

**TEIJIN**

*Human Chemistry, Human Solutions*

# **2012 Teijin Group** **CSR Report**

[Achievements in FY2011]



# Consolidating our Position as a Corporate Group with a Strong Global Presence...

The Teijin Group established its corporate philosophy in June 1993, 75 years after its founding. In April 2003, we changed to a holding company system and established “Human Chemistry, Human Solutions” as our brand statement to represent the Teijin Group’s commitment to customers and society. We will continue striving to fulfill this commitment, developing and enhancing our “Quality of Life” corporate philosophy, and acting as a corporate group that can be trusted by society and by our customers.

## Corporate Philosophy

### In Harmony with Society

Our aim is to grow and evolve in harmony with the progress of society, thus justifying the trust of our shareholders, customers, and the public at large. To this end, we strive constantly to raise corporate value and place our highest priority on safety and the environment.

### Quality of Life

**The Teijin Group’s purpose is to enhance the quality of life through a deep insight into human nature and needs, together with the application of our creative abilities.**

### Empowering Our People

We encourage our employees to achieve self-realization by developing and exercising their abilities to the fullest. We nurture a corporate community with a wide variety of abilities and personalities to foster creative innovation.

## Brand Statement

### *Human Chemistry, Human Solutions*

**The promise of the Teijin brand is summed up in the resonant statement: “Human Chemistry, Human Solutions.” Our promise is to continue to develop chemical technologies that are friendly to both people and the global environment and to provide solutions that deliver real value to our customers and society.**

“Chemistry” and “Solutions” summarize the Teijin Group’s strategy for the 21st century focusing on chemical materials and provision of services that create added value.

Chemistry also refers to good relationships, expressing the importance of trust, goodwill, and mutual benefit.

## CSR Basic Policy (2012–2015)

1. To recognize common value of business strategy and CSR management as a driving force toward sustainable development of the society
2. To contribute to Teijin’s achieving the global excellence as a global player, by obtaining and maintaining a global recognition as “CSR champion” in Teijin’s way.
3. To realize “co-existence with global environment” by actively promoting environmental management.
4. To help realize improvement of “Quality of Life,” by providing safe and reliable products and services.
5. To be recognized as a benchmark of Basic CSR activities such as compliance and risk management by their thorough implementation.
6. To build “Win-Win” relationships with stakeholders in and outside the Teijin Group by two-way dialogues and active involvement in their development and enhance their satisfaction.

# Editorial Policy

## Explanatory Note

In creating the 2012 Teijin Group Corporate Social Responsibility (CSR) Report, we have considered the following points, aiming to increase the report's audience and their understanding of the Teijin Group's CSR activities.

## Completeness and Materiality

The contents of this year's CSR Report have been chosen according to strict criteria, referring to the following guidelines and questionnaires on socially responsible investment (SRI), and considering the business conditions of our group. Notably, the features section describes initiatives relating to themes that are important to both the Teijin Group and society.

## Reference Guidelines:

- "Environmental Reporting Guidelines, 2007" (Ministry of the Environment, Government of Japan)
- "Sustainability Reporting Guidelines, 2006" (Global Reporting Initiative)

Reporting that corresponds to items in the GRI guidelines is marked with the applicable number as follows: **\*\***

## Coordination between CSR Report and Website

Information that could not be included in this CSR report due to space restrictions is published on the website. Relevant pages in the report are marked for reference at the top of the page and a full list of references is included on the final page.



Website-only item

See website for more detailed information



See website for more detailed information

<http://www.teijin.co.jp/english/eco/>

## Clarity

This report predominately targets readers who are interested in CSR, and at the same time endeavors to promote understanding of our activities across a wide audience. To this end, we have minimized the report's length as much as possible, and adopted a layout arranged according to specific features of our group's CSR management. As well as emphasis on making the report easy to understand and view, we have considered ease of searching via features such as cross-referenced pages.

## Reliability

Emphasizing transparency in all aspects of management, the Teijin Group is committed to active disclosure of information that can be trusted. On this basis, this report has been independently reviewed by KPMG AZSA Sustainability Co., Ltd., who have provided assurance of its reliability. Indicators on which assurance is provided are marked with a red star (★).

## Time Period/Boundaries **3.1** **3.6** **3.7**

In principle, this report includes information corresponding to the period from April 2011 to March 2012. However, some information is included that corresponds to the 2011 calendar year or activities implemented after April 2012. Furthermore, information in this report generally refers to all Teijin Group companies (Teijin Limited, plus 67 in Japan and 81 overseas). However, in some sections, such as environment, safety and health management and human resource management, we have included notes indicating the use of a separate time period and boundaries.

## Additional Information

Information that could not be included in this report due to space restrictions (on topics such as our business activities, social contributions, financial data and environmentally friendly products) has been published and is regularly updated on our website. In addition, the following documents are available for reference.

- CSR Report (Japanese)
- Teijin Group Company Profile (Japanese/English)
- Annual Report (Japanese/English)
- Fact Book (Japanese/English)
- Financial Statements (Japanese/English)
- Shareholders' Report (Japanese)

URL: <http://www.teijin.co.jp/english/>

# CONTENTS

Message from the President .....	3
Profile of the Teijin Group .....	5

## Features

The 6th Stakeholder Dialogue .....	7
Products/Technologies Realizing Reduced Environmental Impact .....	13

## News Flash .....

## Vision and Strategy

CSR Management System .....	17
FY2011 Plans, Goals, Performance and Self-evaluations .....	19
Corporate Governance .....	23

## Social Report

Compliance and Risk Management .....	25
Quality Assurance .....	28
Human Resource Management and Labor CSR .....	29
CSR Procurement .....	32
Social Contributions .....	33

## Environment, Safety and Health Report

ESH Management (Environmental Preservation, Safety and Disaster Prevention, and Health) .....	35
Reducing Environmental Impact .....	36
Design for Environment .....	41
Environmental Businesses .....	43
Disaster Prevention Activities .....	46
Occupational Safety .....	47
Health and Sanitary Measures .....	48
ESH Management Data (Environmental Preservation, Safety and Disaster Prevention, and Health) .....	49

## Economic Report

Distribution of Added Value to Stakeholders .....	50
---	----

## Opinions from Third Parties

Opinions from Experts .....	51
Independent Assurance Report .....	53
List of Website References .....	54
Editor's Postscript .....	54

All product and service names in this report are trademarks or registered trademarks of the Teijin Group. Other names of products and services are trademarks or registered trademarks of their respective companies.

## Publication Date and Schedule for Next Report **3.2** **3.3**

Published in August, 2012

(next report scheduled for publication in September, 2013) (published once a year).

## Contact **3.4**

Teijin Limited CSR Planning Office

Tel: +81-3-3506-4508 Fax: +81-3-3506-4037

Message from  
the PresidentTowards the Group's Sustainable Growth  
through a Head-on Approach to Tackling Difficult Global IssuesThe medium- to long-term management vision has been announced.  
What are the key points?

## ■ Aim for Growth through Providing Solutions to Global Issues

In February 2012, after a review process of our medium- to long-term strategy for sustainable growth that took close to two years, we announced "CHANGE for 2016—Innovation and Action for Sustainable Growth," our new medium- to long-term management vision. For long-term issues, we conducted simulations of global economic, social and environmental issues in 2020, taking the view that providing solutions to these issues is an opportunity for sustainable growth of the Teijin Group.

In the past, the Teijin Group has divided its businesses into material businesses and solution businesses. However, we now consider that it will be difficult for material businesses to grow unless they contribute to provision of solutions. In this respect, the Teijin Group vows to take a head-on approach to tackling difficult global issues.

In FY2011, the Teijin Group recorded net sales of 854.4 billion yen and an operating income of 34 billion yen. In the future, through concentrated investments in growth areas, mergers and acquisitions, as well as effective alliances, we aim to make further contributions to the solution of global issues. Our target is net sales of 1.3 trillion yen and operating income of 100 billion yen by FY2016, and net sales of 2 trillion yen and operating income of 200 billion yen by around FY2020.

## Outline of the Medium- to Long-Term Management Vision

## Long-term Vision:

1. Secure profitable, sustainable growth by providing customers with needed solutions.
2. Build value that also benefits society, and contribute to the advancement of humanity by focusing on businesses that leverage Teijin's cutting-edge technologies.
3. Be recognized as a leading player that has attained global excellence.\*

\* Our criteria for global excellence is a corporation that has several world-leading businesses; has expanded its businesses on a global scale; has gained recognition in society; and has employees who are proud to work there.

## Basic Policies

1. Press forward with growth strategies in green chemistry, healthcare and overlapping business domains.
2. Advance and expand existing businesses by broadening scope and adding depth.
3. Bolster R&D aimed at fostering new businesses.
4. Enhance implementation of strategies through organizational reforms.
5. Promote decisive, ongoing efforts to reform cost structure.

## Targets

	Net Sales	Operating income
FY2016	1.3 trillion yen	100 billion yen
Around FY2020	2 trillion yen	200 billion yen

## What initiatives are being taken in terms of CSR-related issues?

## ■ Review BCP and Aim to Enhance Our Ability to Cope with Disasters

The Great East Japan Earthquake of March 11 last year caused substantial damage to our home healthcare business and films business. Many patients in our home healthcare business were severely affected by the earthquake, tsunami and nuclear power plant accident. Thanks to the utmost efforts of employees engaged in work related to the business at the disaster areas and support extended by employees outside the disaster areas as well as tremendous cooperation from the people in the affected areas, we were able to resume normal business activities by the middle of June. The response to the earthquake by the home healthcare business leveraged our experience from past earthquakes such as the Hanshin-Awaji earthquake in 1995 and the Niigata-Chuetsu earthquake in 2004. In our films business, both the Utsunomiya and Ibaraki Plants sustained serious damage to their manufacturing facilities. By the end of June, production lines had resumed, but unfortunately, in the meantime, many customers and suppliers were greatly inconvenienced.

The flooding that started last October in Thailand also caused serious damage to three plants of the polyester fibers business. By March, the situation had improved to the extent that the Japanese support team could return to Japan, but still further efforts are required to complete recovery.

As is clear from the above, this past year we experienced severe natural catastrophes both in Japan and overseas. Many times during these situations I called to mind our corporate philosophy: "Improve Quality of Life," "In Harmony with Society" and "Empowering Our People." I strongly felt the burden of protecting the safety of our stakeholders including customers, employees and their families and the weight of responsibility to supply products and services as a business operator even when faced with an accident or disaster. The Teijin Group adopted risk management practices and business continuity plans (BCPs) at an early stage. Through making the most of what we have learned in the past year and reviewing the details, we will aim to build a corporate structure characterized by an even stronger ability to cope in a disaster.

■ Three Core Elements Driving Environmental Management:  
Environmental Preservation, Design for Environment and  
Environmental Businesses

The Teijin Group announced the Declaration of Sustainable Environment Initiatives in 2007. Environmental management refers to reducing environmental impact over the entire life cycle of products including all processes from material procurement to production, use and disposal. The three core elements of this are environmental preservation, Design for Environment and environmental businesses. Environmental preservation refers to activities aimed at reducing the negative impact our daily business

activities have on the environment. Design for Environment refers to our initiatives, based on in-house guidelines, to design products and production processes that contribute to reducing environmental impact. Environmental businesses are business activities aimed at contributing to environmental improvement.

Examples of Teijin Group activities for each of these three core elements are presented as follows.

First, for environmental preservation, one example is our efforts to reduce CO<sub>2</sub> emissions to prevent global warming. Our target (in Japan) of reducing CO<sub>2</sub> emissions by 20% compared to the FY1990 level by FY2020 has already been achieved. We are striving for further reductions, and have set a new target to reduce CO<sub>2</sub> emissions per unit of production amount by 1% or more compared to the preceding fiscal year.

Secondly, an example in Design for Environment is the *Hi-Sanso*<sup>TM</sup> 7R home healthcare oxygen concentrator. This energy-saving product features the lowest power consumption in the industry and is equipped with sophisticated functions including compatibility with a system that automatically monitors equipment operational status. There are approximately 30 other products and processes throughout the Teijin Group that meet the Design for Environment guidelines.

