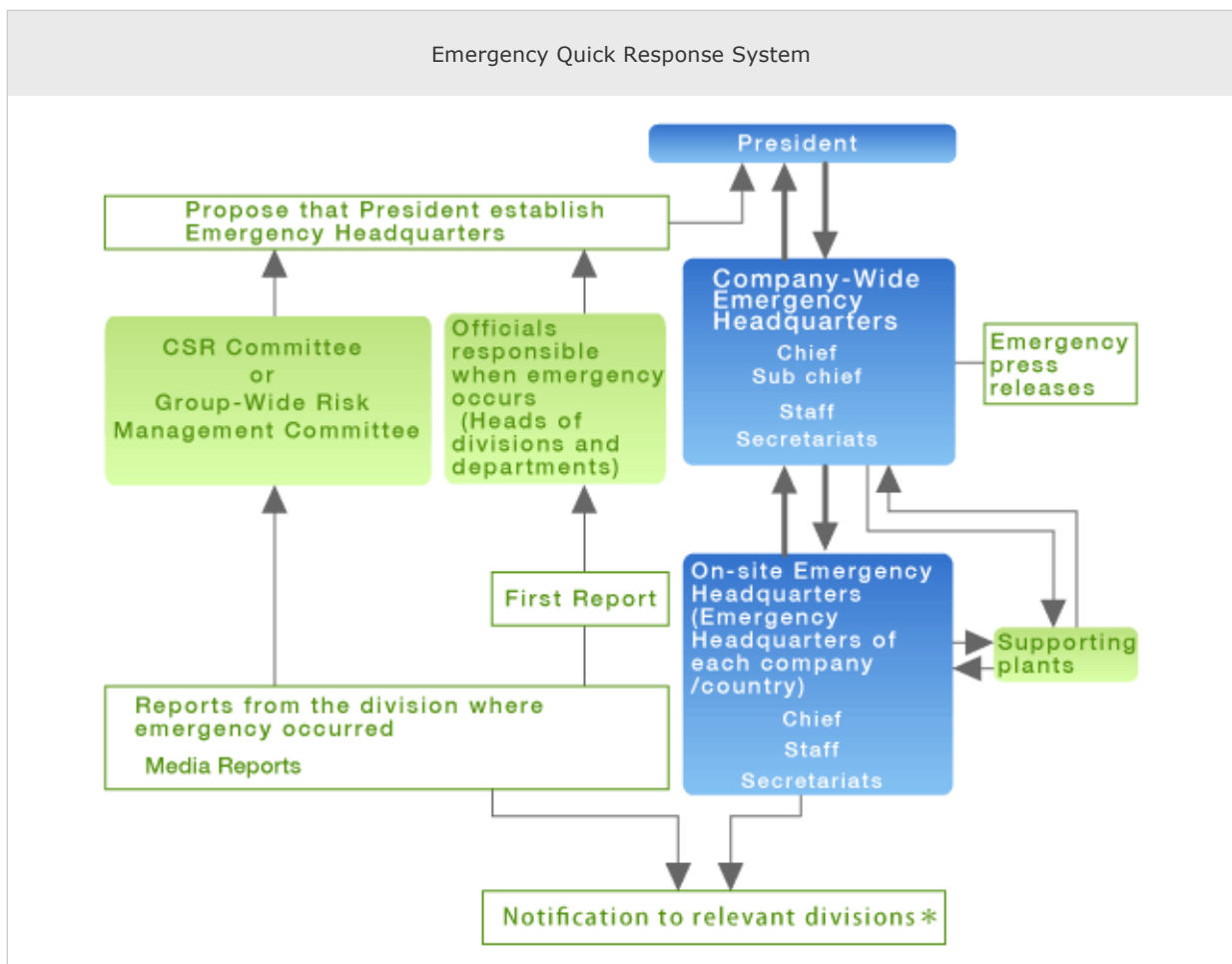
Internal rules were created and additional measures were investigated for the reduction of risk for Toray's entire supply chain.

Crisis Management Systems

Toray has established Crisis Management Regulations, which are clear fundamental principles that form the basis of company-wide responses should a major crisis occur, and works to ensure the thorough implementation of these regulations in a crisis.

In the event of a major crisis affecting the company's operations, the Emergency Quick Response System will be put into effect. Notification will be conveyed via the Emergency Reporting Route, and a Company-Wide Emergency Headquarters will be set up, led by the Toray president, or a person nominated by the president. The Company-Wide Emergency Headquarters will work closely with the Onsite Emergency Headquarters, undertaking a variety of activities aimed at preventing any further escalation of the crisis and at achieving a speedy return to normality.

The Company-Wide Emergency Headquarters will be responsible for the provision of emergency information to relevant areas, both within and outside Toray, in accordance with the regulations.



* Notification will be conducted according to the Emergency Reporting Route for Significant Disasters, Environmental Accidents, and Other Crisis Outbreaks.

Related Information

- Environmental Risk Management

Implementing the Business Continuity Plan (BCP)

Toray has long taken seriously the risk of a destructive earthquake, and has been carrying out initiatives based on a Major Earthquake Business Continuity Plan. In FY 2008, the following activities were carried out based on this plan.

In order to prepare for a possible major earthquake striking Greater Tokyo Area, the head office established an Emergency Response Plan, created of a Rapid Recovery Plan, and secured means of employee safety confirmation and emergency communication. The goal is to implement a plan for recovery of important business operations within three days after a disaster. As an additional support measure, the head office introduced a system for confirming employee safety in the event of an emergency in the Tokyo area via mobile phones and the Internet.

Toray's computer systems at its critical Shiga Information Systems Center were further strengthened against earthquakes, and relevant temperature control equipment was changed from a water-cooled to an air-cooled system. Measures such as these were carried out to minimize damage and promote a quick recovery in the event of a major earthquake.

To help protect the functions of production, purchasing and distribution, Toray created and put into operation Damage Confirmation and Reporting Routes for Major Earthquakes across the Toray Group in July 2008. These communication routes are for the purpose of ascertaining and responding to damage not only within Toray Group, but also throughout the entire supply chain, including customers and raw material manufacturers.



"Emergency Response Plan for Severe Earthquakes"
(Tokyo Head Office)

Risk Management

Initiatives to Protect Personal Information

Toray put in place a system for protecting personal information by introducing a set of Personal Information Management Regulations in March 2005, predating the enactment of Japan's Personal Information Protection Law in April of the same year.

In 2005, Personal Information Management Database was launched on the company intranet in order to organize personal information held in the company. All personal information held by each department is to be registered in the database and strictly managed. Moreover, regular inspections shall be conducted by the executive office.

For society

To establish ties and develop mutual trust as a responsible corporate citizen



In order to maintain the confidence of all stakeholders, Toray Group actively strives for good communication activities. Along with the fulfillment of its responsibilities for the environment as a global materials manufacturer, Toray Group companies aims to be an organization entity that is valued by the local communities in which it operates, through ongoing efforts in areas that include safety, and accident prevention.

■ FOR SOCIETY

Communication

Stakeholder dialogue forms the basis for a company's ongoing development. Toray Group provides appropriate information in a timely manner to a diverse range of stakeholders, including customers, employees, stockholders, and local communities. In this way, the Group promotes good communication while responding to stakeholder feedback.

■ FOR SOCIETY

Social Contribution Activities

In order to help realize a more prosperous society, Toray Group will continue to undertake activities that promote science, technology, arts, culture, and sports, contribute to local communities, and foster the next generation.

■ FOR SOCIETY

Safety and the Environment

By placing top priority on the management issue of safety, accident prevention and environmental preservation, Toray Group is serving to achieve a recycling-based society, through initiatives for the further reduction of environmental impact in all its business activities.

Toray Group Stakeholder Dialogue Aims

Under its Basic Policies to Promote Dialogue with Stakeholders, Toray Group clearly states its aim to promote dialogue and collaboration with, and improve the satisfaction of, all stakeholders. Based on these basic policies, Toray Group employees are promoting a range of communication activities with stakeholders through a variety of corporate activities. Individual workplaces also provide information to facilitate communication and prepare communication tools for it.

Basic Policies to Promote Dialogue with Stakeholders (adopted September 2005)

1. Toray Group will promote dialogue and collaboration with all stakeholders, including customers, stockholders and investors, business partners, employees, government, local communities, NPOs, citizens, the global community and the media.
2. Each company in Toray Group, through dialogue and collaboration with stakeholders, will take steps to carry out reforms designed to increase the satisfaction level of everyone.
3. All Toray Group employees, in their respective workplaces, shall create an environment conducive to implementing CSR activities. The thrust behind these activities is to enhance stakeholders' satisfaction.

Providing Information for Stakeholders

On its website, Toray posts a variety of corporate information relating to its business, research and development, investor relations, social responsibility activities, and company data. The Company also sends out Annual Reports, CSR Reports and other printed materials upon request (Those services are limited in Japan). In February 2009, search functions on the Toray website was enhanced in order to further improve user convenience.



Website internal search functions

Dialogue and Collaboration between Stakeholders and Toray Group				
	Basic stance	Communication tools	Communication opportunities	Reflect dialogue / Promote collaboration
Customers	Create trust by listening to the voices of customers, through making products and providing services.	<ul style="list-style-type: none"> • Website • Press releases • Product pamphlets • Product descriptions • Material safety data sheet (MSDS) • Advertising 	<ul style="list-style-type: none"> • Marketing and sales activities • Consumer service representatives 	<ul style="list-style-type: none"> • Joint product development • Create products and services that reflect dialogue with customers

<u>Stockholders and investors</u>	Provide accurate business information and ensure smooth communication.	<ul style="list-style-type: none"> • Website • <u>Financial Results</u> • Financial Report • Business Report for Toray stockholders • <u>Annual Report</u> 	<ul style="list-style-type: none"> • General Stockholders Meetings • Investor briefings • IR activities 	<ul style="list-style-type: none"> • Regular reporting and study on opinions of stockholders and investors at the Board of Directors meetings
<u>Business partners</u>	Observe laws and regulations and consider impact on the environment, and promote openness and ensure fair trade.	<ul style="list-style-type: none"> • Website • Corporate Profile • <u>CSR Report</u> 	<ul style="list-style-type: none"> • <u>Purchasing activities</u> • Surveys • Briefings 	<ul style="list-style-type: none"> • Joint operations and development • <u>Green procurement</u> • <u>CSR procurement</u>
<u>Employees</u>	Create ideal working conditions to match the diversifying employment patterns.	<ul style="list-style-type: none"> • Toray Navi intranet • Company magazine PEOPLE (Japanese Edition and English Edition) 	<ul style="list-style-type: none"> • <u>Business Results briefings</u> • <u>IT-2010 Management Meetings</u> • <u>Medium-term Management Program "Project IT-II" Briefing</u> • <u>Labor-management consultation on corporate management</u> 	<ul style="list-style-type: none"> • <u>Improve working conditions</u> • <u>Improve workplace environment</u> • <u>Labor regulations maintenance</u>
Government	Cooperate and work to maintain a sound relationship.	<ul style="list-style-type: none"> • Website • Corporate Profile • CSR Report • Site Reports 	<ul style="list-style-type: none"> • Plant tours • Producing and releasing various reports 	<ul style="list-style-type: none"> • Conclude individual agreements
<u>Local</u>	Promote interaction with people living near plants, to explain its business practices and environmental activities.	<ul style="list-style-type: none"> • Website • Corporate Profile • CSR Report • Site Reports 	<ul style="list-style-type: none"> • Plant tours • Meetings to exchange opinions with local community associations • <u>Sports classes</u> 	<ul style="list-style-type: none"> • Conclude individual agreements • <u>Promote volunteer activities</u>

<u>communities</u>			<ul style="list-style-type: none"> • <u>by the Toray Arrows volleyball teams, as well as the Toray judo and kendo (Japanese fencing) clubs</u> 	
<u>NPOs</u>	Promote tie-ups with people in NPOs to advance mutual cooperation.	<ul style="list-style-type: none"> • Website • Corporate Profile • CSR Report 	<ul style="list-style-type: none"> • Support NPO activities 	<ul style="list-style-type: none"> • Participate in NPO activities
<u>Citizens</u>	Share common perceptions with people who are indirect customers, by taking their wishes into account.	<ul style="list-style-type: none"> • Website • Advertising • Corporate Profile • CSR Report 	<ul style="list-style-type: none"> • Exhibitions, events • Inquires page on the website 	<ul style="list-style-type: none"> • Develop products with end-users in mind • <u>Support academic and cultural activities</u>
Global community	Work to expand global activities to create a better society.	<ul style="list-style-type: none"> • Website • <u>Press releases</u> • Corporate Profile • CSR Report 	<ul style="list-style-type: none"> • International conferences • <u>Toray Science Foundations (Japan, Malaysia, Thailand, and Indonesia)</u> 	<ul style="list-style-type: none"> • Develop products that contribute to society and the environment • Support academic and cultural activities
<u>Media</u>	Work for enhanced transparency in management by ensuring public accountability and playing its part in shaping public opinion.	<ul style="list-style-type: none"> • Website • <u>Press releases</u> • Corporate Profile • CSR Report 	<ul style="list-style-type: none"> • Press conferences • Press Interviews • Surveys • Industry Activity PR 	-

Communications with Customers

In order to realize "Customer-focus", Toray is actively promoting communication through its marketing and sales departments. Using the results of a customer survey conducted in February 2008, the Company carried out activities to improve customer satisfaction in FY 2008. By placing priority on ensuring thorough application of essential business behavior, and on providing joint technical and production support when following up with customers, Toray further enhanced employee awareness of the need for communication across the technical, production, marketing and sales departments. The Company also issues an industry PR newsletter and holds product study briefings for new customers.




A fibers and textiles study briefing for new customers

(Uniform & Advanced Textiles Department)

In June 2008, the Toray Products and Services website was updated. The section entitled, "Toray Products, Surprisingly Nearby," which showcases Toray materials used in everyday life, has received high public recognition, including winning an award in the 2nd Japan Web Grandprix.

In October 2008, an online product retail site called Toray Blue Store was launched in order to obtain customer feedback for product development.

Related Information

 [Toray Products and Services](#)

Communications with Stockholders and Investors

Under its policy for information disclosure, Toray does its utmost to fairly, timely and appropriately disclose information, which is not limited to that required by laws and regulations.

The Company also strives to reach out to stockholders and investors at every possible opportunity, and to reflect their opinions in its management and business activities.

Active Communication through Briefings for Investors

Toray hosts quarterly briefings for institutional investors and securities analysts on the same day that it announces its financial results. Several times a year, the Company also holds business strategy briefings concerning individual business sectors.

Toray participates in company briefings held by various stock exchanges in order to communicate directly with individual investors.

Major IR Activities in FY2008

Activities	Attendees from Toray	Number of events	Approximate number of participants/ instances
Briefings on business results announcements	President, Executive Vice President, Executive in charge of Investor Relations Department, Executive in charge of finance and controller's division	4	770 participants
Briefings on individual business sectors for institutional investors	Executives in charge of individual business divisions	4	587 participants
Briefings for individual investors	General Manager of the Investor Relations Department	1	230 participants
Meetings and conference calls with investors and analysts	Executive in charge of Investor Relations Department, Staff of Investor Relations Department	As required	697 instances

IR Information Disclosure and Corporate Ratings

On the Investor Relations link of the Toray website, there is useful information for stockholders and investors, including contents on management policies and strategies, as well as financial results data. The Company strives for fair information disclosure by quickly posting IR information such as presentation materials disclosed at briefings for institutional investors as well as English translations of these materials.

In FY 2008, a new section was created on the website called "Toray at a Glance" for individual investors investigating Toray for the first time to easily understand its business, management policies, and strategies.

Awards for Toray IR activities and its corporate ratings in FY 2008 are as follows:

Evaluating Organization	Details
Daiwa Investor Relations Co., Ltd.	Outstanding company for Internet IR site content

Nikko Investor Relations Co., Ltd.	Most outstanding site in a completeness ranking of listed company websites in FY 2008
Japan Brand Strategy, Inc.	Fifth place for IR content in a 2008 ranking of 250 corporate information sites
enterprise.com (e.com) (Belgium)	73rd place in the Best Annual Reports 2008 "Top 500 Annual Reports" (8 th place among Japanese companies)

Related Information

- [Toray at a Glance](#)

Evaluation by Socially Responsible Investment (SRI) Index

An SRI index is constructed from stocks in companies that exceed evaluations for certain specified standards for CSR activities. The companies providing these indexes independently select index components and calculate the indexes based on publicly available data and questionnaire surveys.

As of September 2009, Toray is included in the following SRI indexes.

• Dow Jones Sustainability World Index (DJSI)

The Dow Jones Sustainability World Index (DJSI) comprises more than 300 companies around the world that represent the top 10% of leading companies committed to sustainability.



• Morningstar Socially Responsible Investment Index (MS-SRI)

The Morningstar Socially Responsible Investment Index (MS-SRI) tracks the share performance of 150 selected listed Japanese companies based on their commitment to CSR. It is the first such index in Japan.



• FTSE KLD Global Climate 100 Index

Toray has been selected for the FTSE KLD Global Climate 100 Index, which is made up of 100 companies that are leaders in providing long-term solutions to global warming and climate change.

The following are Toray's ratings by SRI survey organizations in FY2008:

Survey Name	Rating
Corporate survey by SAM Group Holding AG (Switzerland)	SAM Silver Class
"Survey of Corporate Social Responsibility" Center for Public Resources Development (Japanese NPO)	A (highest level)
"Base of Integrity Screening" Integrex Inc. (Japan)	No. 1 in the industry (textile products and pulp and paper sector)
"Survey on Corporate Action and Management Systems for Climate Change" Integrex Inc. (Japan)	No. 1 in the industry (textile products and pulp and paper sector)

Reflecting the Voice of Stockholders and Investors

The opinions of stockholders and investors obtained in the course of day-to-day communication with investors and at IR meetings are regularly reported to the Board of Directors. They are also periodically discussed at the Company-Wide Communications Committee that is composed of members of management, as the Company endeavors to ensure the opinions of stockholders and investors are reflected in its management and business activities.

General Stockholders Meetings convenient to Stockholders

For the convenience of its stockholders, Toray avoids holding Stockholders Meetings on the date when the majority of companies hold their Stockholders Meetings. Notices of General Stockholders Meetings are sent out as early as possible in order to ensure that all stockholders have enough time to consider scheduled proposals-in FY 2008, the notice was sent out approximately four weeks prior to the date of the meeting.

Related Information

- [General Stockholders Meeting Information](#)

Communication

Communication with Business Partners

As a partner involved in joint business activities, the Group holds policy briefings with its business partners and carries out surveys of their CSR procurement, in addition to routine communication, as a way of deepening mutual understanding.

Related Information

- [Coperate with Suppliers in Their Environmental and Social Initiatives](#)

Second Round of IT-2010 Management Meetings

The second round of IT-2010 Management Meetings was held at eight Toray business offices and plants from August to October 2008, as part of the ongoing Corporate Brand Strengthening Project under Toray's IT-2010 mid-term business strategy of "Innovation of business awareness".

The aim of these meetings was to set up a forum for direct interaction between executives and employees to increase the latter's understanding and awareness of management issues, business innovation, and corporate culture through frank exchanges of opinions. In the second round of meetings, senior vice presidents individually visited different business offices and plants, each of which has over 500 Toray Group employees, with the aim of sharing personal experiences and offering advice. The meetings were then followed by a lively exchange of opinions on topics such as initiatives to promote innovation in the workplace and how to increase employee motivation and strengthen the corporate brand.