Thirdly, for environmental businesses, there are any number of examples of diverse products and services based on our long-accumulated chemistry-based technologies. Some specific products are bioplastics that use raw materials originating from plant life such as *BIOFRONT*<sup>®</sup>, a highly heat-resistant bioplastic, *PLANEXT*<sup>®</sup>, a polycarbonate resin, and *ECO CIRCLE Plantfiber*<sup>®</sup>, a bio-PET, as well as carbon fibers and aramid fibers that contribute to products with reduced weight and longer service life. Our environmental businesses also include a chemical recycling technology used to recycle polyester products to a highly pure raw material. In March 2012, we came to a basic agreement regarding an alliance with the China Chemical Fibers Association. This alliance will aim to develop the chemical fibers and related industries in China as well as Teijin's fibers industry in China. As part of the agreement, the Teijin Group will promote the establishment of a closed-loop recycling system in collaboration with major companies in China. This move will allow us to contribute to the sustainable development of the chemical fibers industry in China.

In this way, the effects of environmental management extend to all business groups. To support global expansion in each field, in FY2012, we established the Group Environmental Management Promotion Subcommittee. This subcommittee will have a central role in promoting environmental management, while integrating the growth strategies of the entire Teijin Group.

## ■ **Strengthen Human Resources Globally, Aiming for Employee and Group Growth**

One part of the Teijin Group's corporate philosophy is "Empowering Our People."

In 2000, although female employees had achieved equal terms with male employees at overseas companies, this situation had not



been reached in Japan. In response we established the Diversity Development Section and have since endeavored to make various reforms including changing the awareness related to gender-based division of roles in the workplace, which had been an obstacle for female workers, as well as reforms of personnel management systems to enable female employees to continue to work even after major life events such as marriage or pregnancy.

At the same time, we set the goal for the ratio of newly recruited female university graduates to 30% or more and have been trying to increase the ratio of females in managerial positions. In 2000, the total number of females in managerial positions was approximately 10 at Teijin Limited, but this had increased to approximately 80 in total in 2011 at the 12 core group companies. Female employees are now stepping up their presence as an indispensable part of the workforce and our target is to double the number of females in managerial positions to 160 by 2016, five years from now.

In FY2007, the Diversity Development Section expanded its role beyond gender issues, and in FY2009, we established the Global Human Resources Office. These organizations have been playing a central role in creating globally focused personnel management systems to recruit, foster and assign excellent talent in the world in a fair manner irrespective of gender, age, nationality, race or physical impairment, and provide them with a place to fully maximize their potential.

In addition, the Health Care Administration Office established in FY2009 was bolstered to eight-person operation in 2012. This office takes a preventive approach to promoting the healthy minds and bodies of employees.

I am convinced that these measures to strengthen human resources will support the medium- to long-term growth of the Teijin Group.

The Teijin Group will continue aiming to "Improve Quality of Life" on a global basis through the activities described above. I look forward to your ongoing support in these and other efforts.

June 2012

  
**Shigeo Ohyagi**  
 President and CEO  
 Teijin Limited



## Global Expansion in Diverse Businesses

2.1 2.2 2.3 2.4  
2.6 2.7 2.8 LA1

The Teijin Group's key statement, "Human Chemistry, Human Solutions," signifies the deep integration of our diversified, advanced technologies, and vast "solutions knowledge" in the lives of people, achieved through the help of our business partners and their activities.

### Expansion of the Teijin Group's Businesses

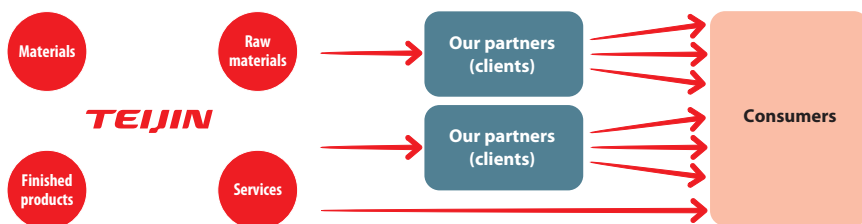
The Teijin Group was established in 1918 as the first manufacturer of rayon yarn in Japan. Starting with the launch of our polyester business, and building on the foundation of our strong technological prowess in fibers, we have expanded to become a diverse business group active in a broad range of fields.

Today, Teijin Limited and 148 group companies are active in our Synthetic Fibers, Films and Plastics, Medical & Pharmaceutical, Fiber Products Marketing, and IT businesses. We continue to expand these businesses on a global scale in Asia, the USA and Europe.

The restructuring of our business has led to changes in the number of our employees.

Currently, there are 16,819 group company employees, including 7,111 overseas (187 transferred from Japan). In FY2011, the average annual number of temporary employees in companies in Japan and overseas was 2,412.

The Teijin Group is primarily involved in business activities in which we do not have direct contact with consumers, such as the production of materials. Despite this, through our involvement in various industrial fields, our innovative and numerous products and services have become strongly integrated in the lives of consumers.



### Teijin Limited Corporate Profile

(As of March 31, 2012)

Established: June 17, 1918  
Capital: 70,816 million yen

Osaka Head Office  
6-7, Minami-Honmachi 1-chome, Chuo-ku,  
Osaka 541-8587 Japan  
Tel: +81-6-6268-2132

Tokyo Head Office  
Kasumigaseki Common Gate West Tower, 2-1  
Kasumigaseki 3-chome, Chiyoda-ku, Tokyo  
100-8585 Japan  
Tel: +81-3-3506-4529

Representative  
Shigeo Ohyagi, President and CEO

URL: <http://www.teijin.co.jp/english>

### Profile of the Teijin Group

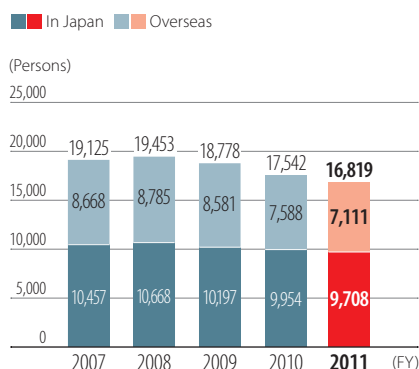
(As of March 31, 2012)

Holding company: 1  
Group companies in Japan: 67  
Group companies overseas: 81  
Total: 149

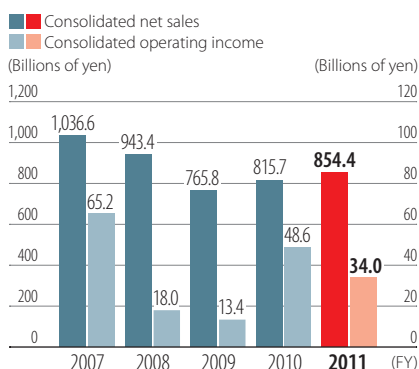
Number of employees in Japan: 9,708  
Number of employees overseas: 7,111  
Total: 16,819

\* Excluding temporary employees.

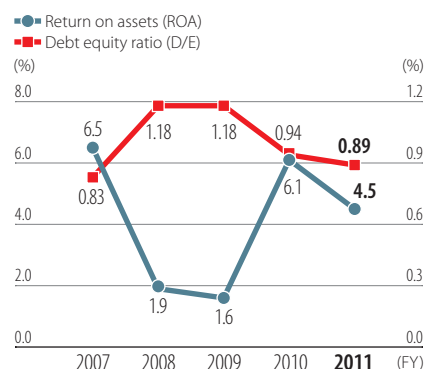
### Trends in No. of Group Employees



### Trends in Consolidated Net Sales and Operating Income

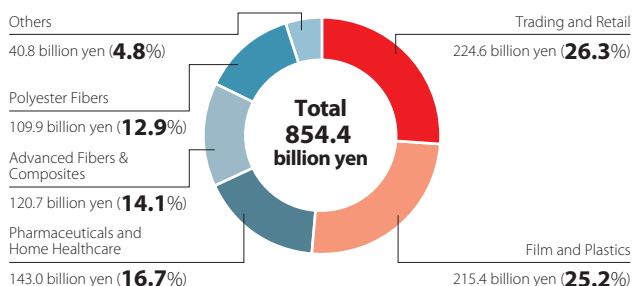


### Trends in Main Management Indexes

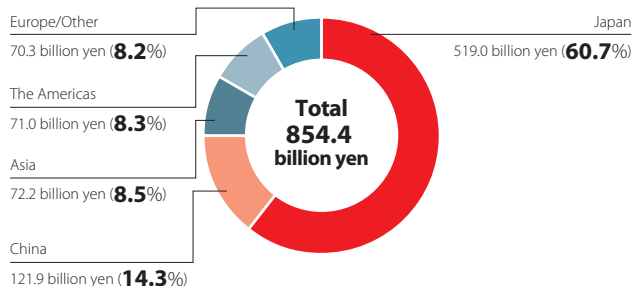


### Breakdown of FY2011 Consolidated Net Sales (As of March 31, 2012)

#### Sales by Business Segment



#### Sales by Domicile of Customers



Business groups were reorganized in April 2012 in line with the implementation of CHANGE for 2016, the medium- to long-term management vision announced in February 2012.

## Advanced Fibers & Composites Business Group

### High Performance Fibers Business Unit

This group is engaged in the manufacturing and marketing of high-strength, high-tensile para-aramid fibers, and highly heat- and flame-resistant meta-aramid fibers. Notably, the group holds an approximate 50% share of the global para-aramid fiber market.

*Twaron*® is a lightweight, high-strength para-aramid fiber. It is used widely including in protective clothing, in automobiles as a friction material for brake pads and reinforcement material for tires, and as a reinforcement material for optical fiber cables.



Optical fiber cable made using *Twaron*®

### Carbon Fibers & Composites Business Unit

This group is engaged in the manufacturing and marketing of *Tenax*® carbon fiber and its application, carbon fiber reinforced plastics (CFRP) (see pages 13–14). The carbon fiber production capacity of this group is the world's second largest.

*Tenax*® is used in aircraft, the blades of wind turbine generators and other similar applications owing to its light weight, high strength and high tenacity. Through use of thermoplastic resin in CFRP, the Teijin Composites Innovation Center (TIC) has established a world-first technology that enables mold production in less than one minute, and is now concentrating on developing applications of molded parts made of CFRP.



Structure of concept car made entirely of thermoplastic CFRP

## Healthcare Business Group

These companies are engaged in manufacturing and marketing of pharmaceuticals, as well as the manufacture of home healthcare products and provision of related services. Home healthcare devices and a treatment for hyperuricemia and gout continue to be expanded internationally.

In April 2012, we launched *Hi-Sanso*™ 3S, a home healthcare oxygen concentrator featuring safe, anxiety-free, energy-efficient performance. An audio guidance function informs users of procedures in the case of a power outage or malfunction, thereby ensuring anxiety-free use.



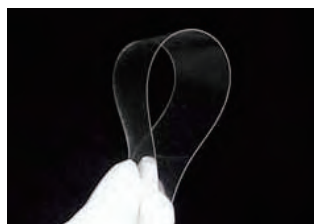
*Hi-Sanso*™ 3S

## Electric Materials & Performance Polymer Products Business Group

### Films Business Unit

This group is a world-leading manufacturer of polyester films, which are used in back sheets of solar battery panels and LCD televisions. Through in-house development of polyethylene naphthalate (PEN) film, this group's share of the global PEN film market is almost 100%.

Teijin Chemicals Ltd. manufactures and sells *ELECLEAR*®, a film for touch panels. This thin, lightweight and transparent electroconductive film is produced from the base of two materials, a polycarbonate film produced by Teijin Chemicals Ltd. and a polyester film produced by Teijin DuPont Films Japan Limited.



*ELECLEAR*® film for touch panels



### Resin & Plastic Processing Business Unit

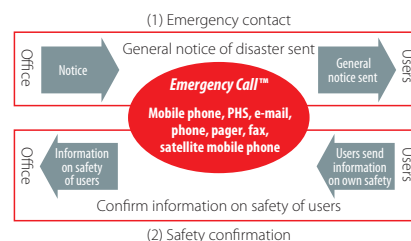
As Asia's No. 1 manufacturer of polycarbonate resin, this group takes advantage of compounding, processing and other technologies in producing various products, such as resin windows for Shinkansen trains and automobiles, LED lighting, and films for touch panels.

## IT Business Group

This group provides operation, development and maintenance services for information systems.

*Emergency Call*™ is a system developed to enable confirmation of the safety of others, and to secure quick and accurate mutual communication. Evaluated highly for its effectiveness in protecting children against risks such as those posed by natural disasters or crime, this system has been adopted in many private elementary schools in Japan.