Management Issue Briefings by Representative Directors

Toray periodically issues a company magazine, for Group-wide employees and senior managers respectively. The magazine disseminates internal information, thereby promoting an understanding of management and business activity topics, as well as strengthening the corporate brand.

In February 2009, a "Message from the President" was posted on the Toray Navi intranet, explaining the company's situation following the global economic downturn along with future measures to address the situation. This coincided with the public announcement of Toray's third-quarter financial results and its earnings forecast for the rest of the fiscal year.

Afterwards, the president and representative directors traveled to all the Toray offices and plants to conduct briefings. In light of the current recession, which is described as the worst in 100 years, these briefings provided an explanation of Toray Group's current situation, followed by lively Q&A sessions with the audience. Those that attended the briefings made an effort to share the information with others in their departments who were not able to attend. In order to promote even wider understanding among employees, the president's message was also included in the company magazine.



Business results briefing at Tokyo head office

Toray promotes positive interaction with local communities by hosting regular meetings with people living near its plants through activities such as taking part in local festivals and in events hosted by the community, conducting cleanup activities along roads and riverbanks near production facilities, and by inviting local residents to take part in summer festivals held on the grounds of the plants.

<COLUMN>

Golden Year of Friendship 2008 Indonesia-Japan

Various special events were held in Indonesia as part of the Golden Year of Friendship 2008 Indonesia-Japan 50th anniversary of diplomatic relations between the two countries.

Toray first exported its synthetic fiber to Indonesia in 1948. Then in the 1960s, Toray decided to build a full-scale production facility in Indonesia after being encouraged to invest by the Indonesian government. In the early 1970s, Toray began to set up a series of fiber and textile joint ventures in the country. Since that time, the Company has continued to grow its operations there, and has been actively expanding its export business as part of the Indonesian government's export promotion program.

After the start of the new millennium, Toray put more effort into environmental and energy-saving measures and further strengthened its production foundation in the country, while continuing to introduce new facilities based on new technology. It also established a Toray Science Foundation in Indonesia and has built good relations with various stakeholders through social contribution efforts, including the provision of research assistance.

Participating in the Indonesia-Japan Expo 2008

The Indonesia-Japan Expo 2008 was held at the Jakarta International Expo in central Jakarta, from November 1 - 9, 2008. Toray Group participated in this event, showcasing the history of each Toray company in Indonesia. There were also displays featuring Toray's main technologies and products, and its 80-year history of business development in Japan. Toray's exhibits drew the attention of a lot of visitors during the Expo.



Toray booth

Taking Part in a Friendship Judo Competition

Toray's Shiga Judo Club participated in an Indonesian judo competition to commemorate 50 years of friendship between Japan and Indonesia, held on October 25 and 26, 2008. The event helped the club members deepen their ties with the local people.



Members of the Toray Shiga Judo Club with Indonesian participants

Related Information

- [Toray Science Foundation in ASEAN Countries](#)

Communication

Communications with NPOs

Toray endorses the objectives of the Japan Women's Innovative Network (J-win), an NPO concerned with the advancement of women. The Company has been involved with and supported the network's activities as a member since its foundation. Toray is also actively involved with the Japan Water Forum (JWF), an NPO concerned with issues regarding water resources both in Japan and overseas.

As the importance of NPOs as stakeholders in industry increases, Toray aims to build long-term and proactive communications with these bodies in the future.

Communication with Citizens

Toray strives to create opportunities for contact with local residents through exhibits and events and actively seeks to obtain feedback from members of the public who represent the company's indirect customers.

In October 2008, Toray's Tsuchiura Plant set up a booth at the Tsuchiura Industry Festival and showcased products such as film, carbon fiber, and color filters for LCDs. As a free gift, kids that visited the booth were able to make their handprint made by heat-lamination film produced at the Tsuchiura Plant. Over 500 people including the mayor of Tsuchiura visited the Toray booth, while a great many people showed an interest in the business operations and CSR initiatives of Toray Group.



Toray booth at the Tsuchiura Industry Festival

Communications with the Media

Established directly under the president, the Corporate Communications Department serves as the interface between the Company and various media organizations, providing the latter with publicity information. The department is working with a full understanding of the company's accountability for information disclosure to stakeholders and the role it plays in shaping public opinion. Information disclosure means the fair and equitable transmission of information, even when it might be sensitive or negative, based on Toray's Information Disclosure Principles.

Toray's major media activities in FY 2008 were as follows.

Press conferences	215
Press interviews given	476
Surveys conducted	400

Related Information

- [Toray's Information Disclosure Principles](#)

Toray Group Social Contribution Activities

Toray Group has always engaged in social contribution activities, particularly in providing financial support for science foundations both in Japan and overseas. The Group's work for society is "to establish ties and develop mutual trust as a responsible corporate citizen," as stated in its Corporate Mission.

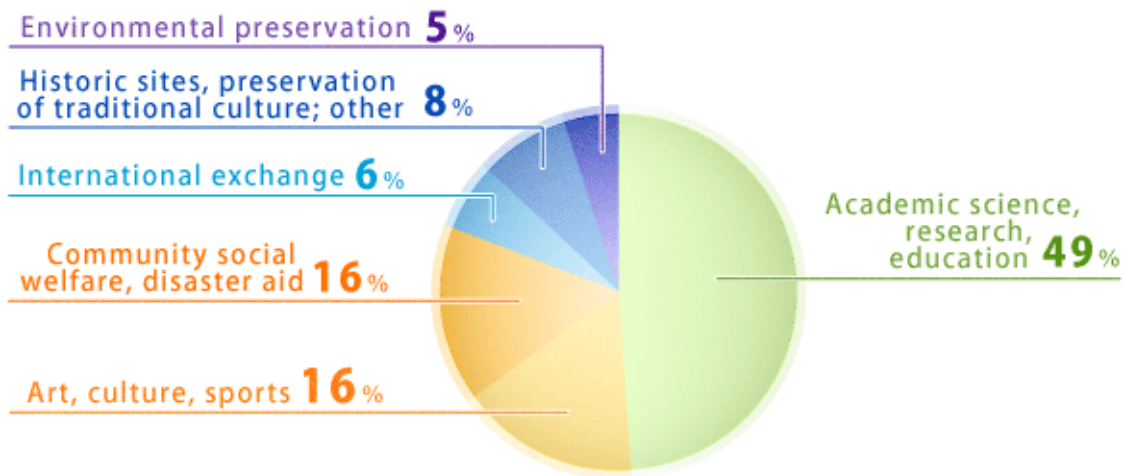
As a member of the 1% Club formed by Nippon Keidanren (the Japan Business Federation) in 1990, Toray has established Toray Group Social Initiative Policies and has declared its intention to invest about 1% of its consolidated ordinary income into social contribution activities.

Toray Group Social Initiative Policies (adopted May 2005)

1. Based on its Corporate Philosophy of "Contributing to society through the creation of new value with innovative ideas, technologies, and products," we will contribute to sustainable development of local and global society as a good corporate citizen, while continuously supporting social initiatives among employees.
2. We will pursue original programs dedicated to the improvement of social welfare in local communities, international exchange through traditional culture, sports promotion, and especially the advancement of science.
3. Using company awards and other measures, we will create a culture that encourages employees to participate in society in constructive ways such as engaging in voluntary activities with an eye to local needs.
4. We will examine all marketing and advertising activities from the perspective of social contribution before finalizing them.
5. We will contribute funds amounting to about 1% of our consolidated ordinary income to social initiatives.

In FY 2008, sustained implementation of social contribution activities at Toray Group generated approximately 1,020 million yen, or about 5%, of its consolidated ordinary income, in donations. Toray contributed approximately 730 million yen in donations on a nonconsolidated basis. Principal activities included donations to the Toray Science Foundation and Toray Science Foundations in Malaysia, Thailand, and Indonesia, assistance for Mishima City in Shizuoka Prefecture, Japan where Toray Group provided water for irrigation, firefighting, and a water park.

Results of Social Contribution Activities



Related Information

- [Promoting Science and Technology](#)

Toray Science Foundation

Established by Toray in 1960, Toray Science Foundation aims to assist and promote basic research in science and technology and to contribute to the improvement and development of science, technology, and culture. Since its inception, when it generated considerable interest, the foundation has been a pioneer among private research assistance foundations and continues to receive high praise for the activities it undertakes. For example, two of the winners of its Toray Science and Technology Prize have gone on to receive Nobel Prizes. In FY 2008, two Toray Science and Technology Prizes were awarded, along with a total of 22 research grants. The main activities of the foundation are outlined on the right.

Principal Toray Science Foundation Activities

(Figures in parentheses refer to number of award recipients in FY 2008.)

1. Toray Science and Technology Prize (2)
2. Toray Science and Technology Grant
3. Toray Science Education Prize (9)
4. Science Lecture Meetings



Toray Science Foundation awards ceremony

Toray Science Foundations established in three ASEAN countries

With the objective of assisting, promoting, and expanding science and technology research in Southeast Asia, Toray established Toray Science Foundations in Malaysia, Thailand, and Indonesia in 1993 and 1994. Each year, these foundations carry out various activities including special lectures and award presentations.

Related Information

- [Promoting Science and Technology](#)

Providing Classes that Feature Toray Products and Technologies

In order to help reverse the trend of declining interest in science among Japanese children, Toray believes it is important to have kids experience the significance and fun of learning science. As such, Toray sends guest instructors to schools to give classes on the topics of the environment and laboratory science, utilizing its own products and technologies to help them discover from an early age how what they learn in science class pertains to their daily lives and the environment.

In FY 2008, Toray instructors visited two elementary schools in Osaka and one in Tokyo and gave laboratory science classes focused on filtration experiments using hollow fiber membranes used for water treatment. The achievements of this educational program were presented at a career education forum attended by educators and companies. Toray also conducted environmental classes at two Tokyo junior high schools, providing opportunities for students to learn first-hand about environmental issues and corporate approaches to addressing these issues, primarily through participation at the Eco-Products exhibition.



Laboratory science class using hollow fiber membranes to make colored water clear



Presenting the educational program results at a career education forum

Supporting Community Interaction through Music



Fureai Trio performing at an elementary school

Toray provides support for the activities of the Fureai Trio, a group of musicians that perform classical music to small children and the general public, while also assisting institutions that provide work to persons with disabilities.

Other Major Activities (FY 2008)

- Supported the 20th International Biology Olympiad held in July 2009
- Supported the Japan Science & Engineering Challenge (sponsored by the Asahi Shimbun Company), which aims to nurture high school students for the future of science and technology in Japan
- Supported Science Camp, a hands-on science and technology program for high school students who intend to pursue careers in science (sponsored by the Japan Science and Technology Agency)
- Supported public master classes offered by the Shanghai Quartet
- Sponsored the Toray Digital Creation Awards (a public contest for "Computer Pictures")
- Supported art programs such as Setagaya Public Theatre @ School, a joint program instituted by Setagaya Public Theatre in collaboration with schools

Social Contribution Activities

Support for Culture and the Arts

Toray is committed to promoting international exchange in arts and culture. Examples include providing support for Japan Fashion Week in Tokyo, the France Meets Japan-Ukiyo-e Influence on French Ceramics exhibition held at the Tokyo National Museum Hyokeikan (Asian Gallery) (sponsored by Nikkei Inc.) and performances in Japan by the Shanghai Quartet and the Orchestra Asia. At the same time, Toray continues to implement activities designed to keep traditional arts alive such as providing backing for domestic performances of Youkiza a type of marionette theater with a history of over 370 years.

Social Contribution Activities
Community-based Initiatives

CSR Activities through Sports and Events

Toray contributes to local communities through sports. This includes holding volleyball classes led by the Toray Arrows, and judo and kendo (Japanese fencing) classes taught by Toray employees in a number of different communities. The Company also opens up its sports grounds, gymnasiums and other sports facilities to the public.



Volleyball class led by the men's Toray Arrows team (Mishima City)



Volleyball class given by the women's Toray Arrows team (Osaka City)

Facility Visits and Cleanup Activities

Volunteer activities at Toray plants and Japanese and overseas subsidiaries and affiliates included visits to neighborhood senior citizen homes and social welfare facilities to call on residents and help with cleaning. Another way in which employees contribute to society is by participating in cleanup activities for roads and rivers near Toray plants and offices and at other similar events.



Highway cleanup activity (Toray Resin Co. (USA))

As a Major Sponsor of Sporting Events

While the 2009 Toray Cup Shanghai International Marathon and the Toray Pan Pacific Open Tennis Tournament (Toray PPO) are part of the company's advertising activities, Toray's reason for sponsoring these events is to give back to the community.

During the Toray PPO, the Company carries out special activities such as the collection of tennis rackets for donation to developing countries.


<Donating Rackets Worldwide>


Since 2003, Toray PPO has collected used rackets from tournament spectators and donated them to

developing countries worldwide through the Japan International Cooperation Agency (JICA). Kimiko Date Krumm, a JICA Official Supporter, visits recipient countries and creates opportunities for children to experience tennis. The total number of rackets collected to date is 1,877, and Ms. Date Krumm has visited six countries as part of this initiative.

(As of the end of the 2008 tournament)

Related Information

 [2009 Toray Shanghai Marathon](#)

 [Toray Pan Pacific Tennis Tournament 2009](#)

Results of Social Contribution Activities

2008	Supported Japan Fashion Week in TOKYO (Japan)
	Supported the France Meets Japan-Ukiyo-e Influence on French Ceramics exhibit (sponsored by Nikkei Inc.) (Japan)
	Supported Corot: Souvenirs et Variations exhibit (sponsored by the Yomiuri Shimbun) (Japan)
2007	Supported L'art de Monet et sa Postérité exhibit (Japan)
	Supported performances of Quatuor Voce in Japan (Japan)
	Supported art programs such as Setagaya Public Theatre @ School (Japan)
2006	Sponsored "Musee d'Orsay" exhibition. (Japan)
	Sponsored the Fourth Japan Science & Engineering Challenge 2006, a science and technology contest for high school students. (sponsored by Asahi Shimbun).
	Supported Science Camp, a hands-on science and technology program for high school students who intend to pursue careers in science sponsored by Japan Science and Technology Agency.
	Sponsored concerts in Tokyo by "the Shanghai Quartet". (Japan)
	Sponsored the Sustainable Society Education Support Project (sponsored by Diamond, Inc.), a program that donates the book Tales of Life: Eleven Stories of Biodiversity to elementary, middle, and high schools throughout Japan.
	Sponsored Japan Tent (sponsored by the Japan Tent Steering Committee), an event held in Ishikawa Prefecture that promotes international exchange.
2005	Sponsored "Vermeer String Quartet" concert. (Japan)
	Sponsored U.S. Tour of Chikamatsuza of Shochiku Grand Kabuki. (U.S.)
	Sponsored Art Deco Exhibit. (Japan)
	Sponsored the Umewaka Kennohkai Europe Tour. (Germany, Latvia, France, Belgium)
	Sponsored "Napoleon and Versailles" exhibition. (Japan)
2004	Sponsored "Flemish and Dutch Paintings from the Collection of the Kunsthistorisches Museum WienVienna" exhibition (Japan)
	Sponsored "Florence: The Birth of the Capital of Arts" exhibition (Japan)
	Sponsored "Mirai Sen-i Ten (Fabric in the Future)" exhibition (Japan)
	Sponsored publishing "Sekai-wo kaeru okane-no tsukaikata (The way you use money can change the world)" (Japan)
2003	Supported setting up "Re-birth", website of Masako Imaoka, photographer (Japan)
	Sponsored "Shigeru AOKI and Romanticism in Modern Japanese Art" exhibition (Japan)

	Sponsored performances of the Yukiza marionette theater (Japan)
	Sponsored concerts in Tokyo by "the Shanghai Quartet". (Japan)
	Sponsored "Japan Science & Engineering Challenge" (Japan)
	Sponsored performance in Paris by "Meiwa Denki" (France)
	Sponsored "Monet and Renoir: Two Great Impressionist Trends" exhibition. (Japan)
2002	Sponsored "Masters of the Pardon Museum" exhibition (Japan)
	Sponsored performances of the Yukiza marionette theater in France (France)
	Sponsored concerts in Tokyo by the "Vermeer Quartet" (Japan)
2001	Sponsored "Mohri's Colored Space Part5, SAYOKO" (Japan)
	Sponsored Italy 2001 in Japan (Japan): Participated in the following exhibitions ; "IL Rinascimento In Italia" "Innovative Engineers of Renaissance" "Italia E Giappone: Design Come Stile Di Vita" "Masterpieces of Italian Majolica from the collection of The International Museum of Ceramics in Faenza" "A Century of Italian Art-From 1990 to 2000" "Artisans from the Palace of Florence"
	Sponsored "Dufy" exhibition. (Japan)
	Submitted dress materials to "Mitsui Collaboration 2001-AMATERASU". (U.K.)
	Sponsored Tokyo performance of "Juilliard String Quartet". (Japan)
	Sponsored "the Coming of Age of CG" Toray DCA 5th Anniversary Exhibition. (Japan)
	Sponsored concerts in Tokyo by "the Shanghai Quartet". (Japan)
2000	Sponsored "The public and the private in the Age of Vermeer". (Japan)
	Costume materials provided for the performance at the opera house in Luang. (France)
	Sponsored the Umewaka Kennokai Noh troupe's tour of Germany, Netherlands. (Germany, Netherlands)
	Kite materials provided for "the Wind Caravan Sanda". (Japan, New Zealand, Finland, Morocco, Mongolia, Brazil)
1999	Sponsored "History and Imagination in Goya's Etching" exhibition. (Japan)
	Sponsored "les coulisses de la mode" exhibition. (Japan)
	Sponsored "Masterpieces of The National Gallery of Art, Washington" exhibition. (Japan)
	Sponsored concerts in Tokyo by "the Vermeer Quartet" (Japan)
1998	Sponsored the "Treasures of Celtic Art" exhibition. (Japan)
	Sponsored concerts in Tokyo by "the Shanghai Quartet" (Japan)

	Sponsored "THE AIR WARE" exhibition by CG artist Daizaburo Harada. (Japan)
	Sponsored The Toray Corp Shanghai International Marathon. (China)
	Sponsored performances in Japan by "Orchestra Asia". (Japan)
	Contribution of exhibits to and sponsorship of "Structure and Surface: Contemporary Japanese Textiles" exhibition at the Museum of Modern Art (MOMA). (U.S.)
1997	Sponsored The Toray Corp Shanghai International Marathon. (China)
	Sponsored Coutauld Institute Collection. (Japan)
1996	Sponsored the first China performance of "Orchestra Asia". (China)
1995	Presented a congratulatory curtain for "Nakamura-Kai Grand Kabuki" commemorating the centennial anniversary of Shochiku. (Japan)
	Sponsored the first Japan performance of "Orchestra Asia", featuring traditional folk instrument form Japan, China and Korea. (Japan)
1994	Costumes produced and supplied for the Bunraku puppet theatre production of "Kotobukishiki Sanbanso". (Japan)
1993 - 1994	Toray Science Foundations established in Indonesia, Thailand and Malaysia. (Indonesia, Thailand, Malaysia)
1993	Costume supplied for the Bayreuth Opera's production of "Tristan and Isolde". (Germany)
	Sponsored the Umewaka Kennokai Noh troupe's tour of Germany. (Germany)
1992	Costume materials provided for the production of "Turandot", performed at the opera house in Lyons. (France)
	The Toray Arrows volleyball team visited Indonesia and Malaysia for a series of friendly matches. (Indonesia, Malaysia)
	Toray produced and supplied the official uniforms for the Lithuanian team, competing in its first Olympics as an independent nation. (Lithuania)
	Toray contributed one million dollars to establish a scholarship fund at the University of Rhode Island. (U.S.)
	Using its Shingosen new synthetic fabrics, Toray produces and supplied the costumes for the Kabuki drama "Musume Dodo-ji". (Japan)
1991	Sponsorship provided for the Courtauld Institute of Art's first exhibition of drawings. (U.K.)
	Noh and Kyogen performances at the Japan Festival in London are sponsored. (U.K.)
	President of Toray Plastics (America) Inc. spoke at a periodical assembly of Harvard Business School graduates. (America)
	Provided extensive cooperation in the production of the NHK TV series "Fashion Dream". (Japan)
1990	Sponsored Performances in France by the Umewaka Kennokai Noh troupe. (France)
	Financially sponsored for the construction of a new building of Japanese School in Paris. (France)