### How *Emergency Call*™ Works



## Products Converting Business Group

### Products Converting Business Unit

This group handles the total planning and sales of fiber, apparel and industrial materials, films and plastics, and other miscellaneous household products.

*AEROSHILTER*® II is an ultralight and compact large-scale temporary tent made using *POWERIP*®, a lightweight, high-strength polyester fabric, as the base material. Owing to its ability to restrict the passage of outside air and excellent flame resistance, it has applications including at events and as an initial relief facility during disasters.

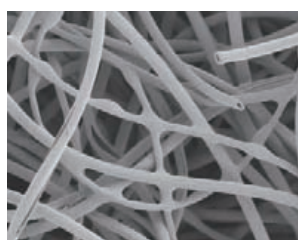


*AEROSHILTER*® II

### Polyester Fibers Business Unit

In addition to manufacture/sales of apparel and interior household materials, this group is responsible for global expansion of the *ECO CIRCLE*™ closed-loop recycling system.

*ELK*® is a functional cushioning material with superior elasticity, durability and ventilation. After use, *ELK*® products can be recycled as part of the *ECO CIRCLE*™ system, and toxic gas emissions during combustion are minimized.



*ELK*®

## New Business Development Group

Established within Teijin Limited, the New Business Development Group promotes activities to create and develop new businesses in cooperation with other group companies.

*LIELSORT*® is an innovative separator that enhances the safety, extends the service life and realizes high capacity/output for lithium-ion secondary batteries (LIBs). We aim to establish *LIELSORT*® as the de facto standard for specifications of next-generation LIBs for fast-expanding tablet computers, automobiles and other products.



*LIELSORT*® innovative separator

Feature 1

## CSR in Disasters 4.17

Immediately after the Great East Japan Earthquake of March 11, 2011, Teijin Home Healthcare Ltd., in collaboration with medical institutions and patients' associations, was involved in urgent efforts to verify the safety of long-term oxygen therapy (LTOT) patients and distribute portable oxygen cylinders to these patients. One year on, we take a look back at our response to the earthquake, and think about what CSR the home healthcare business should fulfill in disasters.

### Home Healthcare Support in the Great East Japan Earthquake



Power outage throughout the Tohoku region

Utilizing D-MAP, a disaster response and support map system, a list of 25,000 patients living in the disaster areas was prepared 10 minutes after the earthquake. Approximately 50 staff members from the head office disaster support headquarters started calling LTOT patients to verify their safety.

Teijin Home Healthcare Ltd.'s Ishinomaki satellite office is inundated by the tsunami.



At the disaster countermeasures headquarters, damage to oxygen cylinder filling stations was checked as calls to verify safety continued. The Kanagawa branch office was designated as a depot for oxygen cylinders, and arrangements for oxygen cylinders/concentrators for patients and medical institutions began.

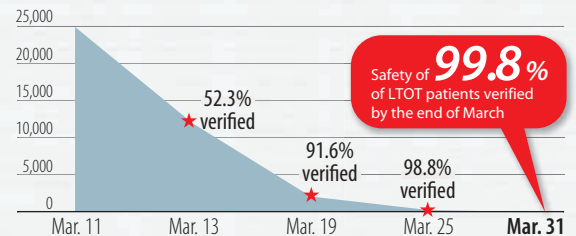
#### March 11

Great East Japan Earthquake strikes (at 14:46)

Four minutes after the quake hit, in accordance with the disaster countermeasures manual, Teijin Home Healthcare Ltd. set up a disaster countermeasures headquarters at the Sendai branch office and a disaster support headquarters at the Tokyo head office.

#### Progress of Safety Verification for All Affected Areas up to March 31, 2011

(No. of LTOT patients yet to have safety verified)  
(Persons)



#### March 12

Explosion at Fukushima No. 1 Nuclear Power Plant; Evacuation advisory is issued for all areas within 20 km radius



Call center

A disaster-area support plan was created, support personnel were dispatched to the six Tohoku prefectures and Ibaraki, and the number of staff at the call center was increased. Due to distribution companies cancelling any delivery of cargo to disaster areas, we used chartered truck transportation to send oxygen cylinders.

The first group of support personnel arrived in Sendai and started distributing oxygen cylinders to high-priority LTOT patients in the areas affected by the power outages.

Activities in the Fukushima area continued while checking radiation exposure with radiation meters.



#### March 14

TEPCO implements the planned power outage

Support personnel started arriving in Tohoku disaster areas from all over Japan.

Cooperation between our offices and cylinder dealers in planned power outage areas helped to improve the oxygen cylinder distribution system.

#### March 13

Tokyo Electric Power Co. (TEPCO) announces planned power outages from the following day

In response to TEPCO's announcement, we started notifying LTOT patients affected by the planned power outages.

A temporary distribution base was set up.



Tohoku Electric Power announces planned power outages from the following day

A temporary base for distribution of oxygen concentrators and other items was set up in Yamanashi.

Oxygen concentrators were installed for patients who evacuated to Ishinomaki Red Cross Hospital (50 units) and at 17 other institutions in Miyagi (112 units).

#### March 15

#### March 16

Safety verification of LTOT patients moves into full swing with staff from Sendai office making direct visits to homes and evacuation shelters.

#### March 18

Use of the mass media (television, radio, newspapers, etc.) to alert people of our safety verification efforts begins in collaboration with Tohoku Hakuchokai, a patients' association.

#### March 31

Safety of 99.8% of LTOT patients is verified by the end of March

#### Medical equipment supplied to the Tohoku region (as of the end of March 2011)

Oxygen concentrators	603 units
Oxygen cylinders	17,173 units
Mask respirators	74 units
Batteries for respirators	284 units



Teijin Home Healthcare Ltd. is a subsidiary of Teijin Pharma Limited, a core company of Teijin Group's medical and pharmaceutical business. Among other products, the company supplies oxygen concentrators for long-term oxygen therapy (LTOT). Immediately after the Great East Japan Earthquake, Teijin Home Healthcare Ltd. extended full support to LTOT patients in the disaster areas with the Sendai and Fukushima sales offices playing a central role.

LTOT is a method of providing oxygen inhalation at home for a long period of time to patients who cannot take in enough oxygen into their bodies. It enables patients to return to their family lives and their workplaces, enhancing their quality of life. There are estimated to be approximately 150,000 patients in Japan.

In this stakeholder dialogue, we are joined by Dr. Yanai of the Ishinomaki Red Cross Hospital, as well as Mr. Takahashi and Mr. Ohtomo, chairman and vice chairman of Tohoku Hakuchokai, an association for patients with respiratory diseases. In addition to taking a look back at the response to the earthquake, we talk about what is required to prepare for future catastrophes and what CSR the home healthcare business should fulfill in disasters.

<b>Date &amp; Time</b>	Wednesday, March 28, 2012 From 3:00 to 5:00p.m.
<b>Venue</b>	Sendai sales office meeting room, Sendai branch office, Teijin Home Healthcare Ltd.

### Working with the Patients' Association to Urge Mass Media to Alert Patients to Safety Verification Activities

**Mr. Kishida (MC):** Over one year has passed since the Great East Japan Earthquake. When and where the next catastrophe will strike

is unknown, and continued vigilance is required in respect to an earthquake in the Nankai or Tonankai troughs. Today, this group of people, who have all made dedicated efforts in the disaster area, has been gathered to discuss what we can do and what preparations are necessary for future disasters. I invite everyone to share personal experiences, make requests to Teijin Pharma and Teijin Home Healthcare Ltd., and discuss future challenges and any other relevant issues.

**Mr. Matsumoto:** First of all, as the manager of Sendai sales office, Teijin Home Healthcare Ltd., I would like to thank Dr. Yanai of Ishinomaki Red Cross Hospital, as well as Mr. Takahashi and Mr. Ohtomo, chairman and vice chairman of Tohoku Hakuchokai for all the support extended to us. A telephone conversation with Dr. Yanai on March 11, the day of the earthquake, helped me grasp the situation in faraway Ishinomaki. Mr. Takahashi and Mr. Ohtomo were of great assistance in helping verify the safety of patients. At Teijin Home Healthcare Ltd., when there is an earthquake of lower-5 or higher intensity, in order to verify safety and decide the best support method, we use *D-MAP*, an originally developed disaster response and support map system that automatically outputs a list of Teijin medical equipment LTOT patients in the affected areas. However, there were some patients that we had difficulty in contacting and I would like to thank you again for your assistance in that regard.

**Mr. Ohtomo:** At that time, I was also urgently moving from place to place to verify people's safety but just as I was becoming aware of my limitations, Teijin Tokyo head office called asking for help in verifying the safety of patients. In response, I proposed using television and other mass media to alert people. This proposal was accepted, so on March 18 as there was no transportation available then, I walked to NHK Sendai broadcast station, the nearest broadcast station from my house. Apparently, NHK received many similar requests to ours. In our case, based on our position as a



**Mr. Ryosei Kishida**  
Senior Manager and  
Assistant to the Head of the  
Home Healthcare Sales Division  
Teijin Pharma Limited

**Mr. Ryo Ohtomo**  
Vice Chairman  
Tohoku Hakuchokai  
(patients' association)

**Mr. Akira Takahashi**  
Chairman  
Tohoku Hakuchokai  
(patients' association)

**Dr. Masaru Yanai**  
Respiratory Department  
Manager  
Ishinomaki Red Cross Hospital

**Mr. Tadaaki Matsumoto**  
Manager  
Sendai Sales Office  
Teijin Home Healthcare Ltd.

**Mr. Toshiro Miyazaki**  
Manager  
Fukushima Sales Office  
Teijin Home Healthcare Ltd.

## CSR in Disasters

## Feature 1

respiratory disease patients' association, the broadcast examination committee approved our request. I also went to the Miyagi Prefectural Office to ask for a request to be made for the mass media's cooperation. Our information was published in newspapers on March 19 and also broadcasted through newspaper-affiliated stations. Patients soon started contacting us saying "I heard the broadcast" or "I read it in a newspaper." We could thus alert patients in the six Tohoku prefectures that we were verifying safety.

**Mr. Matsumoto:** The success in approaching the mass media was only possible through the assistance of Tohoku Hakuchokai. The message was broadcast by NHK late at night on March 18. By the following day, we had made contact with approximately 92% of patients and one week later, this figure rose to 99%. When we visited patients' homes to check oxygen concentrators and other equipment, patients made comments such as, "I was relieved to see it on television" and "I felt I had Tohoku Hakuchokai supporting me."

**Mr. Kishida:** We have learnt through our experiences this time that, as business operators, when a large disaster occurs we must approach mass media in collaboration with patients' associations. In this sense, we have discussed in our company that it is important to keep in close contact with patients' associations in various areas on a routine basis.

### A System is Needed to Determine LTOT Patients Beyond the Boundaries of Any Medical Institution or Business Operators

**Mr. Kishida:** Mr. Takahashi, as a representative of the patients' association, what are your thoughts about the earthquake response?

**Mr. Takahashi:** What I am most concerned about is the so-called earthquake-related death. These deaths were an issue that came to the fore after the earthquake this time and include those who



**Mr. Akira Takahashi**

Chairman  
Tohoku Hakuchokai (patients' association)

Mr. Takahashi has given many rehabilitation lectures advocating the importance of respiratory rehabilitation. Many patients were able to get through this crisis using the breathing method they had learnt.

died after deterioration of health while living in an evacuation shelter. We think that some of these deaths may have included home therapy patients. If first-aid stations had been set up in evacuation shelters, patients would have been able to receive treatment sooner and some deaths may have been avoided. I think it is important to make the government understand this.

**Mr. Ohtomo:** In Sendai, I considered it a problem that respiratory disease patients were not allowed into secondary evacuation shelters. Secondary evacuation shelters are facilities that accept and support people who need nursing and other care. Admissions are checked by a nurse and approved by the



**Mr. Ryo Ohtomo**

Vice Chairman  
Tohoku Hakuchokai (patients' association)

After the Great East Japan Earthquake, Mr. Ohtomo made urgent efforts through the mass media to alert respiratory disease patients of safety verification activities.

manager concerned, but LTOT patients were not eligible. In other words, recognition of this disease is very low. In my role as a consultant for Sendai city, when I was asked by the mayor about any problems, I responded, "Please make people who use an oxygen concentrator in daily life eligible for the secondary evacuation shelters."