	Funds donated to the Indonesian Judo Association to build a national judo center. (Indonesia)
	Toray Science Foundation established a scholarship system through CENTEX. (Indonesia)
	Partially funded for the construction of a new community hall of Nakhon ChaiSi County through Thai Toray Textile Mills Public Co., Ltd. (Thailand)
	Toray representative in Thailand made a donation to Thai Amateur Volleyball Association. (Thailand)
	Through Toray Science Foundation, fostered basic studies of natural science carried out by Indonesian, Thai and Malaysian universities. (Indonesia, Thailand and Malaysia)
1989	To commemorate the 30th Anniversary of Toray Science Foundation, started funding for basic studies of natural science at Southeast Asian universities. (Indonesia, Thailand and Malaysia)
	Found donated to Courtauld Institute of Art to assist relocation. (U.K.)
	Financially sponsored for the acquisition and renovation of a building and donated for the purchase of educational materials and tools for Japanese School in Milan. (Italy)
1988	Costume and staging materials provided for the musical "Idamante", directed by Ennosuke Ichikawa. (Japan)
1987	Costume materials provided for the China performances of the opera "The Magic Flute". (China)
1986	Costume materials provided for the Kabuki performance "Yamato Takeru". (Japan)
1982	Swimming pool built with funds donated by Toray in Penang. (Malaysia)
1960	Established Toray Science Foundation. (Japan)

Ten Basic Environmental Rules

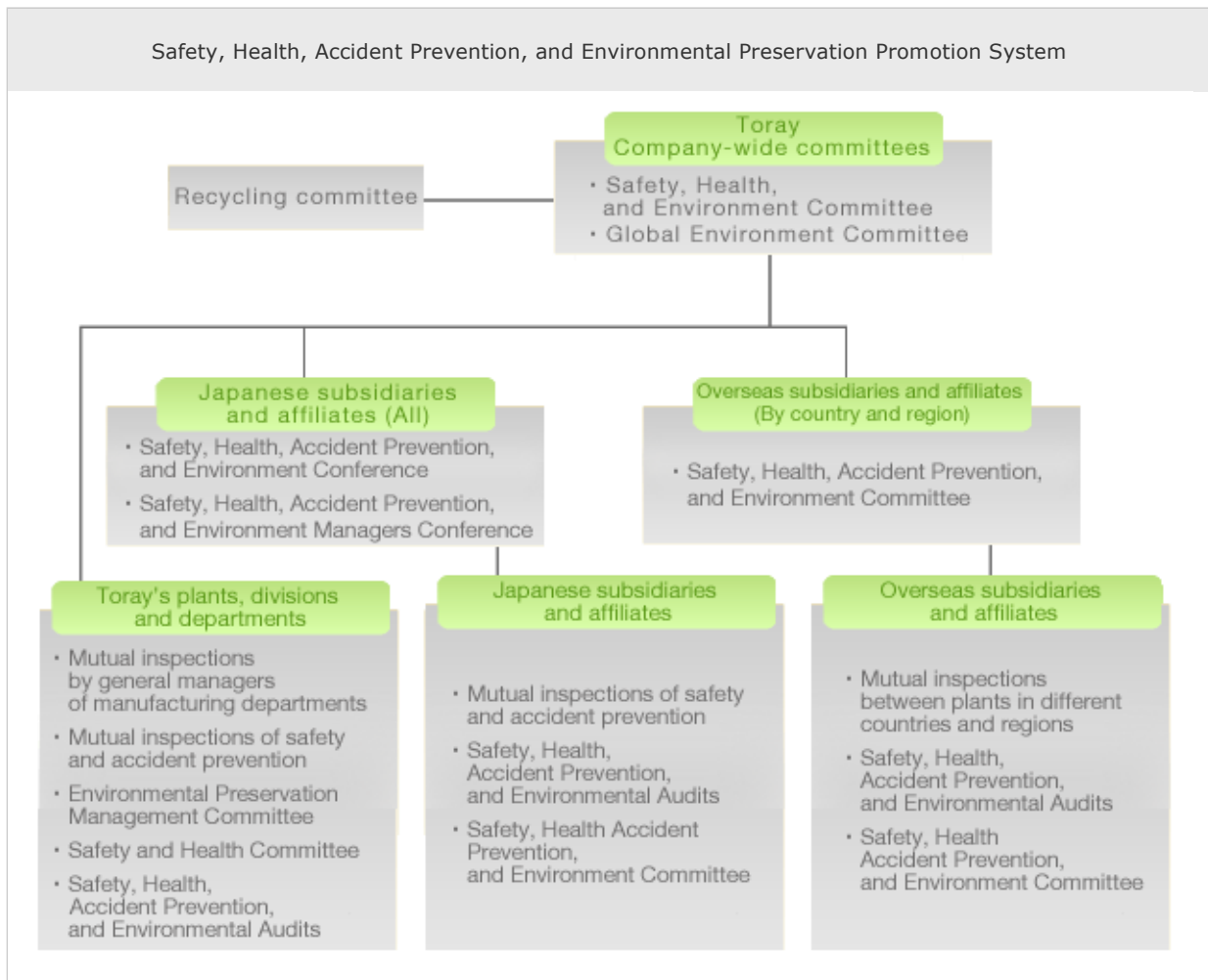
Ten Basic Environmental Rules (Adopted January 2000)

1. **Prioritize environmental preservation**
We shall comply with all laws, regulations, and agreements in all of our business activities while placing the highest priority on environmental preservation in the manufacture, handling, use, sale, transport, and waste disposal of products.
2. **Prevent global warming**
We shall promote energy conservation and work to reduce our unit energy consumption and our carbon dioxide emissions.
3. **Achieve zero emissions of environmental pollutants**
We shall strive continuously to reduce our emissions with the ultimate goal of achieving zero emissions of hazardous chemical substances and waste materials into the environment.
4. **Use safer chemical substances**
We shall collect, maintain, and provide information on the health and environmental effects of the chemical substances we handle while striving to use safer chemical substances.
5. **Promote recycling**
We shall develop recycling technologies for products, containers, and packaging and cooperate with society in promoting the recovery and reuse of such items.
6. **Improve the level of environmental management**
We shall work to maintain and improve the level of our environmental management while working to upgrade our environmental management technology and skills, performing self auditing, and taking other measures.
7. **Contribute to society through environmental improvement technologies and products**
We shall meet the challenge of developing new technologies and shall contribute to society through environmental improvement technologies as well as products that place a low burden on the environment.
8. **Improve the environmental management of our overseas businesses**
In our overseas business activities, we shall place top priority on complying with local laws and regulations, and further, we shall manage those businesses in accordance with the management standards of Toray Group.
9. **Improve employees' environmental awareness**
We shall strive to improve our employees' awareness of environmental issues through environmental education, social activities, internal communications activities, and other means.
10. **Share environmental information with society**
We shall deepen mutual understanding of Toray Group environmental policies and practices by widely publicizing our environmental preservation efforts and their results in environmental reports and other publications directed at local communities, investors, and the media.

Safety and the Environment
Unified Management of Safety, Health, Accident Prevention, and Environmental Preservation Issues

The basic Toray Group policy with regard to safety, health, accident prevention and environmental preservation is one of unified global management instituted throughout Toray Group each year under a set of "Safety, Health, Accident Prevention, and Environmental Action Policies." In 2008, Toray focused on the execution of 15 key activities in addition to its annual Safety, Health, Accident Prevention, and Environmental Audits used to evaluate and improve initiatives and management at all manufacturing companies and plants.

Audits in FY 2008 were carried out with an emphasis on mutagen management and forklift safety measures at all 13 Toray plants and its research laboratory, its 23 Japanese subsidiaries and affiliates'; 47 plants, and 30 overseas subsidiaries and affiliates' 39 plants. Furthermore, over 200 Toray Group presidents, executives and plant managers participated in the 27th Toray Group Safety Meeting, ensuring Group-wide awareness of safety issues and measures.



Toray Group Safety, Health, Accident Prevention, and Environmental Activity Policy in 2008		
	Policy	Major activity item
Common	Promotion of 3Z* activity Enhance risk management	<ul style="list-style-type: none"> • Certain execution of 3Z activity plan (each company, plant) • Enhancement of risk reduction activity • Strengthening of emergency action system for crisis
Safety	Thoroughness of safety action Enhancement of work management Eradication of serious injury	<ul style="list-style-type: none"> • Improvement of hazards sensitivity to danger by enhanced awareness training • Strengthening safety management of non-routine work • Strengthening safety management in contract work • Enhancement of safety measures against rotating objects, moving machine parts and heavy materials

Health	Thoroughness in occupational health management	<ul style="list-style-type: none"> • Thoroughness in management of mutagenic substance • Enhancement of mental health management
Accident prevention	Strengthening of fire and explosion prevention measures	<ul style="list-style-type: none"> • Thoroughness of fire prevention by step-up FP activities • Strengthening of accident prevention and environment measures of chemical plants <ul style="list-style-type: none"> - Thoroughness of risk assessment for newly established plants, remodeled installations, and at time of occurrence of serious near-accidents-serious near-accidents- • Execution of BCP against large-scale earthquakes
Environment	Promotion of The "Third Three-Year Environment Plan" achievement Enhancement of chemical substances management	<ul style="list-style-type: none"> • Planned promotion of environmental emission reduction • Reduction of GHG emission • Promotion of preparing REACH regulations

* 3Z:

Zero Accident, Zero Trouble, and Zero Claims Program

Related Information

- [Occupational Safety](#)
- [Business Continuity Plan \(BCP\) Promotion](#)

Promoting the Third Three-Year Environmental Plan

Toray Group implemented the Third Three-Year Environmental Plan in FY 2007, and in FY 2008 posted substantial achievements including a reduction in greenhouse gas (GHG) emissions. In order to achieve the plan's goals by FY 2010, Toray will continue promoting measures to systematically reduce its environmental impact, thereby helping to realize a recycling-based society.

Third Three-Year Environmental Plan Progress Chart			
Area	Toray Group FY 2010 target	FY 2008 results	Related links
Prevent global warming	Toray: 6% or greater reduction in GHG emissions compared to FY 1990	20% reduction	Initiatives to fight global warming
	Toray Group (Japan): 15% or greater reduction in GHG emissions per unit sales compared to FY 1990	13% reduction	
Management of chemical substances	Atmospheric emissions of PRTR Law- specified substances: 55% reduction compared to FY 2000	63% reduction	Voluntary reduction of atmospheric emissions of chemical substances
	Atmospheric emissions of volatile organic compounds (VOCs): 55% reduction compared to FY 2000	62% reduction	
	Pursue the goal of zero emissions	Achieved at 18 plants at 11 subsidiaries/affiliates	Initiatives to
	Rate of simply disposed waste:	32%	

Waste reduction	34% or lower		<u>reduce waste</u>
	Recycling rate: 85% or higher	81%	
	Landfill rate, Toray Group (Japan): 5% or lower	2.6%	

ISO14001

Toray Group is working towards acquisition of ISO 14001 certification, and is making the necessary improvements to its environmental management structure. At the end of 2000, all 12 Toray plants had obtained this certification. Additionally, four plants at four overseas subsidiaries and affiliates received certification in FY 2008, bringing the total number of certified plants to 68 at 45 Toray Group companies.

Sites with ISO 14001 Certification (As of March 2009)

Toray: All 12 plants

Shiga, Seta, Ehime, Nagoya, Tokai, Aichi, Okazaki, Mishima, Chiba, Tsuchiura, Gifu, Ishikawa

Japanese subsidiaries and affiliates: 34 plants at 19 companies *

Du Pont-Toray Co., Ltd., Opelontex Co., Ltd., Toray Textiles, Inc. [Tokai],

Toray Coatex Co., Ltd. [Kyoto, chemical products], Toray Monofilament Co., Ltd.,

Toyo Tire Cord Co., Ltd., Toyo Plastic Seiko Co., Ltd. [Mishima, Koriyama],

Toray PEF Products Inc. [Konan, Tsukuba],

Toray Advanced Film Co., Ltd. [Mishima, Takatsuki, Fukushima, Nakatsugawa],

Dow Corning Toray Co., Ltd. [Chiba, Fukui, Yamakita, Komatsu],

Toray Fine Chemicals Co., Ltd. [Moriyama, Matsuyama, Tokai, Chiba],

Toray Engineering Co., Ltd. [Numazu],

Soda Aromatic Co., Ltd. [Noda, Koriyama, Okayama Chemicals], Toray ACE Co., Ltd. [Ehime, Fukushima],

Suido Kiko Kaisha, Ltd., Ichimura Sangyo Co., Ltd., Toray International, Inc., Chori Co., Ltd.,

Toray Medical Co., Ltd.

* In addition, 12 companies received certification as affiliated companies on Toray sites

Overseas subsidiaries and affiliates: 34 plants at 26 companies

USA

Toray Plastics (America), Inc. [Rhode Island, Virginia],

Toray Resin Co.,

Toray Fluorofibers (America), Inc.,

Toray Carbon Fibers America, Inc.

UK	Toray Textiles Europe Ltd.
France	Toray Plastics Europe S.A.S.
Italy	Alcantara S.p.A
Czech Republic	Toray Textiles Central Europe s.r.o.
Indonesia	P.T. Century Textile Industry Tbk, P.T.
	Easterntex, P.T.
	Indonesia Toray Synthetics
Thailand	Thai Toray Textile Mills Public Company Limited,
	Thai Toray Synthetics Co., Ltd.[Bangkok, Ayutthaya, Nakhon pathom],
	Luckytex (Thailand) Public Company Limited [Mill2, Mill3]
Malaysia	Penfibre Sdn. Berhad [Mill3],
	Penfabric Sdn. Berhad [Mill1, Mill2 , Mill3, Mill4]
	Toray Plastics (Malaysia) Sdn. Berhad
China	Toray Fibers (Nantong) Co., Ltd.,
	Toray Sakai Weaving & Dyeing (Nantong) Co., Ltd.,
	Toray Plastics (Shenzhen) Ltd.,
	Toray Film Products (Zhongshan) Ltd.,
	Toray Sanko Precision (Zhongshan) Ltd.,
	Toray Jixiang Plastics (SuZhou) Co., Ltd.,
	Toray Fibers & Textiles Research Laboratories (China) Co., Ltd. [Nantong, Shanghai]
South Korea	Toray Saehan Inc., STECO, Ltd.

* Names in red indicate companies or plants that first obtained certification in FY 2008
 * Note: information in brackets refers to the names of the plants

Responsible Care (RC) Program

RC activities focus on measures that address safety, health and the environment. The program designates the responsibilities of those who handle chemical substances at every stage of the process. Toray has participated in the Japan Responsible Care Council (JRCC) since its foundation.

REACH Regulation Compliance

All Toray business divisions and subsidiaries and affiliates in Japan and overseas have initiated and are carrying out their own projects for complying with REACH regulations. Toray Group completed pre-registration of applicable substances with the European Chemical Agency by December 2008, and is now working toward registration.

<VOICE>

Tomoko Chikaike

Manager, Environment and Safety Section
Shiga Plant
Toray Industries, Inc.

**Putting Safety First to Create a Plant that is Valued by the Community**

At the Toray Shiga Plant, we carry out various operations including production, technology development, and research. The Environment and Safety Section is responsible for overall management of the plant's safety, health, accident prevention, and environmental protection. As manager of this section, I am striving for issue identification and effective resolution measure implementation, with an emphasis on ascertaining actual conditions at the worksites, while promoting environment and safety awareness within the plant.

In the area of safety, we are pursuing real safety improvements by enhancing management of people, facilities, and organizations. This includes risk assessment where managers and operators work together to evaluate risks and investigate risk reduction for processes and operations. It also includes the "back to basics" campaign to familiarize employees with a topic chosen from the basic rules of safety each month. In the area of environment protection, we are putting special effort into wastewater management, with an appreciation that we are privileged to be located near Lake Biwa, Japan's largest lake. We conduct water flow tours to enable people to actually see how the plant uses water, from intake to release. Improvements are also being made to the wastewater treatment process using MBR* technology. We will continue to create a safer and more energetic plant with the unified support of all employees, while promoting good communication with subsidiaries and affiliates.

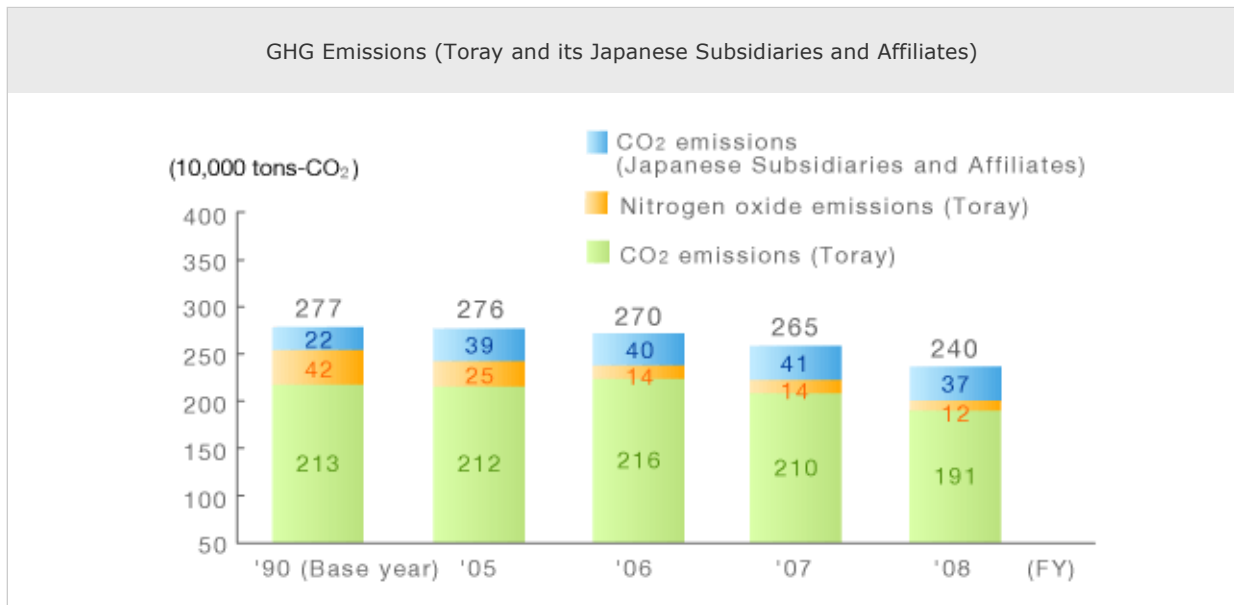
* MBR: Membrane bioreactor. A wastewater treatment technology that can produce clear treated water by removing all suspended solids using a fine membrane.