**Mr. Kishida:** Dr. Yanai, as a doctor, what is your opinion about this situation?

**Dr. Yanai:** I regret to say that few people understand the situation of LTOT patients. Nurses and physiotherapists are permanently stationed at the welfare evacuation shelters\* and doctors move between shelters to give support to those who need nursing care, but the city officials were not fully aware of LTOT patients. I would like the city to have a proper understanding of LTOT patients. In the case of dialysis patients, this has been achieved. Including the degree of emergency needs, the status of LTOT patients must be understood beyond the boundaries of businesses and medical institutions. In a crisis, the effect of the disaster could be reduced if the required information was made available to local social workers and the patients' association. Even if disasters cannot be prevented completely, in order to minimize damage, we must anticipate various cases and prepare for occurrences beyond these anticipations. We fully learnt this time that the more we are prepared, the less damage we will suffer. This will lead to reducing disaster-related deaths.



**Dr. Masaru Yanai**

Respiratory Department Manager  
Ishinomaki Red Cross Hospital

Dr. Yanai supported LTOT patients by installing a LTOT station at Ishinomaki Red Cross Hospital, the only medical institution that escaped major damage in the affected areas.

\* Welfare evacuation shelter: A kind of secondary evaluation shelter where elderly people who require nursing care, physically impaired people, pregnant women and others are given special consideration.

**Mr. Takahashi:** In some areas, the government is supposed to convey information to social workers, but in some respects it is difficult for the government to always grasp the status of patients due to privacy and other issues. We also tried to have patients register with a neighborhood association, but hardly any patients registered of their own accord. For the time being, it may be the home healthcare dealer supplying oxygen concentrators and cylinders that has the best understanding of patients.

**Mr. Kishida:** The actual situation may be so, but as Dr. Yanai pointed out, it is necessary to have a record of all patients in each area beyond the barriers of medical institutions and businesses. In my role as head of the home oxygen task force of the Japan Industrial and Medical Gases Association, I went to the Pharmaceutical Affairs Section of the Tokyo Metropolitan Government to ask about the actual situation of patient registration. I learnt as a result that although patients requiring dialysis and patients with amyotrophic lateral sclerosis are registered, there is no registration for respiratory disease patients.

**Mr. Miyazaki:** I think it is important to use some kind of method so that government officials understand the suffering of respiratory disease patients. One method may be to measure blood oxygen saturation levels with a simple fingertip instrument, and have people experience the strain when the level falls below 90%.

#### Collaboration Beyond Company and Organizational Barriers to Establish an LTOT Station in a Hospital

**Mr. Kishida:** Dr. Yanai, I understand that the Ishinomaki Red Cross Hospital used one of the rehabilitation rooms as an LTOT station. Please tell us about it.

**Dr. Yanai:** The practice of business operators supporting patients in disasters started with Teijin Home Healthcare Ltd. and others in the Hanshin–Awaji earthquake. As a system, this proved to work fairly well, as was also demonstrated in the Niigata–Chuetsu earthquake, the Chuetsu offshore earthquake and the Iwate–Miyagi inland earthquake. On the other hand, although the hospital had prepared for an earthquake predicted to occur offshore of Miyagi, we never expected such a widespread disaster nor the situation of many respiratory disease patients coming to the hospital for oxygen. The number of people that came rose from 10 on the first day to 26 the next day and then to 29 on the day after that until we couldn't respond. It was in this situation that I had the idea of setting up an LTOT station, on the basis that the rehabilitation center had electricity and thinking that it could be used by many LTOT patients. Thus, I consulted Mr. Matsumoto of Teijin Home Healthcare Ltd. and 50 oxygen concentrator units were installed on March 15.

**Mr. Matsumoto:** I think the prompt support was possible because I had previously had many discussions with Dr. Yanai.

**Dr. Yanai:** I appreciate all the help we received from each business operator. Teijin Home Healthcare Ltd. and other business operators



**Mr. Ryosei Kishida**

Senior Manager and Assistant to the Head of the Home Healthcare Sales Division  
Teijin Pharma Limited

Mr. Kishida has been engaged in the home oxygen business for 28 years and serves as the chairman of the home oxygen task force of the Japan Industrial and Medical Gases Association.

assisted by bringing as many oxygen concentrators/cylinders as possible to the hospital, and many empty cylinders were taken back and refilled regardless of whose cylinder it was. It was reassuring to know that in an emergency, medical equipment manufacturers and their agents can cooperate beyond company barriers to do everything possible for patients.

**Mr. Kishida:** Twenty years ago, the Association for Promotion of Health Care Service initiated a certification system for LTOT. Today, approximately 220 companies in Japan are certified under the system. One criterion for certification is being able to offer 24-hour support, or if this is not possible, guaranteeing a substitute company that can offer 24-hour support. In this case, I think this provision functioned effectively.

**Mr. Matsumoto:** Recently, many hospitals have asked for our regional data on the number of LTOT patients. Since *D-MAP*, our disaster response and support map system, can output a distribution map of patients, we have explained to hospitals that any data that does not contain personal information can be provided. The keyword that I thought came out of this earthquake disaster in terms of future measures was “collaboration” including that between business operators, business operators and hospitals, business operators and patients’ associations, and patients and patients’ associations. Use of *D-MAP* by hospitals is also part of this collaboration.

**Dr. Yanai:** In the event of a large-scale disaster, it will be important to collaborate beyond company and organizational barriers.



**Mr. Tadaaki Matsumoto**

Manager  
Sendai Sales Office  
Teijin Home Healthcare Ltd.

While contacting/liasing with various parties as a person responsible for the home oxygen business in Miyagi, Mr. Matsumoto issued instructions to his staff as a workplace leader while considering the psychological stress of employees.

#### Promoting Respiratory Rehabilitation: Training Patients in Breathing Methods Useful in Emergencies

**Mr. Kishida:** I understand that respiratory rehabilitation\* proved very useful in this earthquake. Please tell us about it.

**Mr. Takahashi:** Tohoku Hakuchokai asked its members about respiratory rehabilitation through questionnaires and during group discussions at the general meeting. Many patients said that using the breathing methods that they had learnt in Hakuchokai rehabilitation sessions allowed them to wait calmly for family members to return or for other help. I was very glad to hear that.

**Mr. Kishida:** Dr. Yanai, please tell us again about the significance of respiratory rehabilitation?

**Dr. Yanai:** For chronic obstructive pulmonary disease patients in particular, respiratory rehabilitation carries the same importance as

## CSR in Disasters

## Feature 1

drug therapy. If patients learn how to breathe properly, they can substantially prevent the drop in blood oxygen saturation levels that occurs when walking. This time, there were patients who were able to survive the crisis without oxygen cylinders through use of respiratory rehabilitation; it is that important. That is why it is such a great thing for the patients' association to offer respiratory rehabilitation classes. Patients also receive encouragement from each other while talking at the classes.

**Mr. Ohtomo:** Recently, patient awareness about the benefits of respiratory rehabilitation has been increasing. For instance, in Yamagata, there have been requests for rehabilitation lessons to be held. Through comprehensive public relations activities, Tohoku Hakuchokai would like to increase the number of participants at these sessions.

**Mr. Takahashi:** Tohoku Hakuchokai will start accepting applications for respiratory rehabilitation classes in May. We are now preparing a leaflet inviting patients to join the classes. It would be nice if Teijin Home Healthcare Ltd. staff could hand out these leaflets when they visit patients.

**Mr. Matsumoto:** Yes, we would be glad to cooperate.

**Mr. Kishida:** This autumn, the general meeting of the Federation of Japanese Respiratory Disease Patients' Associations will be held. As there is increasing interest about the benefits of respiratory rehabilitation among patients in the areas not affected by the disaster, I hope that comments from Tohoku Hakuchokai at the meeting will lead to its more widespread use.

\* Respiratory rehabilitation: As a supplement to medical treatment, a combination of physical therapy (breathing training, exercise therapy) and diet therapy to improve breathing difficulties.

### Collaboration, the Keyword in Creating an Environment of Security and Trust

**Mr. Kishida:** Today's dialogue was the first opportunity for discussions between a doctor, a patients' association and Teijin Home Healthcare Ltd. What did everyone think about the dialogue?

**Dr. Yanai:** It was good to hear how patients in Sendai responded to the earthquake disaster. I had heard about the patients in Ishinomaki and now I know the details of the situation in Sendai. The dialogue

reaffirmed the importance of collaboration between medical staff, patients and home healthcare dealers and of raising the issue with the government.

**Mr. Takahashi:** In this major earthquake disaster, many local clinics ceased functioning. That's why a huge number of patients went to large hospitals for help.

From now on, I think it is necessary that local clinics introduce in-house power generation and for there to be closer coordination between clinics.

**Mr. Ohtomo:** In this earthquake disaster, we saw the sincere efforts of Teijin Home Healthcare Ltd. with our own eyes. This strengthened the resolve of the patients' association to also take action and we were able to carry out measures to face the problem. For me, today's dialogue reinforced the importance of collaboration between all groups.

**Mr. Matsumoto:** Teijin Home Healthcare Ltd.'s underlying theme is "security and trust." On March 11, to be honest, we didn't know how to take the initial step forward. However, I think this dialogue has told us that the trial-and-error process used to support patients was not mistaken. Based on the lessons that we have learnt this time, we hope to strengthen collaboration between all groups and achieve an enhanced level of security and trust.

**Mr. Miyazaki:** This dialogue was a valuable opportunity for business operators like us to think about what responsibilities we must fulfill to prevent/reduce the effect of disasters. In the future, we hope to apply what we have learnt from Dr. Yanai and Tohoku Hakuchokai.

**Mr. Kishida:** As a business operator, my resolve to collaborate with people in the industry and work for better home healthcare was renewed. Thank you very much for sparing the time to join this dialogue and for the valuable comments.



**Mr. Toshiro Miyazaki**

Manager  
Fukushima Sales Office  
Teijin Home Healthcare Ltd.

In Fukushima, which experienced both the earthquake and nuclear power plant accident, the struggle from a psychological point of view is still continuing today. While considering the health of employees, Mr. Miyazaki guided staff to ensure proper patient follow-up.



### Dialogue with Employees Engaged in Home Healthcare

In addition to this dialogue with a doctor and a patients' association, a dialogue was held with employees of the home healthcare business regarding the response to the Great East Japan Earthquake. For details, please visit our website.



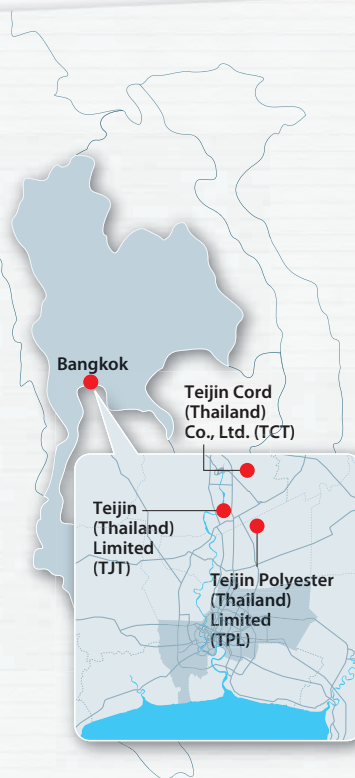


## Teijin Group's Response to the Thailand Floods: Recovery and Restarting Production after Suspended Operations due to Flooding

In Thailand, due to the continuous and torrential rainfall that started in July 2011, rivers overflowed and approximately one third of the land was inundated. Three (TPL, TJT and TCT) of the four Teijin Group production bases in Thailand were inundated and production had to be temporarily suspended. However, there were no injuries to Teijin employees and recovery work has progressed to enable gradual resumption of production activities.

### Outline of the Three Teijin Group Production Bases in Thailand and the Extent of Damage

Company name	Abbreviation	No. of employees (at time of disaster)	Business details	Extent of damage		
				Operations suspended	Injuries	Partial restart of production after flooding
Teijin Polyester (Thailand) Limited	TPL	Approx. 900	Manufacture of polyester chips, polyester filament/staple fibers and industrial fibers	October 16, 2011	None	February 9, 2012
Teijin (Thailand) Limited	TJT	Approx. 500	Manufacture of polyester chips and polyester filament/staple fibers	October 12, 2011	None	February 29, 2012
Teijin Cord (Thailand) Co., Ltd.	TCT	Approx. 100	Manufacture of cords for the core of industrial-use transmission belts	October 8, 2011	None	May 3, 2012



### Worksites and Head Office Working Together for Recovery

After we were notified of the further spread of damage on October 14, 2011, we set up a Thailand floods countermeasures task force in our head office to support the activities of the countermeasure headquarters already established onsite. The countermeasures headquarters assigned personnel responsible for each business and department. Placing priority on human life, these personnel took action in areas such as onsite directions, customer response, material supply support, procurement of machinery/materials, technical/personnel support, local employee support, infection prevention and healthcare.

Recovery work at the three companies, such as cleaning the premises and disassembly/cleaning of equipment was conducted through the joint efforts of local employees and the support team from Japan. TPL made the first shipment after the flooding on February 11, 2012, followed by TJT on February 29, 2012, and production has since been resumed step-by-step.

### Maintaining Deliveries to Customers through Alternate Production

After operations were suspended at the three local sites, we immediately considered alternate production and procurement from other companies to ensure customer needs were met. Production of polyester filament and staple fibers, and industrial fibers was shifted to the Matsuyama, Tokuyama and Iwakuni Factories of Teijin Fibers Limited as well as to manufacturers in Indonesia and Taiwan, thereby minimizing the impact on deliveries to customers. TCT also maintained their deliveries to Japanese rubber manufacturers through alternate production at other companies.



Inside the inundated plant at TJT  
(October 21, 2011)



The inundated plant at TPL  
(October 24, 2011)



Trial operation of equipment at TCT  
(March 9, 2012)



First shipment after restart of production  
at TPL (February 11, 2012)

## Looking Back at the Great East Japan Earthquake and Thailand Floods with Respect to Teijin's BCP/BCM

The Teijin Group implements risk management for the entire group based on its basic principles of total risk management. In this framework, the BCP and BCM are positioned as core challenges, and their implementation status, and group-wide risk management plan and progress are reported to the Board of Directors.

Teijin Home Healthcare Ltd., which features in this report, has formulated a BCP under the basic concept that business continuity is directly connected to the safety of patients, and has devised original systems such as *D-MAP*. These kinds of preparations performed on a routine basis made it possible to respond appropriately and promptly at the time of the Great East

Japan Earthquake. I am proud of the employees who fulfilled their duty at their respective workplaces.

During the Thailand flooding, countermeasures headquarters were established both in Thailand and at the Teijin head office and all-out group-wide efforts were made for recovery. We will continue to promote total risk management including BCP and BCM as an important part of CSR.



**Tamotsu Koyama**  
General Manager of  
Risk Management Office  
Teijin Limited

## Feature 2

# Thermoplastic CFRP: Transforming the Future— Reducing Automobile Chassis Weight by 80%

## CFRP, a New Material Being Viewed as the Answer to Creating Lighter Cars

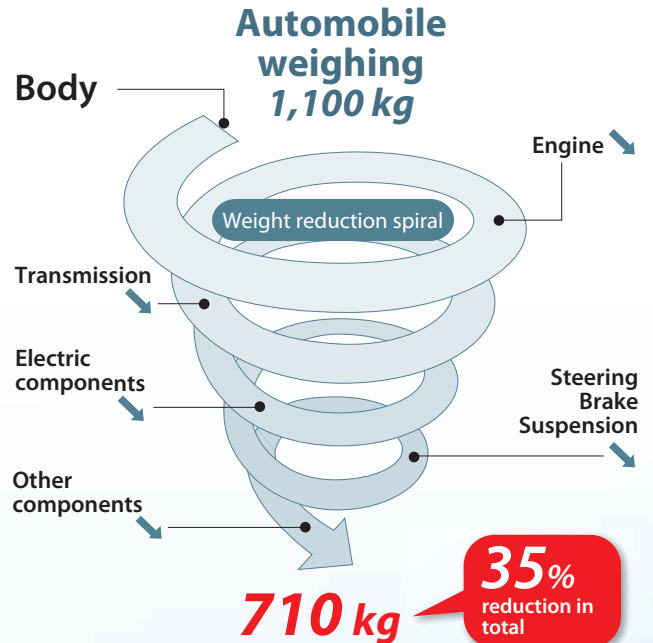
Carbon fiber is an advanced material 10 times stronger than steel yet only a quarter of its weight with the added advantage of being highly resistant to both acid and alkaline corrosion. Combining carbon fiber with plastics is CFRP, whose use as a structural material for aircraft and wind power generation turbines continues to grow.

In the automotive industry, CFRP is capturing attention as a new material that can realize a lighter vehicle body while ensuring safety. Since the body is currently the heaviest part of a car, a lighter body will allow downsizing and weight reductions of other parts such as the engine and transmission. This will result in a substantial reduction of the overall vehicle weight (weight reduction spiral) and improve fuel efficiency dramatically. For hybrid and electric vehicles, it will help realize smaller and lighter batteries and motors, the sources of power, while significantly increasing the driving range.



The world's first CFRP one-minute molding technology developed by Teijin has received worldwide acclaim. The technology has received awards from the global market research firm Frost & Sullivan and ICIS, an influential UK-based journal in the chemical industry, who chose the technology as the overall winner and division award winner in the ICIS Innovation Awards 2011.

### Weight Reduction Spiral Effect

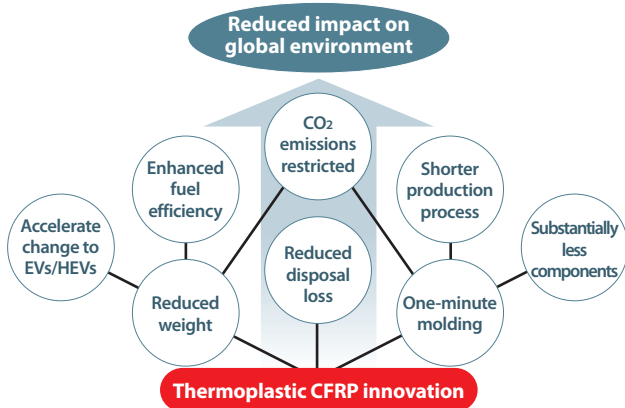


Fuel efficiency of automobiles is a global issue as underlined by the US government's announcement to tighten fuel-efficiency regulations to 23.2 km/liter for 2025 models, approximately twice the current average. Offering a solution, the Teijin Group has successfully established a new technology that, for the first time in the world, enables carbon fiber reinforced plastic (CFRP), a new material that is strong yet light, to be molded in just one minute. This will make it possible to achieve the previously difficult task of using CFRP in automobile mass-production, and will pave the way toward better fuel efficiency owing to a substantially lighter vehicle body weight.





## Potential of Thermoplastic CFRP to Reduce Environmental Impact



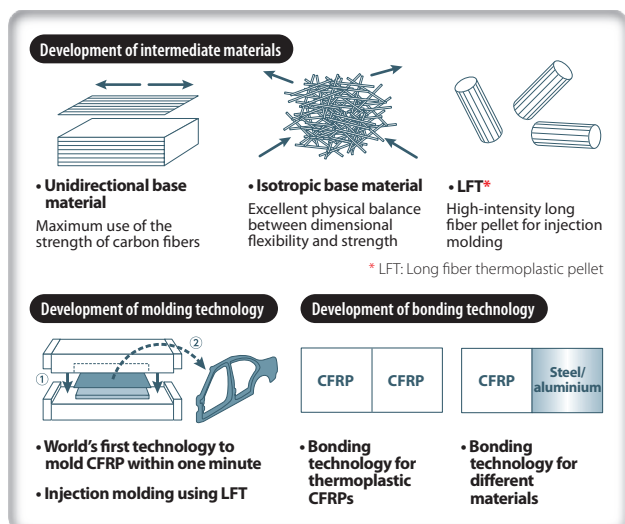
### Overcoming the Barrier of One-minute Takt Time for the First Time in the World

Conventional CFRP could not be used in automobile mass-production where a takt time (time required for one process) within one minute is required. This was because of a complex manufacturing process and longer molding time due to the use of thermosetting resin, which hardens when heated. The high cost is another obvious problem.

In response, the Teijin Group used thermoplastic resin, which softens when heated and had previously been difficult to use for CFRP, to successfully develop thermoplastic CFRP in March, 2011. As a result, the manufacturing process was simplified significantly and takt time within one minute was realized for the first time in the world, opening up the possibility of applications to mass-produced automobiles. Thermoplastic CFRP, whose shape can be easily modified after molding, is also suitable for reuse or reforming, and has the potential to contribute to reducing environmental impact over the entire product life cycle including after use.

### Concept Car with Chassis Weight Reduced to One-fifth

The Teijin Group has analyzed the strength and moldability required for a vehicle body and developed three types of intermediate materials with different strength characteristics to enable use of thermoplastic CFRP to meet the requirements for various vehicle parts. We have also developed technologies to bond CFRPs with other CFRPs and with different materials such as steel and aluminum.



In March 2011, a concept electric vehicle was manufactured combining all of these new technologies. This all-thermoplastic-CFRP car has minimized use of metal and a chassis weighing a mere 47 kg, one fifth the weight of a conventional steel chassis.



All-thermoplastic-CFRP car

### Joint R&D with GM, USA for Full-scale Application to Mass-produced Automobiles

For full-scale application of thermoplastic CFRP to mass-produced automobiles, it is necessary to guarantee further reliability and safety as a vehicle-body structural material, while also developing peripheral technologies relating to repair and maintenance.

In December 2011, we signed a pact with General Motors (GM), a major US automobile manufacturer, for co-development of mass-production technologies for various components using thermoplastic CFRP. It was a first step toward full-fledged application to mass-produced automobiles.

Moving towards commercialization of thermoplastic CFRP, in the middle of 2012, operations will begin at a pilot plant currently under construction at our Matsuyama Factory (Ehime). We will also fast-track component development at Teijin Composites Application Center, established in the north-eastern part of the USA in March 2012 as a base for application development.

In the future, we plan to approach manufacturers at home and abroad regarding full-scale application of thermoplastic CFRP with a focus on automotive applications. We also hope to expand applications to other industrial components to contribute to the reduction of CO<sub>2</sub> emissions through weight reductions.

### Comment of GM Vice Chairman Mr. Steve Girsky

Our relationship with Teijin provides the opportunity to revolutionize the way CFRP is used in the automotive industry, which till now has been limited to some parts of luxury cars. This technology holds the potential to be an industry game changer and demonstrates GM's long-standing commitment to innovation.



Norio Kamei, Senior Managing Director (left)  
Steve Girsky, Vice Chairman (right)

### Comment from Teijin—Involvement in Development

#### Designing and Analyzing Molded Parts Made of Thermoplastic CFRP

No-one has ever done this kind of development before so there are many difficulties, but considering the technological innovation that we are creating, it is extremely satisfying. I hope our thermoplastic CFRP can be used in many components and contribute to reducing global environmental impact.

#### Tsukasa Arai

Teijin Composites Innovation Center



# News Flash

Major topics relating to FY2011 Teijin Group CSR activities are presented below.

## Society Listed Once Again in SRI Indexes

Teijin Limited has been listed for three consecutive years in the Dow Jones Sustainability World Index, which is recognized as a global indicator of socially responsible investment (SRI). Teijin is also listed in the Dow Jones Sustainability Asia-Pacific Index, the FTSE4Good Index series, the Ethibel Investment Register as well as in the Morningstar SRI Index, a representative SRI index in Japan. These listings are evidence of the high worldwide evaluations of Teijin's social-responsibility initiatives.

We were also awarded a Bronze Class rating in the CSR assessments by Sustainable Asset Management (SAM), a globally recognized SRI rating company. Teijin Limited is the only Japanese firm in the chemical industry sector that acquired a rating in 2012.



## Award Ohda City Presents First "Corporate Excellence in Childcare Support System" Award to Teijin Cordley Shimane Plant 2.10

Teijin Cordley's Shimane Plant, a driving force in the Teijin Group's artificial leather business, was chosen by Ohda City in FY2011 as the first company to receive the Corporate Excellence in Childcare Support System Award. A certificate was presented together with a Corporate Excellence in Childcare Sticker. The award is a result of the company's overall efforts in childcare support including a work-at-home system for employees experiencing difficulties in attending the office for childcare-based and other reasons, and a system for returning to work after childcare leave. The Teijin Group plans to use this award as a springboard to further enhance childcare support and also work-life balance of group employees. Through wide flexibility in "place" (work-at-home system) and "time" (support for childcare and nursing care), we will ensure comprehensive back-up for our employees.