Initiatives to fight global warming

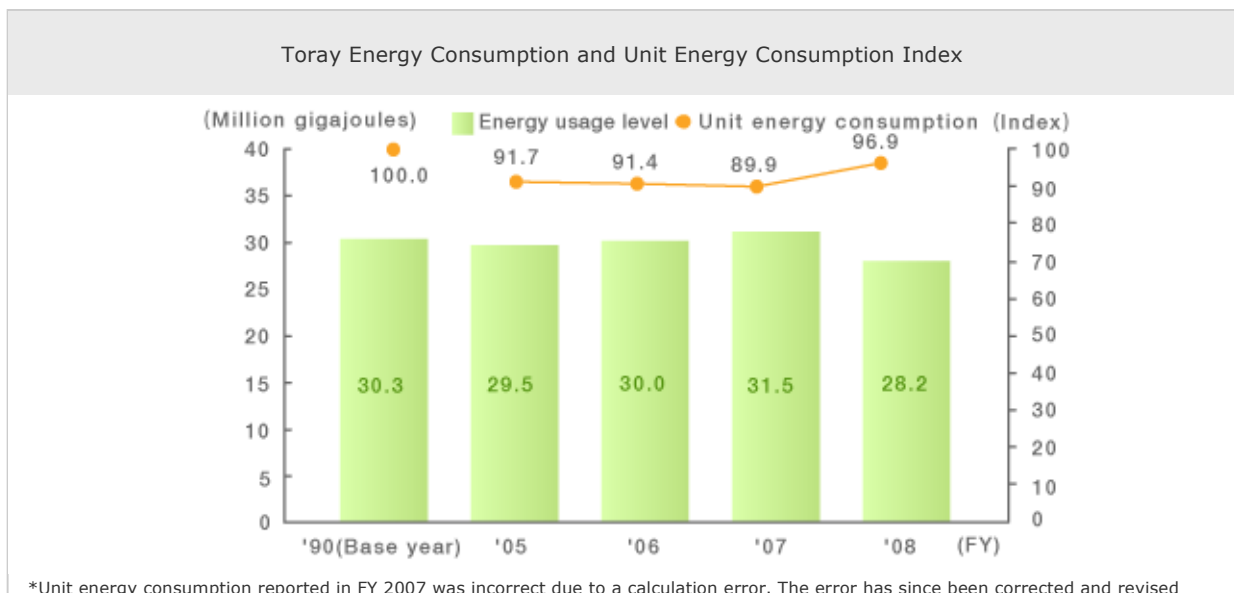
With the aim of fighting global warming, Toray Group continues to systematically reduce its GHG emissions through energy conservation measures that improve operational processes, and by converting from heavy oil to city gas. Toray is also participating in the Japanese government's trial implementation of an integrated domestic market for emissions transactions.

Toray Actions on Global Warming Initiatives

Toray has set a FY 2010 goal of a more than 6% reduction in GHG emissions over FY 1990 levels. In FY 2008, the fuel sources for boilers at the Seta, Aichi, and Mishima plants were converted, thereby saving about 5,000 tons of CO₂ per year. In addition to energy conservation activities such as thermal energy loss reductions through stronger controls, the amount of production emissions also fell, resulting in a 20% reduction in emissions compared to FY 1990. Thanks to the identification and promotion of energy conservation measures by in-house experts in 25 plants at 14 Japanese subsidiaries and affiliates, Toray Group succeeded in reducing its emissions by 10% over FY 2007 levels, including a reduction in production emissions.



Toray has been working hard to reduce its unit energy consumption rate by 2.0%. In FY 2008 however, production efficiency was reduced as a result of the effect of a decrease in production following the global economic downturn, and unit energy consumption deteriorated by 8.0%.



Converting from Fuel Oil to City Gas

As part of Toray's systematic effort to convert fuel sources in boilers, it completed conversion at its Seta, Aichi, and Mishima plants in FY 2008. This resulted in an emissions reduction of 5,000 tons of CO₂ per year.



Natural gas boilers at the Aichi Plant

Promoting Energy Conservation Diagnostics

Each year, Toray Group organizes energy conservation teams to help carry out its energy conservation diagnostic activities at both domestic and overseas plants as it strives to reduce GHG emissions. In FY 2008, these activities were carried out at four Japanese plants as well as at two overseas plants at subsidiaries and affiliates in China and Korea. This resulted in a reduction of GHG emissions of about 3,000 tons of CO₂ per year. Toray stepped up energy conservation activities at all its other plants as well, including those at Japanese subsidiaries and affiliates, thereby achieving a total reduction of 35,000 tons of CO₂ per year.

Initiatives to Protect the Ozone Layer

Toray ceased using chlorofluorocarbons (CFCs) in all manufacturing processes in 1994. The Company has also stopped purchasing CFCs for use in refrigerators, and has been working to replace existing CFCs with alternative compounds. In FY 2008, the Nagoya Plant introduced high-efficiency alternatives to CFC refrigerators, which use an alternative coolant compound with zero ozone depletion potential.

Household Eco-Account Book Program

With the aim of raising environmental awareness among employees and reducing the GHG emissions at household sector, Toray Group initiated a "Household Eco-Account Book program" in August 2008. As of March 31, 2009, 1,445 employees have signed up to participate in the program.

Participants have provided feedback such as "We now have more opportunities to talk about global warming at home," and "It's a great chance to teach my kids about environmental issues." According to a survey, all participants have said that the experience was good, i.e. 19.2% rating it "extremely good", while 55.8% replied as "good" and 25.0% "reasonably good."



Graph of CO₂ Emissions from the Household Eco-Account Book Program (Using the Tokyo Electric Power Company system)

Voluntary Reduction of Atmospheric Emissions of Chemical Substances

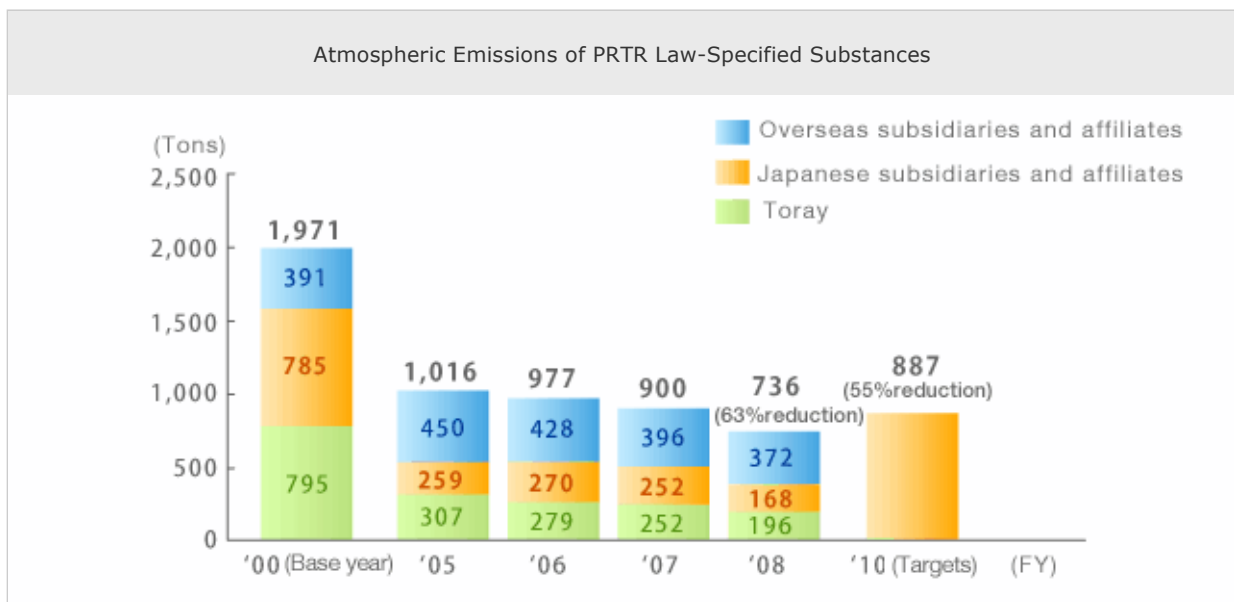
Toray Group has set Group-wide targets for the reduction of volatile organic compounds (VOCs) and PRTR Law-specified substances, under the Third Three-Year Environmental Plan, which began in FY 2007. It is working to voluntarily reduce its chemical substance emissions, in a systematic way.

Related Information

- [Third Three-Year Environmental Plan](#)

Reducing Atmospheric Emissions of PRTR Law-Specified Substances

In FY 2008, Toray Group reduced its atmospheric emissions of PRTR Law-specified substances by 18% compared to the previous year, which was a reduction of 63% over FY 2000 levels. This was a result of the full year effects of measures implemented at the end of FY 2007 at Toray Plastics (Malaysia) Sdn. Berhad (TPM) and the Toray Advanced Film Co., Ltd.'s Fukushima Plant. In FY 2008, TPM made efforts to strengthen the collection of organic exhaust gases, and these measures are expected to continue in FY 2009.



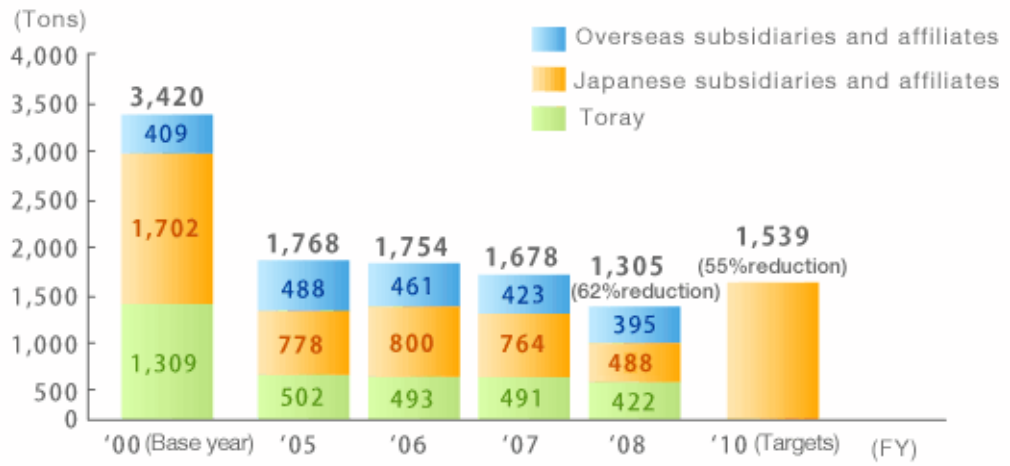
Reducing Atmospheric Emissions of VOCs

Working toward its Group-wide goal of a 55% reduction in VOC atmospheric emissions compared to FY 2000 levels by FY 2010, Toray Group has introduced voluntary initiatives to meet this target. In FY 2008, Toray Plastics (Malaysia) Sdn. Berhad and other companies implemented such initiatives, reducing atmospheric emissions of VOCs by 22% over the previous year, which was a reduction of 62% compared to FY 2000 levels.

In FY 2009, emissions are expected to be further reduced, thanks to the set up of regenerative combustion facilities at the Toray Okazaki Plant.



Device for the collection of organic exhaust gases installed at Toray Plastics (Malaysia) Sdn. Berhad



* VOC atmospheric emissions of overseas subsidiaries and affiliates reported in FY 2007 was incorrect due to a calculation error. The error has since been corrected and revised figures are shown.

Safety and the Environment

Initiatives to Prevent Air and Water Pollution

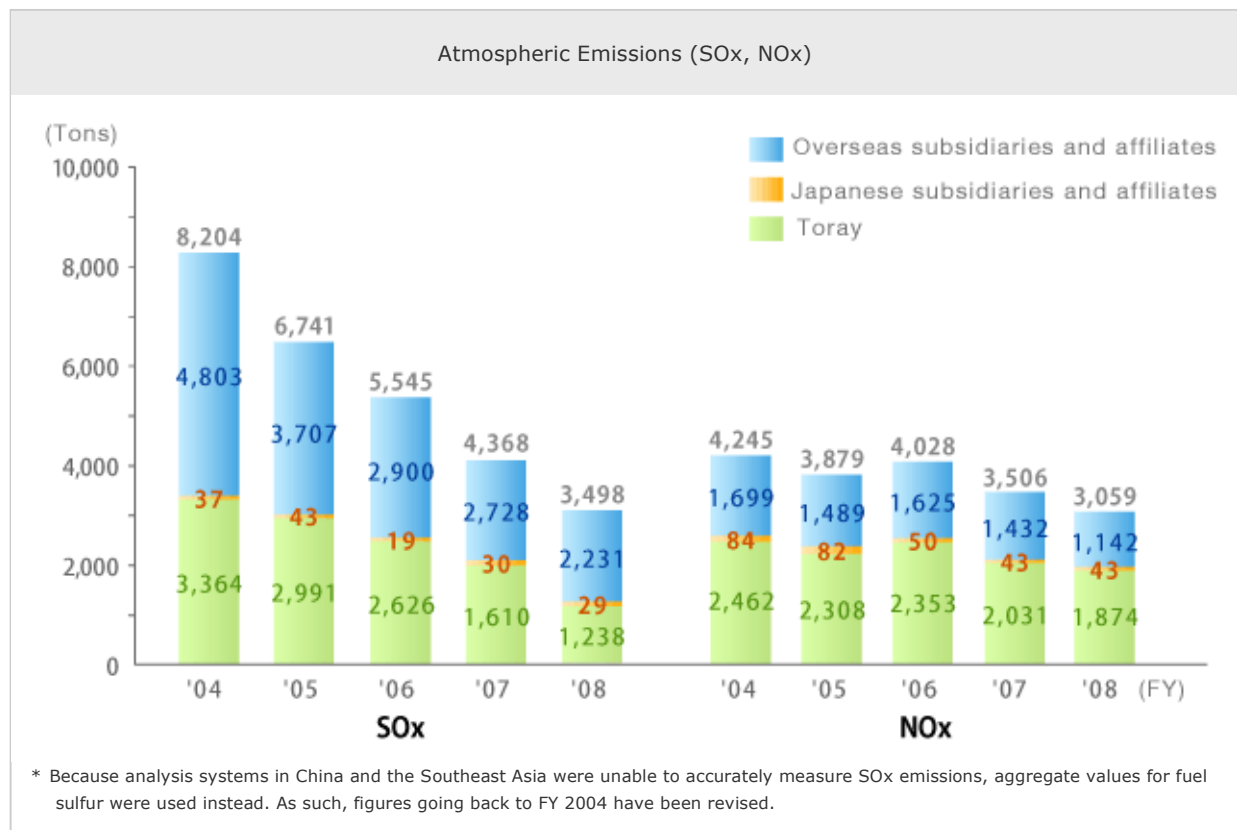
Toray Group has ongoing environmental initiatives in place for the prevention of air and water pollution during production. At both overseas and Japanese plants, the installation of desulphurization equipment and fuel conversion have cut SOx emissions. Also, the improvement of wastewater treatment facilities has reduced chemical oxygen demand (COD) emissions.

Atmospheric Emissions Management (Performance for FY 2008)

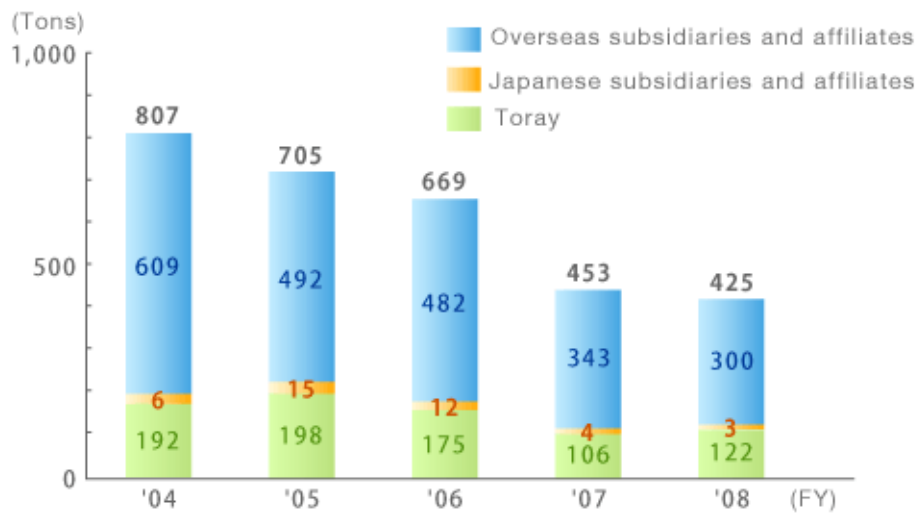
Toray Group emitted 3,498, 3,059, and 425 tons of SOx, NOx and dust emissions, respectively, which represented reductions of 20%, 13% and 6% compared to the previous year.

Toray reduced its SOx and NOx emissions by 372 and 157 tons, respectively, by converting to city gas at the Shiga, Mishima and Aichi plants, by promoting a switch to purchased electricity at the Ishikawa Plant, and owing to the impact of a fall in production volume. Dust emissions increased by 16 tons, although dust concentrations remained within regulatory values, due to problems with electrical dust collectors at the Ehime Plant.

Overseas subsidiaries and affiliates reduced its SOx, NOx and dust emissions by 497, 290, and 43 tons, respectively, by using low-sulfur coal and natural gas at P.T. Indonesia Toray Synthetics and Thai Toray Textile Mills Public Company Limited.



Atmospheric Emissions(Dust)

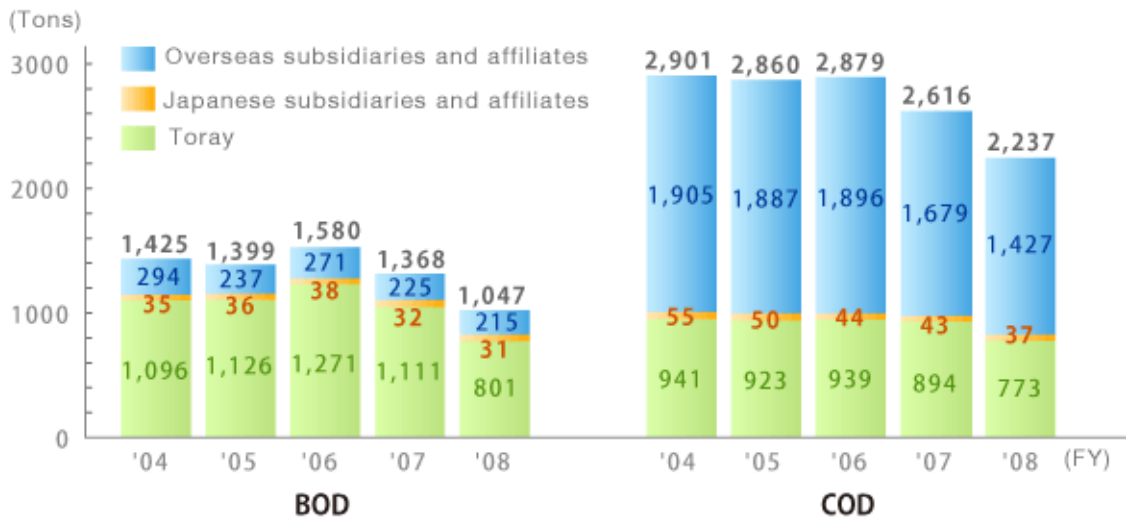


Water Quality Management (Performance for FY 2008)

Toray Group reduced its biochemical oxygen demand (BOD) and COD emissions by 1,047 and 2,237 tons, respectively, which represented reductions of 23% and 14% compared to the previous year. As a result of the effect of a decrease in production and the creation of a new MBR processing facility developed by Toray as a water purification measure at the Tokai Plant, the Company reduced BOD and COD emissions by 310 and 121 tons, respectively.

Overseas subsidiaries and affiliates reduced BOD and COD emissions by 10 and 252 tons, respectively by strengthening of operation management and the capacity of wastewater treatment facilities at Luckytex (Thailand) Public Company Limited's No. 3 Plant and Penfabric Sdn. Berhad's No. 4 Plant.

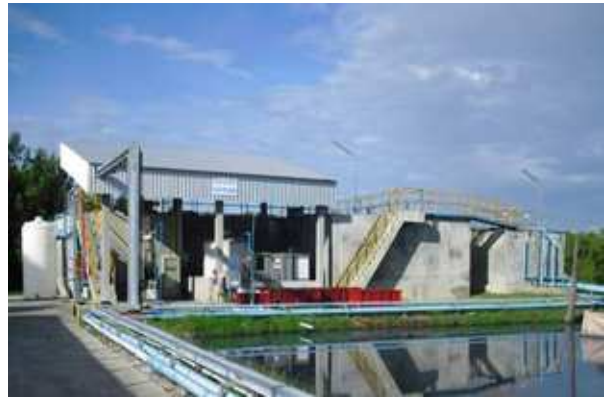
Water Emissions (BOD, COD)



* Although Toray had previously disclosed figures that included sewer effluent, in FY 2004 there was a change to include only figures for wastewater destined for public water area. As a result, figures going back to FY 2004 have been revised.



New MBR treatment facility at the Toray Tokai Plant



Wastewater treatment facility at Luckytex (Thailand)'s
No. 3 Plant

Safety and the Environment
Initiatives to Reduce Waste

Toray Group has zero emissions initiatives in place as it works toward the realization of a sustainable, recycling-based society. In the Third Three-Year Environmental Plan, Toray Group has set numeric targets for the rates of simply disposed waste * 1, landfill waste * 2 and recycled waste * 3, which are indicators for measuring zero emissions initiatives. Toray is working toward the achievement of these targets.

*1. Simply disposed waste rate
 (Incineration + landfill)/ Total waste

*2. Landfill rate
 Landfill waste/Total waste

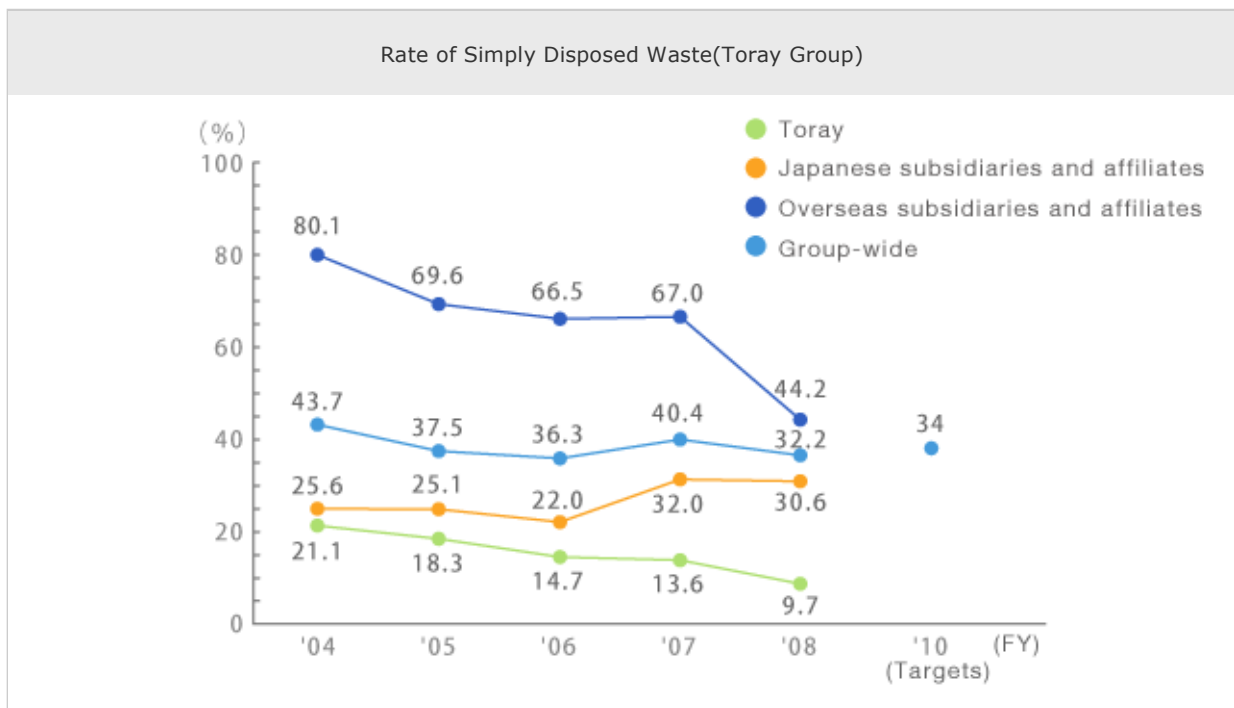
*3. Recycling rate
 (Recycled resources + resources with monetary worth)/ (Total waste + resources with monetary worth)

Related Information

- [Third Three-Year Environmental Plan](#)

Simply Disposed Waste Rate (Performance for FY 2008)

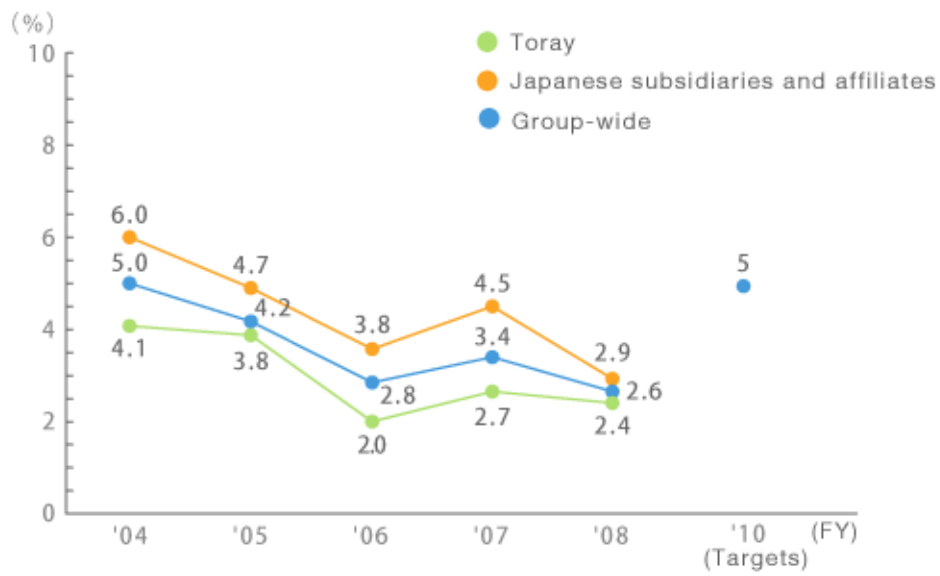
As a result of improvements to the simply disposed waste rate at Toray and its Japanese and overseas subsidiaries and affiliates, the rate for Toray Group improved by 8.2 points over the previous year to 32.2%. This enabled the early achievement of the FY 2010 target of 34% or less.



Landfill Rate (Performance for FY 2008)

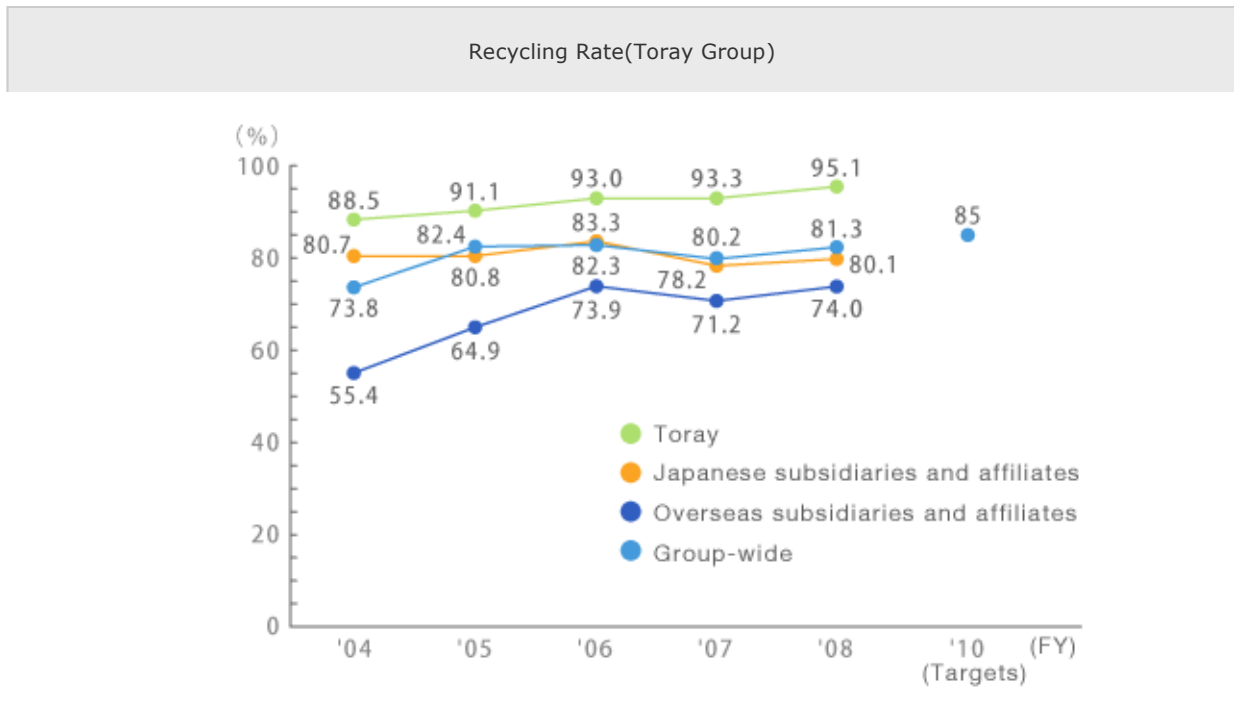
As a result of improvements over prior year performance at Toray and its Japanese subsidiaries and affiliates, Toray Group improved its landfill rate by 0.8 points over the previous year to 2.6%. This marked early achievement of the FY 2010 target of 5%, for the second year in a row.

Landfill Rate (Toray and its Japanese Subsidiaries and Affiliates)



Recycling Rate (Performance for FY 2008)

As a result of recycling activities at Toray and its Japanese and overseas subsidiaries and affiliates, the recycling rate for Toray Group improved by 1.1 points over the prior year to reach 81.3%. These activities will be continued in an effort to achieve the FY 2010 target of 85%.



Zero Emissions Activities

Toray Group defines zero emissions as a waste stream where simply disposed waste accounts for 1% or less of total waste generated. It is now working to achieve zero emissions at all Group companies and plants. In FY 2008, six more plants achieved zero emissions, bringing the total to 18 plants at 11 companies.

Zero Emission Companies and Plants in FY 2008	
Toray	Ehime Plant, Seta Plant, Okazaki Plant, Gifu Plant, Tsuchiura Plant
	Opelontex, Toray Textiles (Kiryu), Toray Coatex,

Japanese Subsidiaries

Maruichi Fiber, Toyo Plastic Seiko (Mishima Plant) ,Toray PEF Products (Konan, Tsukuba),
Toray Advanced Film (Fukushima, Nakatsugawa) ,Toray Fine Chemicals (Koriyama),
Toray Engineering (Shiga, Seta) ,Toray Precision Co., Ltd.

(Green font indicates companies and plants that achieved zero emissions in FY 2008)

Initiatives at Toray PEF Products Inc. (Konan)

Although Toray PEF Products has continually recycled plastic waste, other types of waste were still being incinerated or sent to landfills. In order to ensure such waste is now properly sorted and disposed of, "Waste Sorting Committees" have been established at all company work sites by corresponding managers. Through the promotion of recycling efforts, the Company was able to achieve zero emissions.


| Soil and Groundwater Pollution Prevention

Toray Group constructs special embankments around facilities and storage tanks holding hazardous or dangerous substances to prevent spills from leaking into the surrounding area or seeping into the soil.

Ongoing efforts to purify soil contamination at the Nagoya Plant (refer to CSR Annual Report 2005) and groundwater contamination at Toray Monofilament Co., Ltd. (see Toray Group Environmental Report 2002) discovered by Toray's own investigations appear to be making headway.

Toray Group is committed to conducting voluntary surveys, reporting and otherwise disclosing survey results, and undertaking adequate purification measures in the event that any pollution is discovered.

Related Information

-  [CSR Report 2005](#)
- [Past Issue CSR Reports and Environmental Reports](#)

| Compliance: Accident Prevention and the Environment

In FY 2008, none of Toray Group companies or sites was subject to government sanction due to violation of any law or ordinance. Although there were three accidents including a wastewater irregularity at the Toray Shiga Plant, all of them were immediately reported to the authorities, and measures were taken to prevent reoccurrence. Toray also received 19 complaints and requests concerning noise or odors. These were sincerely handled and improvements were made.

Toray Group Environmental Incidents in FY 2008	
Administrative disposition due to violations of laws or ordinances *	0
Accidents (fires, explosions, environmental accidents, etc.)	3
Complaints/requests (noise, odor, etc.)	19

*Includes improvement orders and fines. Improvement guidance and recommendations are included in accident figures.

Toray introduced environmental accounting in FY 1999 to record and calculate the effectiveness of environment-related investments and costs.

Toray FY 2008 Accounting Results

In FY 2008, environment-related investment amounted to 1.67 billion yen. Major components of this total included measures to reduce atmospheric emissions of chemical substances, wastewater treatment facilities, and equipment for the reduction of waste.

Costs totaled 8.12 billion yen. Of this amount, atmospheric costs totaled 2.36 billion, while water quality costs amounted to 2.46 billion. The main portion of total costs, consisted of operating costs for exhaust gas and wastewater treatment equipment already installed.

As a result, Toray realized 597 million yen in energy cost reductions, 125 million yen in waste disposal cost reductions, and gained 613 million yen on the sales of valuable recycled resources.

Toray FY 2008 Environmental Accounting

Costs				
Item		Subcategory and description	Investment (million yen)	Investment expenses (million yen)
Business area costs	Pollution prevention costs	Air(including CFC countermeasures)	421	2,357
		Water quality	554	2,464
		Noise and vibration	8	22
		Greening	3	288
		Foul odors and other	207	166
	Global environment conservation costs	Energy conservation and combating global warming	473	—
Resource recycling costs	Waste reduction, recycling,disposal, and PCB waste disposal services	2	1,934	
Upstream and downstream costs		Product recycling	0	22
		Container and package recycling	0	1
Management activity costs		Indirect labor costs,ISO certification and maintenance,	0	371

	environmental communications, and education		
Social initiative costs	Regional initiatives, support for organizations, etc.	0	43
Environmental damage costs	SOx fines, soil purification, etc.	0	454
Total		1,668	8,122

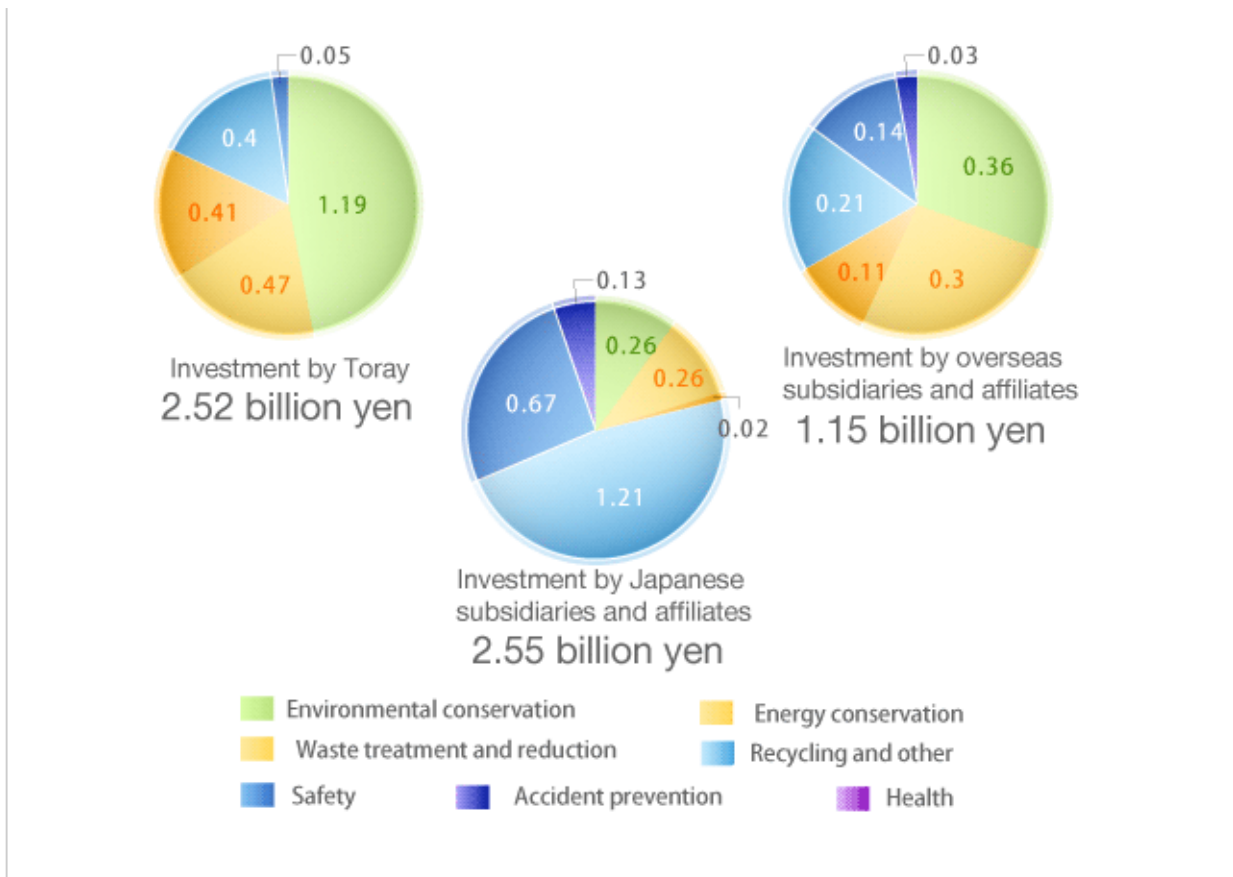
Effectiveness	
Item	Amount (million yen)
Reduction in energy costs	597
Reduction in waste disposal costs	125
Sale of valuable (i.e. with monetary worth) recycled resources	613

Toray Group Facilities' Investment in Safety, Health, Accident Prevention, and Environmental Preservation Projects

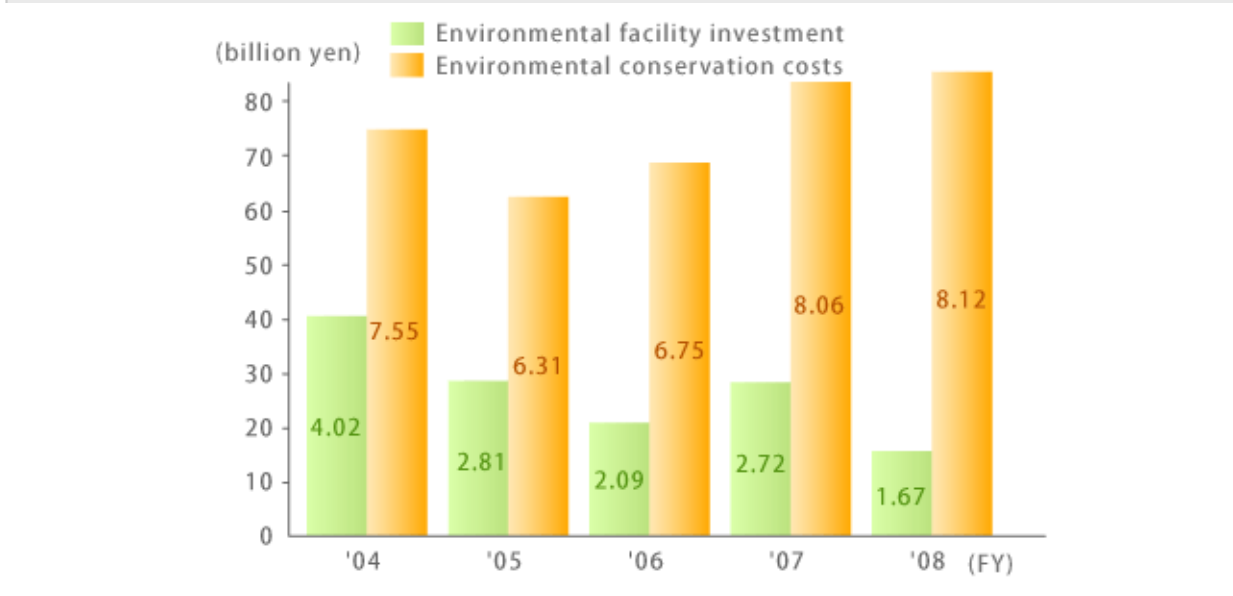
In addition to information on environmental and energy conservation, and recycling, which are the subjects of environmental accounting, Toray Group reports its investments relating to safety, accident prevention, and health. The total amount of equipment investment in FY 2008 was 2.52 billion yen for Toray, 2.55 billion yen for Japanese subsidiaries and affiliated companies, and 1.15 billion yen for overseas subsidiaries and affiliates.