## Award Three Textile Group Companies in Thailand Presented with Safety Award 2.10

In August 2011, Teijin Polyester (Thailand) Limited (TPL) and Teijin (Thailand) Limited (TJT), companies engaged in the manufacture and marketing of polyesters, as well as Teijin Cord (Thailand) Co., Ltd. (TCT) engaged in the manufacture and marketing of polyester cords for transmission belts received the National Occupation Safety and Health Award, the most prestigious safety award in Thailand.

Through ESH activities such as a safety-awareness week to promote the safety activities of each division and implementing management-led safety patrols, these three companies (TPL, TJT and TCT) exerted all-out efforts to instill/raise safety awareness.

We hope that being presented with this prestigious safety award will enhance the sense of trust in us in Thailand as a company making efforts for ESH activities.



## Society Expanded Scholarship Project in China

The Teijin Scholarship Foundation (see page 34) has decided to expand its scholarship project in China and will increase the number of annual scholarship recipients for FY2012 to 36, a 50% increase from FY2011.

One of the Teijin Group's growth strategies is reforming the regional portfolio, aiming to expand business in the key regions of Asia and emerging countries, prime examples being China and Brazil. We have high expectations that the expansion of the scholarship project this time will contribute to further support for fostering excellent human resources in China, resulting in the enhanced presence of the entire group in the future.





## Society

### Various Projects Started to Support Reconstruction of Disaster Areas

Teijin Associa Retail Limited, which is driving business focused on specialist men's and ladies' wear retail stores, started the From Tohoku Factory Project in June 2011. Almost 10,000 products made at factories in the areas affected by the Great East Japan Earthquake are being sold through its nationwide retail network.

Furthermore, on February 1, 2012, the Teijin Group started a project aimed at improving the living environment at emergency temporary housing as the first activity of the Fukushima Living Environment Research Group. This is a joint project with the Fukushima University Post-disaster Reconstruction Research Institute.

We also joined the National Institute of Advanced Industrial Science and Technology (AIST) Smart Life Care Consortium, a group of companies who have formed an alliance through the Kesennuma Kizuna (strong bond) Project to support post-disaster reconstruction. The Teijin Group has extended support of over 500 million yen for all projects combined (for the period between March 2011 and January 2012), including donation of wastewater treatment equipment and curtains.



Product tag

## Society

### Donations to School Lunch Project in Developing Countries through Introducing Table for Two Program

The Teijin Group participates in Table for Two,\* a social contribution program that is easy for employees to take part in, and that seeks to solve problems of famine in developing countries and obesity and lifestyle-related diseases in advanced countries.

Through the Table for Two program, company cafeteria menu items are introduced where donations of 20 yen per meal are passed on to a school lunch project in developing countries. The program was introduced to cafeterias at the Teijin Limited Matsuyama Plant in October 2011, the Iwakuni Plant in April 2012 and the Osaka head office in May 2012.

The donation-linked menu items are healthy and low-calorie, also aiding in the fight against obesity and lifestyle-related diseases among employees.

\* Table for Two: A social contribution program in Japan started by the NPO, Table for Two International.



Donation-linked menu

## Award

### CSR Report Wins Award for Excellence in Sustainability Reporting 2.10

The 2011 Teijin Group CSR Report received the Award for Excellence in the Sustainability Report Awards section of the 15th Environmental/Sustainability Report Awards organized by Toyo Keizai Inc. Following on from receiving the Award for Excellence in the 14th Awards, we have received high evaluations for four consecutive years.

## Award

### Teijin Fibers Limited Wins Award for Excellence in the 13th Green Purchasing Awards 2.10

Teijin Fibers Limited was presented with the Award for Excellence for their initiatives for the reduction of environmental impact in the 13th Green Purchasing Awards organized by the Green Purchasing Network.

Teijin Fibers Limited is committed to reducing environmental impact through their business under a hybrid strategy that amalgamates biomaterials, recycling, functional materials and reform of manufacturing processes.

The award is a result of the highly evaluated achievements of Teijin Fibers in a wide range of fields, as exemplified by the cross-industry coordination and product development in the ECO CIRCLE® closed-loop recycling system for polyester products.

## Environment

### Benefits of MSABP® Recognized in Japan and Abroad

In joint research with the Japan Sewage Works Agency spanning over two and a half years, Teijin Limited has been conducting pilot tests of MSABP®, biological-process-based wastewater treatment equipment (see page 44). The results of this research announced in July 2011 have demonstrated the benefits of MSABP®. Compared to the oxidation ditch process widely used at small-scale wastewater treatment plants, excess sludge can be reduced 78%, while power consumption can be reduced 12% (including power for sludge processing).

Teijin Limited has provided the MSABP® system free-of-charge to help recovery of the Kesennuma sewage system affected by the Great East Japan Earthquake. The equipment was adopted as temporary recovery equipment for a sewage treatment plant.

In addition, the MSABP® system is being used for sewage treatment in Shenyang, China, and in March 2012, was awarded the 2011 Grand Prize for Corporate Excellence in Environmental Business at the 5th Chinese Environmental Industry Awards for enabling centralized management of sewage treatment plants dispersed in multiple locations.



## CSR Management System 4.8 4.9 4.12 4.13

The Teijin Group has appointed a Chief Social Responsibility Officer\*<sup>1</sup> under whose strong leadership we are implementing comprehensive group-wide CSR management. We classify various CSR issues into three fields, and have created a CSR management system that is appropriate to each respective field.

### Activities to Promote CSR

We consider CSR to be an important element of corporate management, and aim to promote CSR as an integral part of management. In 2005, the Teijin Group created the new post of Chief Social Responsibility Officer (the abbreviation CSRO was used previously) to act as proxy for the Chief Executive Officer (CEO) in managing all CSR-related affairs. Since being appointed, the Chief Social Responsibility Officer has been showing strong leadership in promoting the Teijin Group's CSR activities.

To implement the Teijin Group's CSR management in a unified, efficient manner, various CSR issues are classified into three fields, "basic," "expansive" and "selective." A main division/organization in charge is specified for each field, and starting with planning for the medium- to long-term and single fiscal years, we implement the Plan, Do, Check, Act (PDCA) approach.

#### Basic CSR

The Teijin Group's "basic" CSR is directly controlled and supervised by the Chief Social Responsibility Officer\*<sup>1</sup>.

This field includes (1) corporate ethics and compliance, (2) risk management, (3) environmental preservation, safety and disaster prevention, and health activities, (4) product liability/quality assurance and (5) secure export control. While observing laws and international standards, we are striving to reach a level beyond these standards.

#### Expansive CSR

The "expansive" CSR field includes (1) human resources/labor (directly controlled by the Chief Human Resources Officer\*<sup>1</sup>) and (2) purchasing/procurement (Chief Financial Officer [CFO]) to meet supply chain needs.

As of recently, in order to respond to advancing social needs, the Chief Social Responsibility Officer advises/supports the Chief Human Resources Officer and CFO on "expansive" CSR issues.

#### Selective CSR

In "selective" CSR, companies conduct voluntary activities irrespective of legal obligations.

The Teijin Group is proactively engaged in this field and is strongly committed to various philanthropic activities.

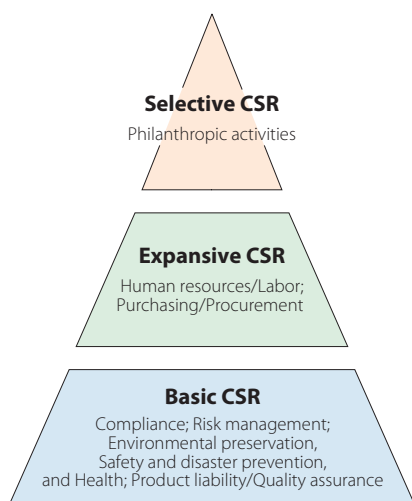
### Teijin Group CSR Committee

The Teijin Group has established the Group CSR Committee to discuss and take action on key issues and initiatives relating to group-wide CSR. The Committee meets twice a year: in FY2011, meetings were held in April and October. The main agenda included confirmation and deciding policies relating to the Great East Japan Earthquake such as how to deal with the radiation, the work-at-home system and financial contributions/donation of relief goods, as well as items relating to how to integrate ISO 26000 into our CSR management.

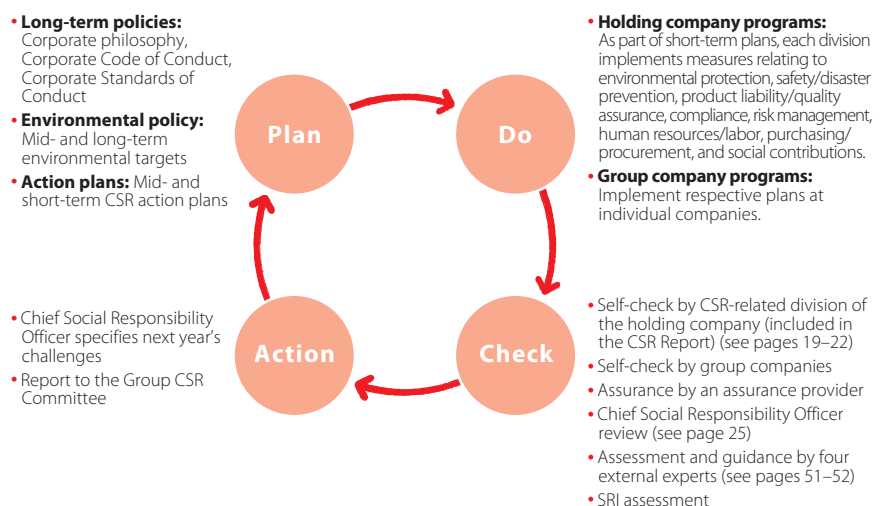
Under the Group CSR Committee, there are six subcommittees or conferences (see page 18: The Teijin Group's CSR Management System). Four of these subcommittees discuss and address "basic" CSR issues, a focus of the Teijin Group. "Expansive" and "selective" CSR issues are discussed and addressed by the Group CSR Promotion Subcommittee consisting of staff from the holding company and representatives from five business groups and the New Business Development Group.

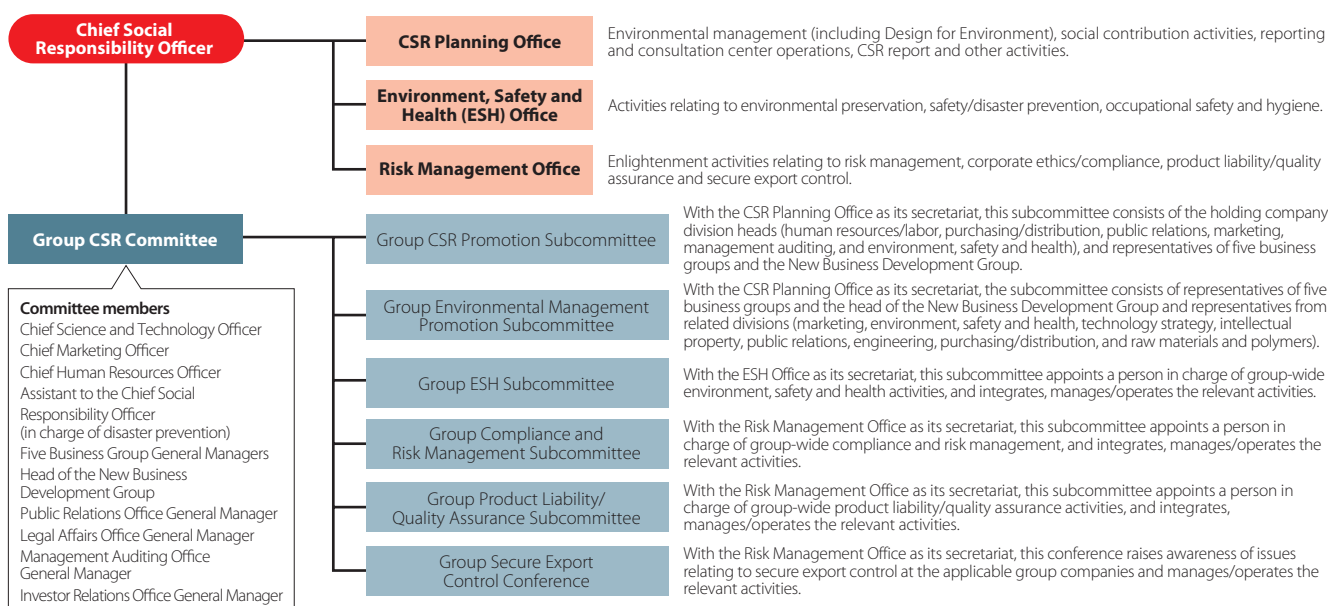
Teijin Limited joined the UN Global Compact in March 2011 based on a global perspective and in order to promote high-quality CSR management.