Safety investment continued to center on retrofitting existing equipment to improve fundamental safety, while accident prevention investment was made to strengthen buildings to increase resistance to earthquakes. In the area of environmental efforts in Japan, Dow Corning Toray Co., Ltd. has been taking steps to reduce atmospheric emissions of chemical substances, while Toray Advanced Film Co., Ltd. has been increasing wastewater treatment facility capacity. Overseas, Luckytex (Thailand) Public Company Limited also strengthened the capacity of its wastewater treatment facilities.

Toray Group Facility Investment and Breakdowns



Toray environmental facility investment and environmental conservation costs



Toray Environmental Accounting Standards

- Some categories were changed based on the Ministry of the Environment’s Guidelines for FY 2005.
- Capital investment also includes facility investments for which environmental preservation is not the main objective. Capital investment resulting from leases is also included.
- Expenses include labor costs and depreciation. However, internal labor costs related to local volunteer activities are not included.
- Only economic effects that can be determined with a high degree of certainty are included in the

calculation. Presumed effects are not included.

- Energy cost reduction figures show the amount of reduction for the 12 months after the completion of an energy conservation facility. Expenses are not recorded because they are deducted when the effect is calculated.
- Waste disposal cost reduction figures show the amount of reduction achieved through waste reduction efforts and resource recycling for 12 months after the measures are undertaken.
- In allocating reserves to cover anticipated expenses for PCB waste disposal and for other matters, the entire amount is assessable in the year for which the reserves are allocated.

Environmental Impact
 Overview FY 2008

 Chemical Substance
 Emissions and Transfer Data

 Environmental Data
 for 12 Toray Plants and
 Principal Subsidiaries and Affiliates

Environmental Impact Overview FY 2008

INPUT	Toray	Japanese Subsidiaries and Affiliates	Overseas Subsidiaries and Affiliates
Energy (1,000,000 gigajoules)	25.6	4.9	34.4
Water (1,000,000 tons)	186	15	35
Raw materials			

OUTPUT	Toray	Japanese Subsidiaries and Affiliates	Overseas Subsidiaries and Affiliates
GHG (10,000 tons CO ₂) *1			
6 gases including CO ₂	203	37.2	212
PRTR Law-specified substances (tons)			
Atmospheric emissions	196	168	372
Water emissions	23	0	0
Waste transfers	898	1,056	736
Air pollutants (tons)			
SO _x	1,238	29	2,231
NO _x	1,874	43	1,142
Dust	122	3	300
Industrial wastewater (1,000,000 tons)			
	179	12	22
Water pollutants (tons) *2			

BOD	801	31	215
COD	773	37	1,427
Nitrogen	585	21	-
Phosphorus	43	1	-
Waste (1,000 tons)			
Recycled	30.2	15.9	36.9
Incinerated and other	2.4	6.3	6.0
Direct landfill disposal	0.8	0.7	23.3
Coal ash (1,000 tons)			
Recycled	56.8	-	32.4
Direct landfill disposal	1.2	-	3.3

*1: Calculation of GHG emissions CO2 conversion coefficient for purchased electricity of overseas subsidiaries and affiliates were calculated by each country.

*2: Water pollutant calculations include the following (Includes public water area emissions only)

■Toray

BOD ... All 12 plants and 1 research laboratory

COD* ... 6 plants subject to Total Pollutant Load Control + 4 plants and 1 research laboratory

Nitrogen/phosphorus ... All 12 plants and 1 research laboratory

■Japanese subsidiaries and affiliates

BOD ... 33 plants at 26 companies

COD* ... 7 plants at 7 companies subject to Total Pollutant Load Control + 27 plants at 12 companies

Nitrogen/phosphorus ... 16 plants at 15 companies

■16 plants at 15 companies

BOD ... 16 plants at 15 companies

COD* ... 16 plants at 15 companies

Nitrogen/phosphorus ... None

*COD figures for Toray, Japanese subsidiaries and affiliates, and facilities in Korea are given in COD_{mn} (using the potassium permanganate method).

COD figures for other overseas subsidiaries and affiliates are given in COD_{Cr} (using the potassium dichromate method).

[Environmental Impact
Overview FY 2008](#)
**[Chemical Substance
Emissions and Transfer Data](#)**
[Environmental Data
for 12 Toray Plants and
Principal Subsidiaries and Affiliates](#)

Chemical Substance Emissions and Transfer Data
PRTR Law-specified substance emissions and transfer data for FY 2008

Tons (dioxins: mg-TEQ)

Note: The List shows emissions and transfers of 39 substances (out of Toray's 59 PRTR Law-specified substances) exceeding 50 kg and dioxins

Toray				
Substance name	Atmospheric emissions	Water emissions	Soil emissions/ company landfill	Waste transfers
Methyl acrylate	0.2	0.3	0.0	0.0
Acrylonitrile	36.7	2.6	0.0	262.9
Acetaldehyde	5.1	0.0	0.0	0.0
Acetonitrile	0.0	0.0	0.0	1.4
Antimony and antimony compounds	0.0	0.0	0.0	0.4
Bisphenol-A type epoxy resin	0.0	0.0	0.0	28.6
Ethylene glycol	0.7	0.0	0.0	110.7
Ethylene glycol monoethyl ether	0.6	0.0	0.0	10.3
ϵ -Caprolactam	0.3	12.0	0.0	27.5
Xylene	11.0	0.0	0.0	0.3
Silver and other water-soluble compounds	0.0	0.0	0.0	4.1
Chromium and chromium (III) compounds	0.0	0.0	0.0	0.1
o-chlorotoluene	0.5	0.0	0.0	0.0
Chlorobenzene	1.9	0.0	0.0	36.4

Chloroform	7.9	0.0	0.0	65.2
Cobalt and cobalt compounds	0.0	0.7	0.0	6.3
Inorganic cyanide	42.6	0.0	0.0	0.0
1,4-Dioxane	0.0	2.4	0.0	0.0
Diuron	0.0	0.0	0.0	2.1
P-Dichlorobenzene	3.2	0.0	0.0	2.1
Dichloromethane	2.5	0.0	0.0	4.7
N,N-dimethylformamide	11.1	1.2	0.0	46.0
Styrene	17.2	0.0	0.0	1.2
Terephthalic acid	0.0	0.0	0.0	136.5
Dimethyl terephthalate	0.0	0.0	0.0	1.1
Trichloroethylene	0.6	0.1	0.0	0.4
Toluene	3.0	0.0	0.0	50.1
Nitrobenzene	0.0	0.0	0.0	29.2
Pyridine	0.0	0.0	0.0	2.8
m-Phenylenediamine	0.0	2.8	0.0	0.0
Bromomethane	41.0	0.0	0.0	0.0
Benzene	0.7	0.9	0.0	0.0
Boron and boron compounds	0.0	0.0	0.0	16.8
Poly (oxyethylene) alkyl ether	1.0	0.0	0.0	20.1
Manganese and manganese compounds	0.0	0.2	0.0	2.6
Maleic anhydride	0.0	0.0	0.0	0.1
Methacrylic acid 2,3-Epoxypropyl	0.0	0.0	0.0	11.8
Methyl methacrylate	7.7	0.0	0.0	15.6
Methyl-1,3-phenylene diisocyanate	0.0	0.0	0.0	0.4

Dioxins	4.0	31.7	0.0	25.6
Total	196	23	0	898

Tons (dioxins: mg-TEQ)

Note: The List shows emissions and transfers of the above 30 substances(out of the 46 PRTR Law-specified substances for domestic subsidiaries and affiliates)exceeding 50 kg and dioxins

Japanese Subsidiaries and Affiliates				
Substance name	Atmospheric emissions	Water emissions	Soil emissions/ company landfill	Waste transfers
Adipic acid bis(2-ethylhexyl)	0.0	0.0	0.0	0.1
Acetonitrile	0.0	0.0	0.0	7.8
2-aminoethanol	0.0	0.0	0.0	79.3
1-Allyloxy-2,3-epoxy propane	0.0	0.0	0.0	0.7
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	0.0	0.0	0.0	13.0
Ethylbenzene	4.5	0.0	0.0	3.3
Ethylene oxide	1.6	0.0	0.0	0.0
Ethylene glycol	0.0	0.0	0.0	2.5
Ethylene glycol monoethyl ether	3.8	0.0	0.0	0.4
Epichlorohydrin	0.1	0.0	0.0	23.7
Ethylenediamine	0.0	0.0	0.0	0.1
Xylene	33.4	0.0	0.0	25.4
Chlorobenzene	0.3	0.0	0.0	5.8
2-Ethoxyethyl Acetate	0.0	0.0	0.0	0.6
1,3-Dichloro-2-propanol	0.0	0.0	0.0	13.0
Dichloromethane	3.3	0.0	0.0	0.3
N,N-dimethylformamide	25.1	0.0	0.0	188.5
Styrene	0.0	0.0	0.0	0.4

Decabromodiphenyl ether	0.0	0.0	0.0	0.1
Toluene	93.4	0.0	0.0	652.7
Carbon disulfide	0.9	0.0	0.0	0.0
Hydroquinone	0.0	0.0	0.0	0.1
Bis (2-ethylhexyl) phthalate	0.0	0.0	0.0	1.1
Poly (oxyethylene) alkyl ether	0.0	0.0	0.0	31.3
Formaldehyde	0.1	0.0	0.0	0.2
N-butyl methacrylate	0.1	0.0	0.0	0.0
Methyl methacrylate	0.2	0.0	0.0	0.0
3-Methylpyridine	1.5	0.0	0.0	4.4
α -Methyl styrene	0.0	0.0	0.0	0.4
Molybdenum and molybdenum compounds	0.0	0.0	0.0	0.4
Dioxins	2.5	0.0	0.0	1.0
Total	168	0	0	1,056

Environmental Impact
 Overview FY 2008

 Chemical Substance
 Emissions and Transfer Data

 Environmental Data
 for 12 Toray Plants and
 Principal Subsidiaries and Affiliates


 an enlargement

Environmental Data for 12 Toray Plants and Principal Subsidiaries and Affiliates															
Unit	GHG emissions 10,000 tons CO ₂ / year	Emission volume												Principal manufactured products	
		PRTR				Gas emissions			Water emissions		Wastewater	Waste			
		Emissions			Waste transfers	Sox	Nox	Dust	BOD	COD		Recycled	Simple incineration and other		Landfill disposal
		Air	Water	Soil & landfill											
tons / year	tons / year	tons / year	tons / year	tons / year	tons / year	tons / year	tons / year	tons / year	tons / year	million m ³ / year	tons / year	tons / year	tons / year		
[Japan] Shiga Plant	10.5	2	0	0	90	0	53	0	94	115	26.3	3,948	326	0	Ecsaine* man-made suede Lumirror* polyester film OPTICAL* color filter Electronics & information materials
[Japan] Seta Plant	0.6	0	0	0	0	0	0	0	0	1	0.4	206	0.3	0	Toraylon* blended yarn Medical products (Inoue balloon catheters and Anthrone* P-U catheters)
[Japan] Ehime Plant	48.8	67	8	0	436	579	759	81	69	103	33.4	10,006	58	10	Tetoron* staple fiber Torayca* carbon fiber Romembra* reverse osmosis membrane-module Toraycon* PBT resin
[Japan] Nagoya Plant	18.6	19	0	0	109	12	295	7	211	228	32.2	1,300	1,778	248	Amilan* nylon resin Toraycon* PBT resin Gypsum Various fine chemicals
[Japan] Tokai Plant	68.7	46	15	0	138	10	318	7	335	338	18.4	6,411	102	445	Caprolactam terephthalic acid Tetoron* chips Torelina* PPS resin
[Japan] Aichi Plant	2.9	0	0	0	15	1	7	0	4	-	2.1	169	0	11	Nylon filament yarn Raytela* plastic optical fiber
[Japan] Okazaki Plant	11.9	15	0	0	55	122	27	17	26	38	6.6	3,697	0	11	Nylon filament yarn Toray Waterless Plate* printing plate Filtrizer* artificial kidney Torayvino* home water purifier
[Japan] Mishima Plant	19.6	3	0	0	37	28	263	1	37	45	36.5	976	94	66	Lumirror* polyester film Tetoron* filament yarn Dorner* (Oral Administration Prostacyclin [PGI2] Derivative) Feron* natural

															interferon- B preparation
[Japan] Chiba Plant	1.8	43	0	0	1	0	11	0	6	60	4.3	2,507	53	10	Toyolac* ABS resin
[Japan] Tsuchiura Plant	3.3	0	0	0	0	0	0	0	1	-	0.3	100	0	0	Torayfan* BO polypropylene film
[Japan] Gifu Plant	9.1	1	0	0	10	427	52	2	13	8	9.3	629	0	1	Ecsaine* man-made suede Lumirror* polyester film Torelina* PPS film
[Japan] Ishikawa Plant	6.0	0	0	0	5	58	86	7	6	0	9.4	132	1	13	Tetoron* filament yarn Nylon filament yarn
[Japan] Toyo Tire Cord Co., Ltd.	1.5	2	0	0	0	0	1	0	2	4	1.1	134	8	0.3	Tire cord Carpet pile fiber
[Japan] Toray Advanced Film (Mishima)	0.7	18	0	0	41	0	1	0	0	0	0.3	507	14	2	Cerapeel* (release film)
[Malaysia] Penfabric (Mill4)	6.1	0	0	0	0	0	20	5	45	404	2.2	1,246	440	414	Polyester-cotton blend textile
[U.S.A.] Toray Plastics (America), Inc. (Rhode Island)	9.9	3	0	0	10	3	12	8	4	27	0.2	600	2,292	646	Torayfan* polypropylene film Lumirror* polyester film

CSR Report 2009 Highlights

As a global manufacturer of advanced materials, Toray Group is working to help address global issues.


CSR REPORT 2009 HIGHLIGHT 1
Tackling Climate Change


Toray aims to reduce its CO₂ emissions through the development and promotion of next-generation materials such as Carbon Fiber Reinforced Plastics (CFRP) for the automotive and aircraft industries.

[1.Expanded Use of CFRP](#)

[2.Establishment of Automotive & Aircraft Center and Our Technological Innovation](#)

CSR REPORT 2009 HIGHLIGHT 2
Initiatives to Mitigate Water Resource Issues


Toray is contributing to solving water resource issues by providing safe water to regions around the world that suffer from water scarcity. This is being achieved by applying Toray's water treatment membrane technology in seawater desalination.

CSR REPORT 2009 HIGHLIGHT 3
CSR Initiatives Around the World


Toray Group employees are promoting CSR activities in countries and regions where the company operates. The following report covers the details and results of Toray Group's main CSR activities.



Highlight 1
Tackling Climate Change

Paving the way toward a low-carbon society with strong, lightweight, next-generation materials

Average temperatures around the world are gradually rising due to an increase in greenhouse gases (GHGs) in the atmosphere. If the increase in these gases are not controlled, damage to the global environment and economy will be immeasurable.

Toray Group is working towards the realization of a low-carbon society. To this end, Toray Group is developing and promoting new materials as its corporate mission, while accelerating measures that contribute to the reduction of GHGs for the whole society.

Tackling Climate Change

1. Expanded Use of CFRP

Strong, Lightweight Carbon Fiber Reinforced Plastic

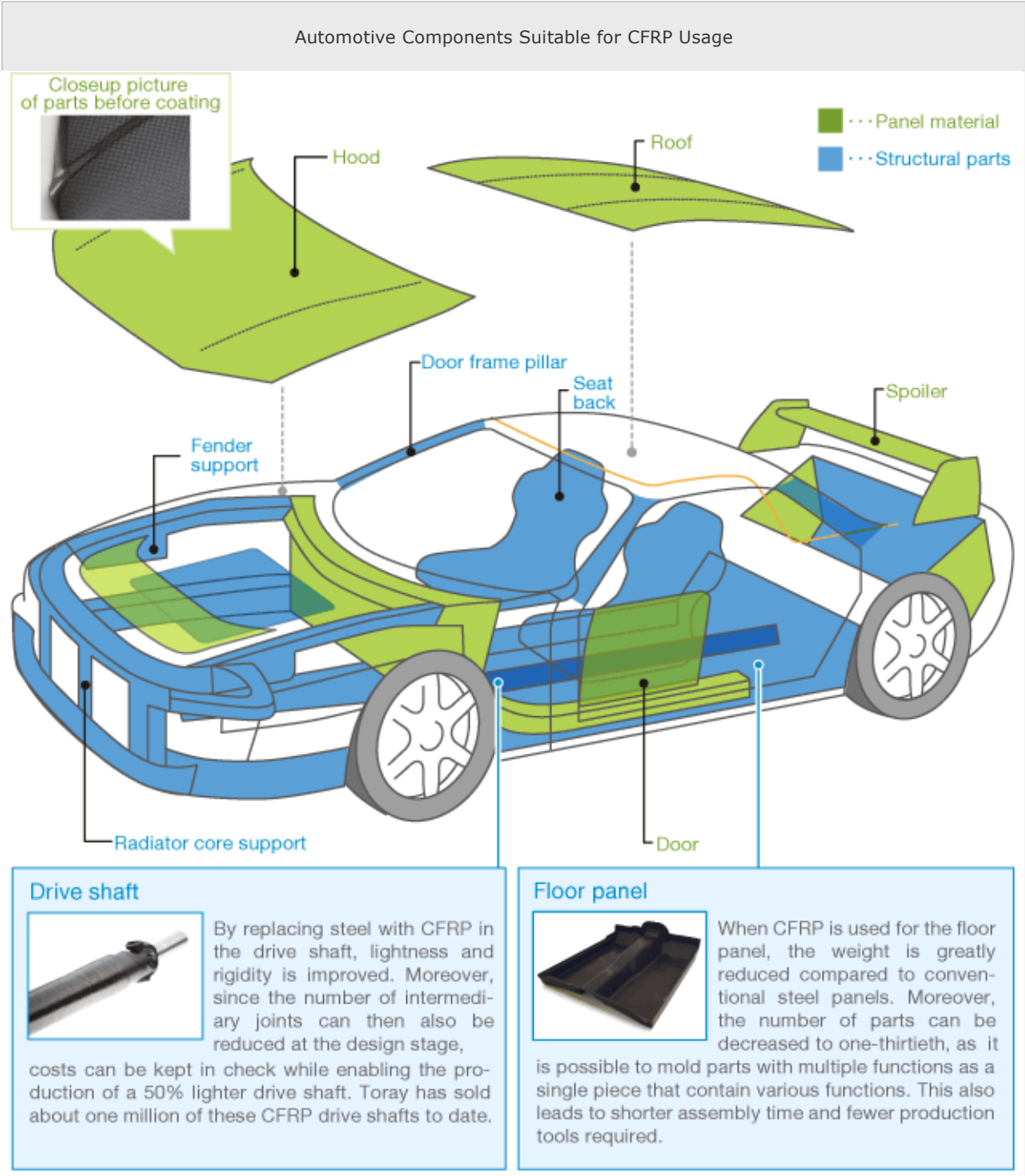
Toray pioneered the mass production of carbon fiber in 1971, through the baking and carbonizing of acrylic fibers. Carbon fiber is a high-performance fiber that is both light and strong. It weighs one quarter the specific gravity of steel yet is ten times stronger per unit weight. Carbon Fiber Reinforced Plastic (CFRP) is an advanced material made by impregnating and hardening resins in the carbon fiber. With its specific strength and rigidity, CFRP enables the creation of much lighter parts and products compared with traditional steel and aluminum. CFRP was first used in sports and leisure goods such as golf clubs and tennis rackets, and applications then expanded into the aerospace industry for components used in aircraft and satellites, pressure vessels, industrial machinery, and civil engineering construction materials. Along with the growing need to reduce fuel costs in recent years, the demand for CFRP from the environmental perspective has greatly increased in the automotive and aircraft industries as a material to build lighter weight cars and planes.

Expanded Use of CFRP in the Automotive Industry

CFRP has been used as a material for drive shafts and high-end automotive bodies since the 1990s. It is here, in the automotive sector, where demand for CFRP is expected to increase greatly in the future. Development is now underway to further expand CFRP applications in auto parts.

One of the main technological themes in this area is thermoplastic CFRP. The property of this material enables it to be processed through the application of heat. Compared with the rigidity of conventional thermoset CFRP, thermoplastic CFRP offers the advantage of being easy to mold, process, and recycle. As a result, the application of this material is expected to shorten manufacturing times, greatly reduce costs, and lower the impact on the environment.

The targeted use reflecting the respective properties of thermoset and thermoplastic CFRP will lead to its use in a wider range of parts. For example, if CFRP is used for 17% of an automobile's parts, its weight can be reduced by about 30% of a standard automobile.



Reducing CO₂ Emissions over the Product Life Cycle through Weight Reduction

In addition to automobiles and aircraft, today CFRP is being used in power-generating wind turbines and lightweight tanks that hold compressed natural gas (CNG) on trucks and buses. Although more CO₂ is emitted in the manufacturing process for CFRP than for steel, CFRP can greatly reduce fuel consumption by making automobiles and aircraft lighter. As a result, adoption of CFRP reduces CO₂ emissions over the entire life cycle of the product, from the raw material and material manufacturing stages, right through to product use and disposal. About 35 tons of CFRP are used in the super-sized Airbus A380, which went into service in 2007. The Boeing 787, a mid-size model that is expected to go into service in 2010, will also use around 35 tons of CFRP



The Boeing 787, which uses CFRP for

per plane, accounting for about 50% of the structural elements. It is expected that aircraft weight will be reduced by about 20% as a result. (Amounts of CFRP used are Toray estimates.)

its structural parts
Photo courtesy of Boeing

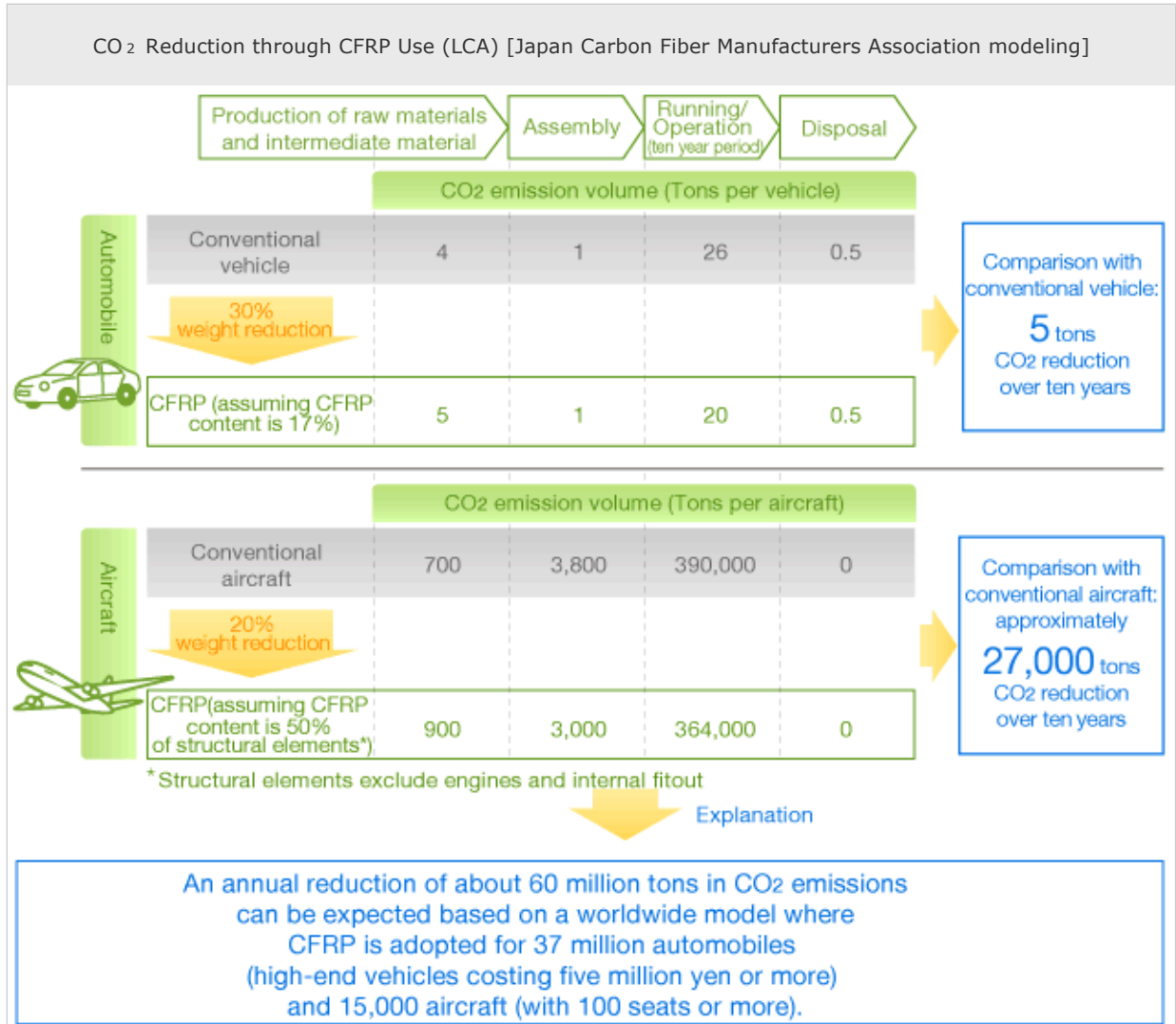
Reducing CO₂ Emissions from Automobiles and Aircraft

The life cycle assessment (LCA) for the full-scale adoption of CFRP in automobile and aircraft parts is shown in the diagram below.

By using CFRP for 17% of the weight of an automobile, the resulting savings in CO₂ emissions can be about 5 tons per unit (16% reduction) over a ten-year product life cycle. This is equivalent to about 0.5 tons of CO₂ per year. If CFRP were adopted for 37 million high-end vehicles worldwide costing five million yen or more, the annual reduction of CO₂ emissions would total approximately 18.5 million tons.

By using CFRP for 50% of the weight of an aircraft, the resulting savings in CO₂ emissions from improved fuel efficiency can average 27,000 tons per aircraft (7% reduction) over a ten-year product life cycle. This is equivalent to about 2,700 tons of CO₂ per year. If CFRP were adopted for 15,000 passenger jets worldwide, the annual reduction of CO₂ emissions would be about 40.5 million tons.

With a 34% share of the world CFRP market, Toray Group is actively promoting technology development in order to accelerate the widespread adoption of CFRP. Accordingly, the Group intends to help fight global warming.



Calculation parameters for these charts are based on the following modeling supplied by the Japan Carbon Fiber Manufacturers Association:

- Automobile
Unladen weight 1,380 kg *1 (gasoline engine, four-door, front-engine, front-wheel drive layout) Actual fuel consumption 9.8km/l *1 Lifetime

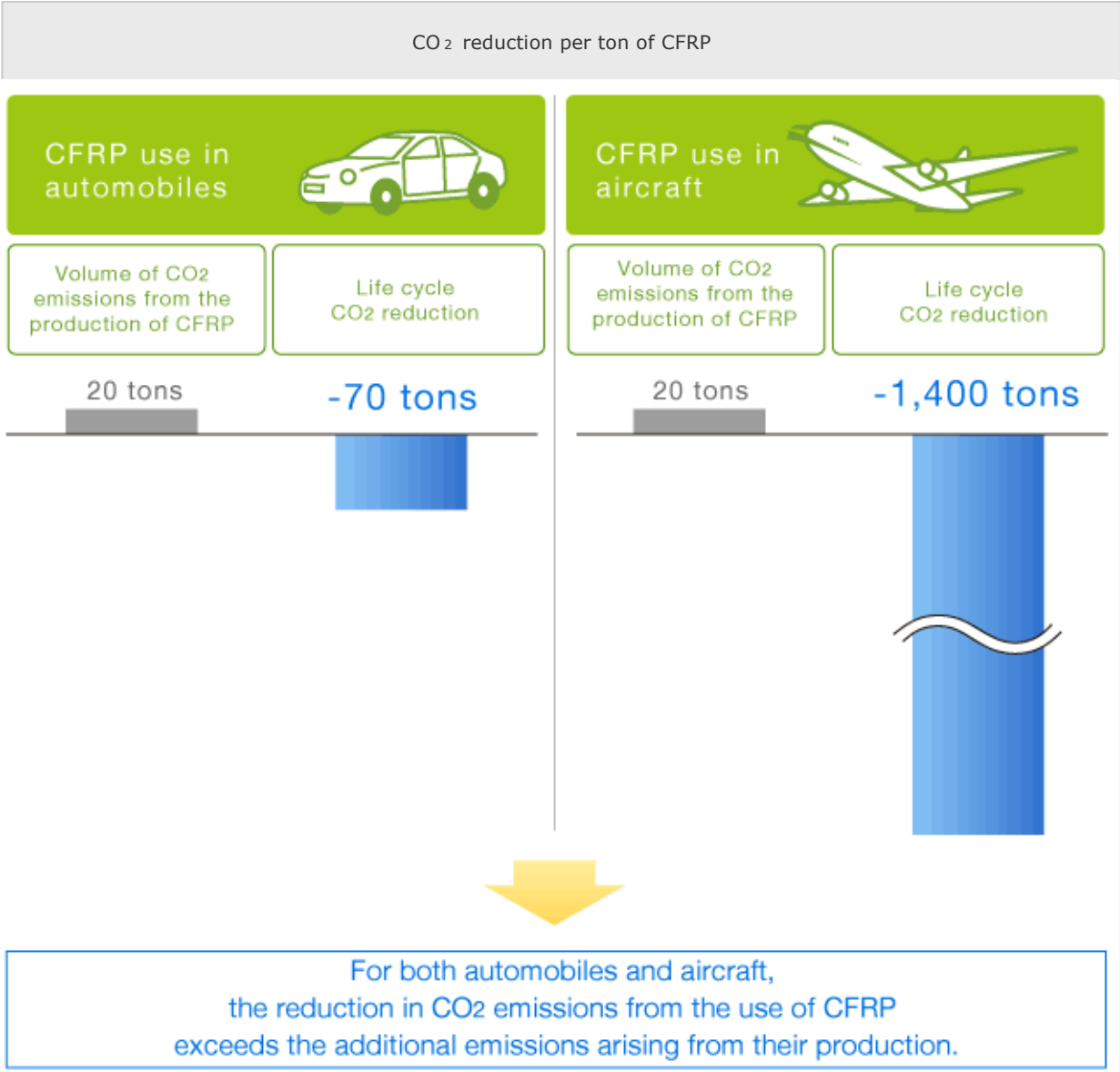
distance travelled: 94,000 km (Average number of years use [10.1 years] multiplied by number of kilometers travelled per year [9,300 km] *2)

(Sources:*1: Japan Automobile Manufacturers Association; *2: Ministry of Land, Infrastructure, Transport and Tourism in Japan)

●Aircraft

Mid-size passenger aircraft (B767) with Japanese domestic flight specifications. 280 seats. Route: Japanese domestic route between Haneda (Tokyo) and Chitose (Sapporo) - 500 miles, 2,000 flights per year for ten years

(Source: All Nippon Airways Co., Ltd.)





Tackling Climate Change

2. Establishment of Automotive & Aircraft Center and Our Technological Innovation

Further Technological Innovation in Advanced Environmental Materials

Toray is undertaking new initiatives with the aim of expanding its range of materials with high environmental performance in the areas of automobiles and aircraft, whose operations greatly impact the global environment.

Comprehensive Technology Development Center for Advanced Materials Used in Automobiles and Aircraft

In April 2009, Toray established its Automotive & Aircraft Center (A&A Center) in Nagoya, Aichi Prefecture. The development and production sites for advanced materials used in automobiles and aircraft were previously spread among plants and offices in Ehime, Shiga, and Nagoya. Now these functions have been combined at the new A&A Center. Through the organic cooperation and mutually complementary functioning of the Automotive Center (AMC), Plastics Application Technology Engineering Center (PATEC), and Advanced Composites Center (ACC), Toray Group has launched a comprehensive technology development center that can offer even more customers solutions based on combinations of Toray's advanced materials and technologies. The goal is to accelerate the development and strengthen joint initiatives with customers, while taking advantage of being situated in Nagoya, a location close to Japan's major automobile and aircraft manufacturers.

Resolving Technology Issues through Seamless Joint Development

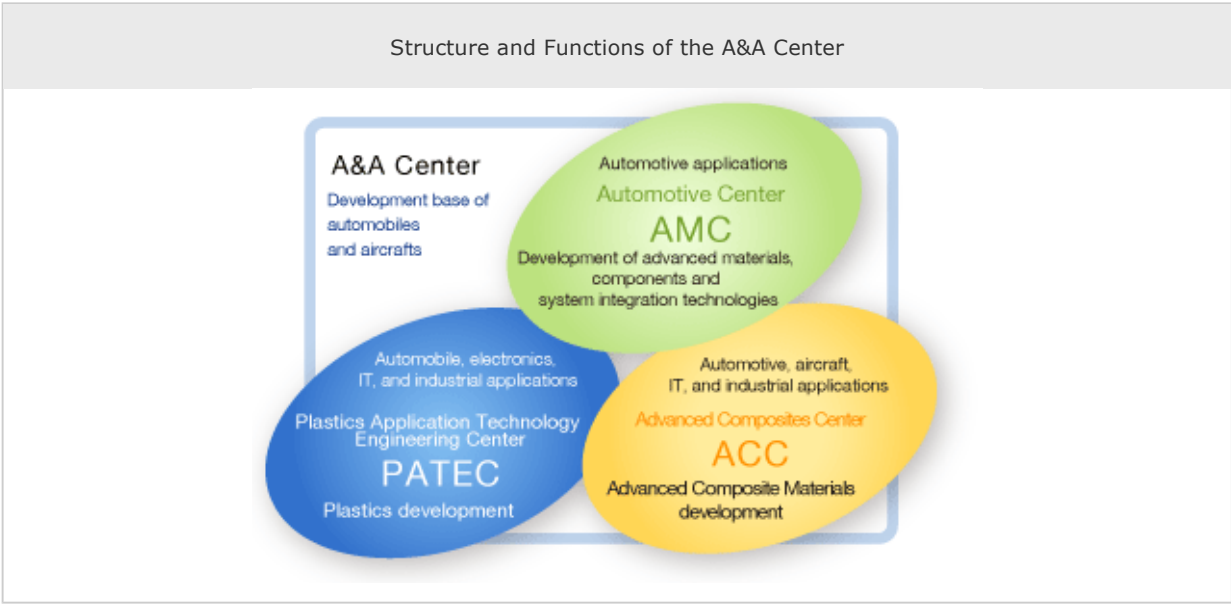
The A&A Center carries out innovative development of Toray's advanced materials in the automotive and aircraft fields. These materials include CFRP, plant-based plastics, high-performance films, high-performance chemicals, and IT-related materials. The center is actively pursuing technology development in order to expand the use of CFRP, which can play a major role in increasing the performance of environmentally-friendly vehicles such as hybrid cars, and electric cars of the future. Nobuhiko Shimizu, Manager for Development Unit at the Automotive Center explains that, "As a materials manufacturer, Toray actively works with customers all the way from the product specifications development stage to the product molding and evaluation stages, while sharing its various technologies and resources. The A&A Center's biggest advantage is its ability to pursue joint development with customers. The response has been better than expected right from the opening of the new A&A Center, and we have already begun joint development with numerous



Nobuhiko Shimizu
 Manager
 Development Unit
 Automotive Center
 Toray Industries, Inc

automobile and parts manufacturers."

Currently, the center's most significant project area is technology development for the purpose of improving production efficiency. By improving manufacturing efficiency through the use of thermoplastic CFRP, molding time is being shortened from the previous minimum of about ten minutes for thermoset CFRP. According to Shimizu, "If we succeed with this technology innovation, CFRP can be used on a full-scale basis for mass-produced models with monthly production at the 10,000 vehicle level. We can greatly contribute to the prevention of global warming by making available high fuel efficiency CFRP vehicles to many drivers."



Automotive Center (AMC)

<Feedback from Automakers01>

Kiyoshiba Mase
General Manager
Organic Material Department,
Vehicle Material Engineering Division
TOYOTA Motor Corporation

Using CFRP Technology to Reduce Vehicle Weight

As we face one of the worst economic downturns of the century, environmental technology is essential in order to compete in the age of next generation



vehicles. In particular, ways to reduce vehicle weight and LCA are drawing a lot of attention in the industry.

The exceptional strength and lightweight properties of CFRP are very attractive, and applications for this technology have come a long way. Given the fact that it has been primarily used in aircraft, however, CFRP tends to be conceived as an expensive, difficult-to-produce material for automobile applications.

We look forward to future proposals from Toray for reliable, economical materials and assembly methods, by teaming up with Toray and making the most of its ability to develop diverse technologies.

<Feedback from Automakers02>

Masayuki Okazaki

Chief Engineer
Automobile R&D Center
Honda R&D Co.,Ltd.