### The Teijin Group CSR Pyramid



### PDCA Approach to CSR Activities





\*1 On February 8, 2012, the Teijin Group announced its medium- to long-term management vision, "CHANGE for 2016." From April 1, to strongly promote our overall strategy and as a measure to enhance corporate administration functions, we have reorganized the previous chief officer system and updated it to a functional coordinator system.

New Position Titles	Previous Position Titles
Chief Social Responsibility Officer	CSRO: Chief Social Responsibility Officer
Chief Science and Technology Officer	CTO: Chief Technology Officer
Chief Marketing Officer	CMO: Chief Marketing Officer
Chief Human Resources Officer	CHO: Chief Human-resources Officer

## Looking Back at FY2011 CSR Activities

As the Teijin Group Chief Social Responsibility Officer, at the end of every fiscal year I conduct a review of the CSR of each business group through hearings with personnel responsible at all business groups. In the following I look back over the FY2011 CSR activities referring to these hearings, and report on three matters where progress has been made.

### 1) Improvements to BCPs

To prepare for a large-scale disaster such as a large earthquake or a pandemic such as bird flu, in 2006 the Teijin Group established a BCP for central management. Since then, we have been working to create BCPs customized to the characteristics of each business group, and in FY2011 we completed this process. As upcoming measures, we will review BCPs based on the important lessons learnt after the Great East Japan Earthquake of March 11 last year and conduct regular training and drills seeking to increase BCP functioning.

### 2) Stronger Risk Management System

Previously, the CSR department consisted of two office systems, the CSR Planning Office and the ESH Office. However, in light of the increasing importance of risk management and BCP, we have newly established a Risk Management Office and increased the number of staff responsible for risk management.

### 3) Environmental Management Promotion Subcommittee Established

The Teijin Group Environmental Management Promotion Subcommittee has been established as of 2012 to enable a group-wide approach to environmental management, considering that its application has expanded globally and it has become applicable to all business groups.

The objective is to integrate the group growth strategy and environmental management while also expecting further expansion of environmental businesses.



**Osamu Nishikawa**  
 Senior Executive Officer,  
 Member of the Board,  
 Chief Social Responsibility Officer  
 Teijin Limited

While advances such as these have been made, accidents also occurred that require serious reflection. As a chemical manufacturer, the Teijin Group has placed special emphasis on disaster prevention and safety activities. Despite this, in August 2011, there was an accident at the Matsuyama Plant of a group company involving a chemical (hazardous) substance falling/spilling onto the road during transportation of raw materials. After the accident was reported to the authorities and the substance was cleaned up, the accident details were publicized. Fortunately, there was no damage to the environment or people, but we regrettably caused much concern among local residents. Immediately after the accident, we set up an accident countermeasures committee, enacted measures to prevent recurrence and applied them group-wide (see page 46).

In FY2012, with respect to international standards for social responsibility, we will seek to further instill the principles of ISO 26000 (published at the end of 2010) within the company and review the form that the Teijin Group's CSR should take. As the Chief Social Responsibility Officer, I vow to continue striving to further advance the CSR management of the Teijin Group.



# FY2011 Plans, Goals, Performance and Self-evaluations

The Teijin Group organizes CSR issues into three categories; Basic, Expansive and Selective. We set mid-/long-term and fiscal-year goals for each area and self-evaluate achievements to reflect them in the goals for the next fiscal year.

		Mid- and long-term goals	FY2011 goals	
Corporate governance		Enhance corporate governance and ensure compliance with laws and regulations.	Conduct a systematic review of corporate governance regulations in accordance with amendments of laws. Respond to the announcement by the Financial Services Agency/Business Accounting Council entitled, "Council Opinions on the Revision of the Standards for Management Assessment and Audits for Internal Control of Financial Reporting" (maintain effectiveness and promote efficiency).	
CSR general		Keep careful track of social demands and use the knowledge gained to enhance management (continue to hold stakeholder dialogues).	Identify issues through stakeholder dialogues.	
		Instill and enhance CSR activities by applying CSR performance indicators.	Review CSR performance indicators/items and apply them to group companies in Japan.	
		Promote common CSR education.	Continue to hold environmental forums.	
Basic CSR	Corporate ethics/ Compliance	Promote corporate ethics/compliance education activities in Japan.	Revise the Teijin Group Corporate Ethics Handbook. Have all employees of group companies in Japan participate in the Corporate Ethics Workshop for All Employees (collect 100% of check sheets at the workshop).	
		Promote corporate ethics/compliance education overseas.	Hold compliance meetings organized by Teijin Ltd. (at least two locations a year).	
		Operate hotline.	Continue to utilize and promote the hotline in Japan and overseas.	
	Risk management	Increase recognition and enhance risk management activities.	Conduct risk management using "heat maps" (achieve heat map submission rate of 90% or more in Japan and 50% or more overseas).	
			Review the earthquake manual.	
			Continue to implement earthquake drills (conduct group-wide EMC drills twice a year).	
	Product liability/Quality assurance	Create and improve BCPs.	Formulate BCP for business/development groups.	
			Achieve zero product liability claims and zero serious quality claims.	
Expansive CSR	Human resources/ Labor	Formalize and promote work-life balance.	Raise employees' awareness of work-life balance and increase/expand system users and registrants.	
		Increase the number of career-oriented female employees and facilitate the promotion of female employees to managerial positions. Increase the number of section managers 1.5-fold from 19 (end of FY2008) to 28.	Maintain the hiring ratio of career-oriented female university graduates at 30% or more (as a total combined with FY2011). Increase the ratio of career-oriented female employees and female employees in managerial positions. Aim for 28 or more female section managers.	
		Establish global human resources management. Instill the Teijin way at all group companies and promote recruitment of global human resources.	Enhance the personnel management system through the Global Human Resources Office of Teijin Creative Staff Co., Ltd. Increase the number of overseas employees selected for the core human resources training program.	
		Promote re-employment after age-based mandatory retirement.	Increase the re-employment rate for those who desire to be re-employed after age-based mandatory retirement.	
		Promote the recruitment of those with a disability in all group companies in Japan. Achieve the legal requirement (1.8% or more of regular employees).	Achieve the legal employment rate for those with a disability at all group companies in Japan (1.8% or more of regular employees).	
		Secure fairness of personnel-related regulations and personnel management systems at all group companies in Japan.	Inspect personnel-related regulations and personnel management systems at all group companies in Japan at the time of amendments to labor-related laws.	
		Appoint employees to appropriate positions at all group companies in Japan.	Regularly inspect placement of full-time employees and contract/temporary and other non-full-time employees at all group companies in Japan.	
	Purchasing/ Procurement	Formalize and enhance procurement CSR activities.	Expand CSR procurement based on CSR management at suppliers on a group-wide/global basis.	
Selective CSR	Social contributions	Manage group-wide donations (monetary and other) and support volunteer activities of employees.	Spend at least 1% of current profits on monetary donations.	
			Introduce a system to support volunteer activities of employees.	
			Continue to donate picture books overseas.	



## The Teijin Group CSR Pyramid

### Selective CSR

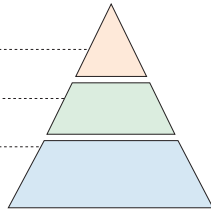
Philanthropic activities

### Expansive CSR

Human resources/Labor; Purchasing/Procurement

### Basic CSR

Compliance; Risk management; Environmental preservation, Safety and disaster prevention, and Health; Product liability/Quality assurance



Self-evaluation Ratings A: Goals achieved B: Goals achieved to a certain extent C: Inadequate

	FY2011 performance and results	Self-evaluation	FY2012 challenges	ISO 26000 core subjects	Reference page
	No change as a result of the review.	A			23
	Internal controls related to financial reporting were effective as of the end of March 2012.	A	Respond appropriately to reorganization of the Teijin Group and group companies and reinforce/improve governance further.	Organizational governance	23
	Held a dialogue (March 28, 2012) relating to BCP and home healthcare support in Sendai, one of the areas affected by the Great East Japan Earthquake, and identified issues.	A	Identify issues through continuing to hold stakeholder dialogues (at least once a year).	Organizational governance/ Consumer issues	7–12
	Held a dialogue (March 26, 2012) and identified issues on Design for Environment.	A			42
	Reviewed adherence of CSR performance indicators to ISO 26000. Yet to be applied to group companies.	C	Apply CSR performance indicators to all core companies (100%).	Organizational governance	17
	Not possible due to the effect of the Great East Japan Earthquake.	C	Promote understanding of ISO 26000.	Environment	18
	Revised the Corporate Ethics Handbook, but could not publish within FY2011.	B	Publish the Corporate Ethics Handbook in July 2012.	Human rights/ Fair operating practices	25–26
	96% of the check sheets were collected at the workshop.	B	Have all employees of group companies in Japan participate in the Corporate Ethics Workshop for All Employees (collect 100% of check sheets at the workshop).		26–27
	Held compliance meetings in Obergünzburg (Germany), Arnhem (the Netherlands) and Shanghai (China).	A	Hold compliance meetings organized by Teijin Limited (at least two locations a year).		25
	<b>Japan:</b> Continued with internal disclosure of operation status in response to 44 reporting/consultation cases. <b>Overseas:</b> Zero reporting/consultation cases in the US. Started utilizing the hotline at Teijin Aramid B.V. in March 2012.	B	Continue to utilize and promote the hotline both in Japan and overseas.		27
	Heat map submission rate: 91% for Japan and 37% for overseas.	B	Conduct risk management using “heat maps” (achieve heat map submission rate of 90% or more in Japan and 50% or more overseas).	Organizational governance	27
	Revised the manual for large earthquakes.	A	Increase recognition of the manual for large earthquakes.		27
	In the Great East Japan Earthquake, we utilized EMC and confirmed the safety of 98% of employees within 24 hours. Conducted a group-wide reporting drill from Dec. 2011 to Jan. 2012. Conducted earthquake evacuation drill (9,240 employees participated from 237 locations across Japan).	A	Continue the earthquake drills (conduct group-wide EMC reporting drills and evacuation drills at all locations twice a year).		27
	Formulated BCPs for five business groups and the New Business Development Group.	A	Expand BCPs to directly managed companies.		27
	Product liability claims: 0. Serious quality claims: 7. Fully applied the function improvement measures (assessment, business group product liability/quality assurance organizations and education thoroughness).	B	Organize structure and enhance activities to secure globally high execution levels.	Consumer issues	28
	Raised awareness through a diversity handbook “together” (published annually) and Teijin Group news (published six times a year). The number of work-at-home system registrants was 29 (including seven men) (FY2010: 16 including five men). The number of employees taking childcare leave was 201 (including 39 men) (FY2010: 171 including 38 men).	A	Promote work-life balance as a platform for “accelerating globalization and diversity” as part of the reform of the human resources portfolio in the medium- to long-term management vision “CHANGE for 2016.” Expand definition and awareness of work-life balance. Enhance various systems and increase/expand users.	Labor practices	30
	Hiring ratio of career-oriented female university graduates was 31% (as a total combined with FY2011) (FY2012: 41%; FY2011: 19%) Ratio of career-oriented female employees was 16% (FY2010: 16%) Ratio of female employees in managerial positions was 3.45% (FY2010: 3.15%) 24 female section managers (goal: 28)	B	Maintain the hiring ratio of career-oriented female university graduates at 30% or more. Increase the ratio of career-oriented female employees and female employees in managerial positions.		29–30
	Introduced EaGLES, the Teijin Group standardized leadership training program to train newly appointed managers. A total of 88 managers in four regions (EU, US, China and Japan) took the course. Eleven overseas employees are registrants of the core human resources training program (of 153 registrants) (FY2010: 10 of 146).	B	Expand the training locations of EaGLES and increase the number of employees taking the course. Increase the number of overseas employees selected for the core human resources training program.		30–31
	The re-employment rate for those wishing to be re-employed after age-based mandatory retirement was 95% (FY2010: 78%)	A	Improve the re-employment rate for those wishing to be re-employed after aged-based mandatory retirement.		30
	Established a permanent recruitment center for those with a disability to facilitate matching between applicants and group companies. At 33 companies, 212 people with a disability are employed compared to the 200 obligated by law (however, 11 companies have not achieved the legal requirement).	C	Achieve the legal employment rate for those with a disability at all group companies in Japan (1.8% or more of regular employees).	Human rights/ Fair operating practices	29
	As there were only minor amendments to labor-related laws, this fiscal year we checked the number of employees and system usage of group companies and investigated if there are personnel-related issues.	B	Continue to inspect personnel-related regulations and personnel management systems at all group companies in Japan at the time of amendments to labor-related laws.		30
	Inspected placement of full-time employees and contract/temporary and other non-full-time employees at all group companies in Japan.	B	Continue to inspect placement of full-time employees and contract/temporary and other non-full-time employees at all group companies in Japan.		30
	Created a Chinese version of CSR procurement guidelines and conducted a survey of overseas suppliers on a trial basis.	B	Introduce and develop CSR procurement activities in China.		32
	Spending on philanthropic activities totaled 1.16 billion yen (3.4% of current profits)	A	Continue to spend at least 1% of current profits on monetary donations.	Community involvement and development	33
	Introduced the volunteer support program. Donated 100,000 yen each to four volunteer organizations that employees participate in.	A	Expand the volunteer support program.		33
	In Japan, collected used books worth 109,378 yen. Donated 52 books to a library in Indonesia. Donated 50,000 yen towards library operations in Thailand.	A	Continue to donate picture books overseas.		34