Creating CFRP Materials that can be Widely Used in Automobiles

Technologies to reduce CO₂ emissions are key factors in all industries. The creation of lighter vehicles not only enables the reduction of CO₂ emissions, but it also is an indispensable goal for improving the basic appeal of vehicles. It helps to make cars fun to drive while also meeting the economic need to cope with rising oil prices, as well as to reduce dependence on limited petroleum resources. Despite the position of CFRP as the ultimate lightweight vehicle material, at present it is only being used for limited applications such as sports cars. In order for CFRP to make a real contribution to the fight against global warming as a material for creating lighter vehicles, automakers need to develop vehicle design and reliability evaluation technologies, while fiber manufacturers must establish CFRP manufacturing technology for mass production. We see Toray as a technology partner for the creation of lighter vehicles, and look forward to the realization of CFRP technology that offers a right balance of price, production performance, and ease of use in automobiles.

<Looking to the Future>

Toray Materials and the Development of Next-generation Vehicles

The adoption of CFRP has already begun in high-end vehicles produced by some European manufacturers. Mainstream cars in Japan made with a variety of CFRP components are expected to hit the market in the next three to four years.

Toray is carrying out numerous initiatives for the development of next-generation automobiles. CFRP adoption is expected to promote the popularization of electric vehicles by greatly extending the range on a single charge through vehicle weight reduction. In addition to CFRP, Toray is taking on the challenge of developing various other new materials such as interior materials made from plant-based plastics, and body materials created by combining plastic and film, thereby eliminating the need for the coating process involving hazardous substances.

In order to protect the global environment, we must accelerate our progress towards the creation of a low-carbon society. Toray's technologies can provide a



Toyota Motor Corporation's "1/X", an environmentally-friendly and safe concept car with CFRP used for the body frame

shortcut to reaching this goal.

Highlight 2
Initiatives to Mitigate Water Resource Issues

Clean and Safe Water Around the World Toray's Water Treatment Membrane Technology

Among the approximately 6.5 billion people that live on this planet, 2.4 billion live in regions without sewer systems or water treatment facilities, and 1.1 billion do not have access to safe drinking water. Toray is utilizing its water treatment membrane technology to help provide safe water to regions around the world suffering from water scarcity, thereby contributing to the alleviation of global water resource issues.

Toray's Water Treatment Membrane Technology for Various Water Qualities and Uses

Research on water production around the world began in earnest only at the beginning of the 20th century. Before then, people were able to obtain sufficient clean water through natural purification processes. However, along with industrialization and rapid population growth, it became more and more difficult to secure safe drinking water. Former US President John F. Kennedy is known for having declared the importance of seawater desalination technology during his time as a Senator. It is likely that he foresaw the worsening global water problem and its significant impact on the world's industries and economies. Along with the Apollo space mission, President Kennedy established seawater desalination as a national project as soon as he took office in 1961, and helped accelerate the corresponding technology development.

Toray took notice of these developments, and in 1968 began R&D into reverse osmosis (RO) membranes. In 1980, the Company succeeded in commercializing RO membranes that create the ultra-pure water necessary for semiconductor manufacturing. After that, Toray went on to take the lead in fields such as seawater/brackish water desalination, wastewater reuse, and water treatment for various kinds of industrial processes.

Toray is one of the few manufacturers in the world that has developed a full range of water-treatment membranes on its own. The Company has four types of membrane technology: RO membranes, NF (nano-filtration) membranes, UF (ultra filtration) membranes, and MF (microfiltration) membranes. Through the optimal combination of these technologies, Toray is able to meet various water treatment needs worldwide.

Toray's RO Membranes Used in Africa's Largest Seawater Desalination Plant

Numerous regions on this planet suffer from water scarcity. As shown in the diagram on the following page, the situation is especially severe in North Africa and the Middle East where there has been rapid economic development and population growth. According to a UN report, these regions will suffer from physical water scarcity by 2025, which could become life-and-death crises for nations in this part of the world. Toray's RO membrane technology has been introduced in many water treatment plants in these regions, for the efficient production of drinking water.

Although flanked by the Mediterranean Sea in the north, Algeria is poor in water resources as 85% of its land is covered by the Sahara desert, making it very hard to secure water for household purposes. In recent years, the water scarcity issue has only grown more severe along with population growth and economic development.

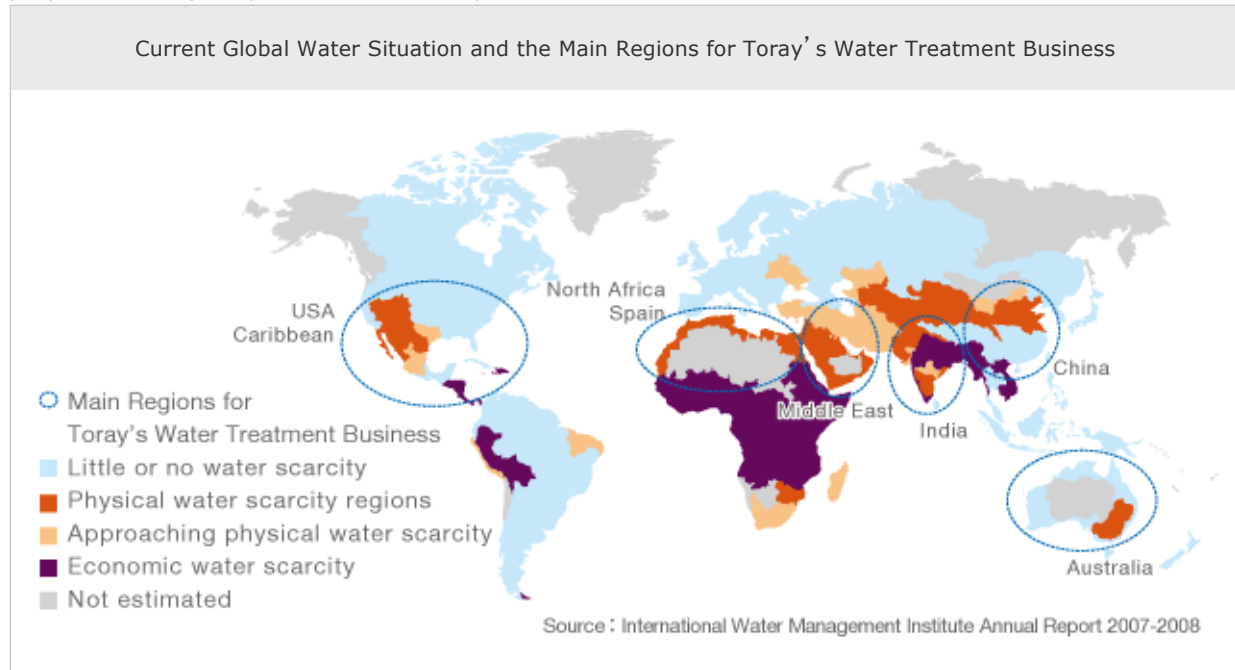
Given this situation, the Algerian government initiated planning for seawater



Africa's largest Hamma

desalination plants, and launched public-private investment projects for their construction. In February 2008, Africa's largest seawater desalination plant, the Hamma Seawater Desalination Plant, began operating in the capital of Algiers. This plant uses Toray's RO membranes, and can produce 200,000 cubic meters of fresh water each day. This is enough drinking water to supply about one million people, and has greatly eased water scarcity in that area.

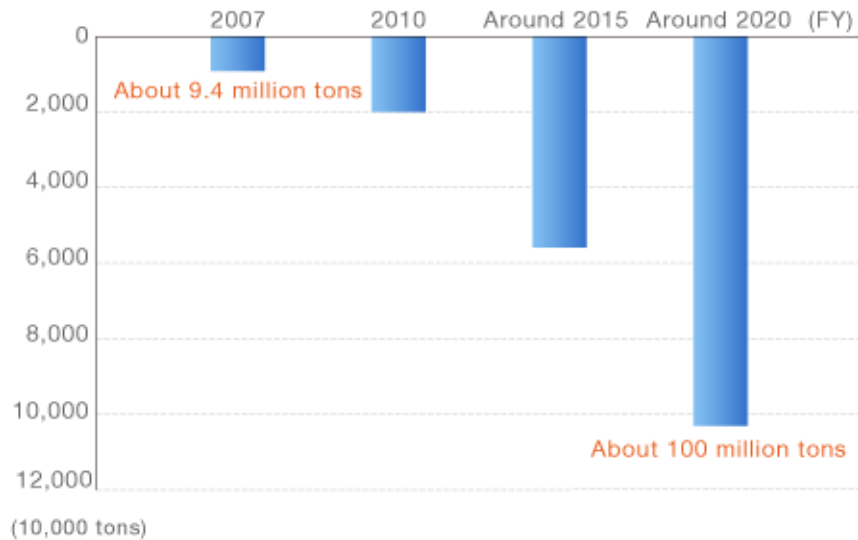
seawater desalination plant (Algeria)



Conservation of Resources and Energy through Seawater Desalination with RO Membranes

An RO membrane is a high-performance water treatment membrane that separates pure water from water concentrate containing impurities such as saline matter. Only pure water is able to penetrate through the membrane, which blocks salt and other substance at the molecular level. Compared to conventional and widely-used thermal desalination systems that extract pure water by boiling seawater and cooling down the distilled water, the RO desalination method only requires one quarter the amount of source water, and less than one fifth the energy such as heat and electricity. As a highly efficient technology for freshwater production in terms of energy and resources, RO desalination is expected to contribute greatly towards global environmental protection. As of 2007, the accumulated reduction in CO₂ emissions resulting from the use of Toray's RO membranes installed around the world amounts to approximately 9.4 million tons. Assuming a continuation of the current rate of new RO desalination plant construction and switchover from thermal desalination, the resulting savings in CO₂ emissions is expected to be approximately 100 million tons by 2020.

CO₂ Emissions Reduction Resulting from Toray RO Membranes



Basis for Calculation

- CO₂ emissions reduced by changing from thermal process to RO process for seawater desalination and ultrapure water production.
*Excluding brackish water RO and waste water RO
- Calculated desalination volume at each point based on past volume orders, and estimated future volume orders.
- Estimated amount of reduced CO₂ for 2020 based on the assumption that water demand will increase at the same rate between 2010 and 2015.

Striving to Resolve the World's Water Issues with Advanced Technology

Toray's RO membranes have been installed in a total of 100 plants around the world, mainly in large plants in 26 countries and regions. Based on the quantity of membranes sold to date (including those used for purposes other than seawater desalination), Toray's technology is responsible for producing 15.5 million cubic meters of water per day, or enough water to supply the household needs of about 65 million people (as of March 31, 2009).

Toray is a founding member of the Global Water Recycle System Association Japan (see Column article) for the development and worldwide application of water recycling systems based on Japan's outstanding technology and expertise in this area. This recent movement is creating new opportunities for helping to solve the world's water issues.

Given the realities of global warming and population growth, soon it will be difficult for human beings to continue relying only on natural water resources. Therefore, it is necessary to make effective use of limited global water resources by producing clean water through advanced technology.

Toray Group will continue to expand its water treatment business based on its unique technologies, in order to contribute to solving global water resource issues.

【Topics Relating to Water Treatment Membrane Technology】

Providing Advanced Technologies from Japan to the World

In January 2009, the Global Water Recycling and Reuse System Association, was established as a Japanese cooperative system for solving water resource issues on a global scale. As of April 1, 2009, 38 companies involved in the water treatment business are listed as members of this association, including Toray Industries, Inc., Hitachi, Ltd., Kajima Corporation, Mitsubishi Corporation, and Hitachi Plant Technologies, Ltd. The aim is to establish a foundation for the business of water recycling and reuse systems that meets the needs of markets outside Japan. The association intends to do this by bringing together technology and expertise in water treatment membranes, while promoting



cooperation with national and local governments, as well as research institutions. As a key company in this Japanese network, Toray is providing expertise and process technologies for water treatment that it has developed through related business activities around the world.

Establishing a Water Treatment Joint Venture in China

Toray and China National BlueStar (Group) Co., Ltd. agreed to form a joint venture water treatment business in Beijing through the establishment of Toray Blue Star Membrane Co., Ltd. in May 2009. The plan is to build facilities for the production of RO membranes and the assembly of membrane elements, with plant operations scheduled to begin in April 2010.

Environmental pollution has become a serious issue for Chinese cities, due to rapid economic growth and industrialization in the country. The Chinese government considers the establishment of nationwide water treatment companies to be a pressing issue in order to secure safe water resources. As a partner of China National BlueStar Group, Toray is providing water treatment membranes and contributing towards environmental improvement in China.



Related Information

- [Toray, China BlueStar to Establish Water Treatment Joint Venture in China - to newly construct RO membrane production facilities -](#)

Highlight 3
CSR Initiatives Around the World

Proactive CSR Measures in Regions Around the World



Toray Group is engaged in "CSR Line Activities" with the goal of having all its Group companies and departments participate in corporate social responsibility efforts. As a global company with operations that span 21 countries and regions worldwide, Toray Group aims to further promote and establish its CSR activities by identifying and undertaking CSR issues based on a respect for and understanding of the different histories, cultures, and customs of the regions in which it operates.

The following is a report on the content and results of CSR activities carried out by Toray Group subsidiaries and affiliates outside Japan, based on the company's "Corporate Missions", which form the key objectives of Toray's management philosophy.

* Related Information

CSR Initiative Reporting Policies

http://www.toray.com/csr/stance/sta_002.html

For our customers

To provide new value to our customers through high-quality products and superior services

Aiming to Firmly Establish Global Quality Management

 P.T.Indonesia Synthetic Textile Mills, P.T.Acryl Textile Mills [Indonesia]

P.T. Indonesia Synthetic Textile Mills and P.T. Acryl Textile Mills are working on internal reforms through CSR activities for the "creation of new organizational cultures." In 2008, the two companies established a CSR Department in order to expand the functions of their previous Quality Assurance Departments, after selecting quality management as the top-priority issue among the various issues that they face. A foundation has now been laid for the independent establishment and improvement of quality control by locally hired staff without the need for personnel from Japan.

Under the leadership of the CSR Department, the companies have launched initiatives such as the introduction of centralized purchasing, inventory optimization, risk management, and training for younger employees. They are also actively utilizing the CSR Mini Handbook, which features localized content that reflects Indonesian culture and practices.



Participants in new-employee training with the CSR Mini Handbook

Providing High Quality Materials

 Société des Fibres de Carbone S.A. (SOFICAR) [France]

Societe des Fibres de Carbone S.A. (SOFICAR) is engaged in various initiatives for the stable supply of CFRP, with the aim of becoming the most reliable manufacturer. In addition to ISO 9001 certification, the company has obtained JIS Q 9100 certification necessary for the production of CFRP for aircraft use, in order to meet precise quality requirements of customers. Furthermore, to provide even better service to customers, the company carries

out global management of its raw material records, as well as production conditions and data. In 2008, SOFICAR contributed to end-product quality by improving its production processes after receiving customer feedback on the external appearance of a SOFICAR product used in the manufacturing of automobiles.

For our shareholders

To provide our shareholders with dependable and trustworthy management



Obtaining SA8000 Certification to be a Leading Company

Alcantara S.p.A. [Italy]



SA8000取得チームのメンバー

As a supplier to leading companies in the fields of fashion, interior design, and automobiles, Alcantara S.p.A. is actively working to achieve standards befitting a company with high level of corporate management. With a long-standing aim to promote sustainability, the company has been proactively engaged in activities not only to ensure product quality, but also to protect the environment, and address social and ethical issues.

Having already obtained the international ISO 9001, ISO/TS 16949 and ISO 14001 management system certifications for quality, automobile industry supply, and the environment, respectively, in 2008 Alcantara achieved the international SA8000 standard for decent working conditions and human rights. The company has now begun a project for the acquisition of OHSAS 18001 management system certification for labor safety.



J-SOX Study Group

TORAY Plastics (Hong Kong) Ltd., Toray Plastics (Shenzhen) Ltd. [China]

With Japan's new Financial Instruments and Exchange Act (J-SOX) that officially took effect in April 2008, Toray Group's consolidated companies are also subject to reporting under this law. TORAY Plastics (Hong Kong) Ltd. and Toray Plastics (Shenzhen) Ltd. became subject to J-SOX management evaluation and audits in FY 2008. In order to carry out the proper measures, the companies began preparations for immediate information sharing and held J-SOX study groups for employees. This was based on the awareness that all employees must understand the requirements of this law.

For our employees

To provide our employees with opportunities for self development in a challenging environment



Independent Creation of a Nationwide Learning Network

Toray Industries (America), Inc., Toray Plastics (America) Inc., and Six Other Subsidiaries [USA]

In FY 2008 the companies of Toray Group USA began joint management training for a range of personnel, including front-line section managers and supervisors, with the aim of sharing expertise and creating a human resources network. The new training is scheduled to be held three times a year, where participants discuss various case studies involving the management of people and organizations as well as cost control. In addition, Senior Management Seminars have been carried out for executives since FY 2006, and other cooperative activities are being carried out with the aim of creating workplaces that promote safety and employee job satisfaction.



Participants of joint management training for Toray Group companies in the US



Cooperative Relations through Positive Labor-management Communication

Toray Saehan Inc. [Korea]

With the aim of building forward-looking labor-management relations based on mutual trust and cooperation, Toray Saehan Inc. has been striving to establish positive communication between employees and the company. The company not only holds labor-management conferences every quarter, but also conducts weekly communication meetings for workers and managers. In this way, the company provides management information in a timely manner, while sharing its corporate vision. As a result, throughout FY 2008, information was regularly exchanged between management and the labor union. Since its founding, the company has attracted the attention of other companies in and outside South Korea for its outstanding labor-management relations and admirable record of zero labor strikes.

 **Traffic Law Training Sessions**
Toray Sakai Weaving & Dyeing (Nantong) Co., Ltd. [China]

Since an employee's death in 2003 while commuting to work on a motorcycle, Toray Sakai Weaving & Dyeing (Nantong) Co., Ltd. has been holding yearly traffic-law training sessions for employees, taught by a representative of the local traffic police. The sessions use examples of traffic accidents that have occurred in the local development zone in order to raise employee awareness of traffic safety. There have been no serious employee traffic accidents since the start of this training. In 2008, a total of 125 employees participated in the session, which focused on changes to the traffic safety law that took effect in May of that year.

For society
To establish ties and develop mutual trust as a responsible corporate citizen

 **Contributing to the Promotion of Science and Technology**
Toray Science Foundation [Malaysia, Thailand, Indonesia]

In the spirit of the Toray Science Foundation, created in 1960, additional Toray Science Foundations were established in three ASEAN countries in 1993 and 1994. The three foundations have been providing assistance and awards for a range of basic research by local scientists. In order to make a real contribution to the development of each region, local experts carry out administration of the main activities of the foundations. Moreover, the supported research findings and resulting patents help to promote science and technology in the countries where the foundations operate. In 2008, the Toray Science Foundations in ASEAN honored the achievements of a total of 95 scientists, researchers and educators (29 in Malaysia, 31 in Indonesia, and 35 in Thailand).



Awards ceremony of the Thailand Toray Science Foundation



Research findings presentation by a local scientist

Related Information

- [Toray Science Foundations in ASEAN Countries](#)

 **Consistent Contribution to Community**
Toray Fluorofibers(America),Inc. [USA]

Toray Fluorofibers (America), Inc. won the 25th Heart of the Community award, presented each year in Morgan County, Alabama. This award is given to groups and companies, as well as individuals, young and old, for volunteer activities carried out in the local community. Toray Fluorofibers (America) received the award in recognition of its work with "Rebuilding Together", one of the community organizations in which the company participates on an ongoing basis. Company employees and their family members have been participating in this organization's activities since the company's founding five years ago. They contribute to the local community by helping to repair and maintain the homes of persons with disabilities, senior citizens, and low-income families.



President (left) and HR Section Manager (right) of Toray Fluorofibers (America), Inc.

Related Information

- [Toray Fluorofibers \(America\), Inc. \(TFA\) Receives “Heart of the Community” Award](#)