			Mid- and long-term goals	FY2011 goals	
Basic CSR	ESH general		Enhance ESH management.	Conduct ESH audits in Japan and overseas. Audit I: Conduct at 22 sites. Audit II: Conduct once a year for eight business groups, New Business Development Group and Raw Materials and Polymer Department. Audit III: Conduct once a year for eight business groups, New Business Development Group, Raw Materials and Polymer Department and three directly managed companies.	
				Conduct ESH training in Japan at least once a year and overseas at least once every two years.	
				Hold an ESH compliance internal auditor training course (at least once a year).	
	Environment	Efforts to prevent global warming	<b>Group-wide:</b> Reduce CO <sub>2</sub> emissions* <sup>1</sup> per unit of production amount by 1% or more compared to the preceding fiscal year (evaluate the effect of energy-saving and other projects while excluding the influence of increased/decreased production). <b>Japan:</b> Reduce CO <sub>2</sub> emissions* <sup>1</sup> by 20% or more compared to the FY1990 level by FY2020. <b>Overseas (Europe &amp; USA):</b> Reduce CO <sub>2</sub> emissions* <sup>1</sup> by 10% or more compared to the FY2010 level by FY2020. <b>Overseas (Asia):</b> Reduce CO <sub>2</sub> emissions* <sup>1</sup> per unit of production amount by 10% or more compared to the FY2010 level by FY2020.	<b>Group-wide:</b> Prepare for the CO <sub>2</sub> emissions* <sup>1</sup> target per unit of production amount from FY2012. <b>Japan:</b> Reduce CO <sub>2</sub> emissions* <sup>1</sup> by 20% or more compared to the FY1990 level by FY2020.	
			Reduce CO <sub>2</sub> emissions per unit of transportation amount by 1% or more compared to the previous year's level.	Achieve targets through further enhancing measures to reduce the environmental impact of logistics.	
		Managing/Reducing chemical substance emissions	Reduce chemical substance* <sup>2</sup> emissions by 80% or more compared to the FY1998 level by FY2020. Adopt LIME2, the second version of the Life Cycle Impact Assessment Method Based on Endpoint Modeling (LIME) developed in Japan and focus on reducing chemical substances that have a large environmental impact.	Reduce chemical substance emissions by 30% or more compared to the FY2005 level by FY2011. Using the chemical substance emissions in FY2010 as a model case, specify representative chemical substances that have a large impact on humans and the environment, discuss with relevant businesses and set reduction targets. Regarding proposals of reduction targets in the FY2011 mid-term plan and long-term plan up to FY2020 (80% reduction of chemical substance emissions compared to the FY1998 level), check the mid-and long-term plans of each business and investigate whether management of chemical substance emissions reductions should incorporate units of production amount in addition to total emissions (for improved production efficiency).	
		Waste reduction	<b>Group-wide:</b> Reduce "waste with no effective use* <sup>3</sup> " by 85% or more compared to the FY1998 level by FY2020. <b>Group-wide:</b> Achieve zero emissions at all major business sites in Japan and overseas. <b>Japan:</b> Excluding coal ash and similar waste, endeavor to reduce the amount of waste generated, and achieve zero emissions* <sup>4</sup> for group companies in Japan. <b>Japan:</b> Reduce the total waste generated per unit of production amount by 1% compared to the preceding fiscal year.	<b>Group-wide:</b> Reduce the amount of "waste with no effective use" by 50% or more compared to the FY2005 level by FY2011. <b>Japan:</b> For business sites/plants emitting over 500 tons of waste per year, achieve zero emissions by the end of FY2011.	
		Design for Environment	Shift to development more focused on supply chains.	Further instill the Design for Environment concept (strengthen brand power, and apply concept to systems developed by business groups). Review LCA of in-house products.	
		Environmental business	As sustainable solution proposals, strive to increase the widespread use of environmentally friendly products, technologies and systems.	Develop technologies and promote products to realize advanced materials contributing to the reduction of CO <sub>2</sub> emissions and recycling of resources and water.	
				Review environmental business index settings.	
		Disaster prevention	Achieve zero serious accidents.	Promote disaster prevention management.	
				Enhance countermeasures for earthquakes and tsunamis at high-risk business sites/plants.	
				Improve disaster prevention assessments for overseas plants.	
	Enhance activities of fire prevention management liaison meetings.				
	Take measures for 19 buildings under a 2006 revision of the Promotion of Building Earthquake-resistance Reinforcement Law.				
	Safety	Maintain the annual lost time injury frequency rates at under 0.3.	Expand application of the three major workplace accident prevention guidelines to plants in Japan. Maintain the lost time injury frequency rates at under 0.25.		
Health and hygiene	Strengthen measures for early prevention through creating an easily approachable counseling environment and increased interview opportunities.	Implement assessments of work stress in all workplaces and assess changes in health risk values.			
		Review system for enhanced individual counseling functions.			
	Prevent damage to health due to hazardous chemical substances.	Review nano-material handling guidelines following the changes in regulations.			

\*1 CO<sub>2</sub> emissions include methane and N<sub>2</sub>O emissions.

\*2 Chemical substances: 462 chemical substances listed as Class 1 chemical substances in the Chemical Substances Management Law (Law Concerning Reporting, etc., of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management) revised in April 2010, and 433 substances specified by the Japan Chemical Industry Association. Excluding duplicated listings, there are 575 specified chemical substances.

## The Teijin Group CSR Pyramid

### Selective CSR

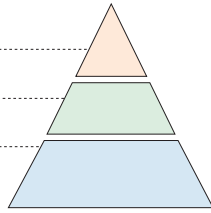
Philanthropic activities

### Expansive CSR

Human resources/Labor; Purchasing/Procurement

### Basic CSR

Compliance; Risk management; Environmental preservation, Safety and disaster prevention, and Health; Product liability/Quality assurance



Self-evaluation Ratings A: Goals achieved B: Goals achieved to a certain extent C: Inadequate

	FY2011 performance and results	Self-evaluation	FY2012 challenges	ISO 26000 core subjects	Reference page
	Audit I: Conducted at 17 sites in Japan and five overseas. Audit II: Conducted at eight business groups, New Business Development Group and Raw Materials and Polymer Department. Audit III: Conducted at eight business groups, New Business Development Group, Raw Materials and Polymer Department and three directly managed companies.	A	Conduct ESH audits in Japan and overseas. Audit I: Conduct at 31 sites. Audit II: Conduct once a year at eight business groups, New Business Development Group and Raw Materials and Polymer Department. Audit III: Conduct once a year at eight business groups, New Business Development Group, Raw Materials and Polymer Business Department and three directly managed companies.	Organizational governance	35
	<b>Japan:</b> Held ESH training at Osaka head office in July. <b>Overseas:</b> Held ESH training in China in November.	A	Conduct ESH training in Japan at least once a year and overseas at least once every two years.		35
	Held training course at Osaka head office in January (38 and 14 employees were certified as 1st-grade and 2nd-grade auditors, respectively).	A	Hold an ESH compliance internal auditor training course (at least once a year).		35
	<b>Group-wide:</b> Organized data for the standard year in preparation for the new target of CO <sub>2</sub> emissions*1 per unit of production amount. <b>Japan:</b> Reduced CO <sub>2</sub> emissions*1 by 49% compared to the FY1990 level.	A	<b>Group-wide:</b> Reduce CO <sub>2</sub> emissions per unit of production amount by 1% or more compared to the preceding fiscal year (overseas targets are integrated into group-wide targets). <b>Japan:</b> Reduce CO <sub>2</sub> emissions by 20% or more compared to the FY1990 level by FY2020.		36–37
	We were unable to implement the planned measures to reduce environmental impact due to the breakage of links in the supply chain caused by the Great East Japan Earthquake and the Thailand flooding. This resulted in worse CO <sub>2</sub> emissions per unit of transportation amount compared to the previous year's level. Nevertheless, we took all possible measures to reduce environmental impact and controlled the increase.	C	Reduce CO <sub>2</sub> emissions per unit of transportation amount by 1% or more compared to the previous year's level.		37
	Chemical substance emissions of 2,279 tons (34% reduction compared to the FY2005 level). Specified chemical substances that have a large impact on humans and the environment, and set reduction goals.	B	Maintain proper management of the group-wide chemical substance emissions. Continue to promote chemical substance reduction through use of LIME2.	Environment	37–38
	<b>Group-wide:</b> Reduced the amount of "waste with no effective use" by 74% compared to the FY2005 level. <b>Japan:</b> Following on from FY2010, continued to achieve zero emissions at relevant business sites/plants.	A	<b>Group-wide:</b> Reduce "waste with no effective use" by 85% or more compared to the FY1998 level by FY2020. <b>Japan:</b> Reduce the total waste generated per unit of production amount by 1% compared to the preceding fiscal year.		40
	Further instilled the Design for Environment concept. Registered the <i>Earth Symphony</i> * trademark overseas (EU, China, Singapore). Held re-training at major sites (10 sites, 11 times, approx. 250 participants). Expanded certified products to five. Started operating the Design for Environment guidelines with enhanced assessment of the effect on biodiversity. Conducted LCA activities through the industry.	A	Instill the Design for Environment concept both internally and externally. Quantify and expand contributions to the environment. Newly establish the Group Environmental Management Promotion Subcommittee and review the overall system of promoting environmentally friendly management activities.		41–42
	Increased the widespread use of carbon fibers and polycarbonate resin in the transportation field. Developed and increased the widespread use of bioplastics. Developed <i>ECO CIRCLE</i> ™ on a global basis. Promoted the water treatment business. Other.	B	Develop technologies and promote products to realize advanced materials contributing to the reduction of CO <sub>2</sub> emissions and recycling of resources and water		43–45
	Planned establishment of the Group Environmental Management Promotion Subcommittee.	B	Review environmental business index settings.		43–45
	One chemical substance leakage accident occurred.	C	Enhance disaster prevention management.		46
	Planned and implemented risk reduction measures at five plants with high risk of fire and leakage of hazardous substances due to earthquakes and tsunamis.	B	Review and exercise emergency response measures with emphasis on earthquakes and tsunamis.		46
	Implemented disaster prevention assessment at four plants in Japan and one overseas plant. • Specialist disaster prevention team conducted on-site guidance at all plants including overseas from specialist and objective viewpoints and achieved enhanced risk reduction effect.	B	Implement disaster prevention assessment at one plant and mini disaster prevention assessment at six plants.	Labor practices	46
	Achieved zero fire accidents. • A total of 15 plants and companies participated in fire prevention management liaison meetings. • Newly introduced fire and disaster prevention hands-on training at the liaison meetings.	A	Enhance activities of fire prevention management liaison meetings.		46
	Completed measures for one building.	B	Take measures for 18 remaining buildings under a 2006 revision of the Promotion of Building Earthquake-resistance Reinforcement Law.		46
	Officially started operating the three major workplace accident prevention guidelines in the Teijin Group from May 2011. The lost time injury frequency rate was 0.32.	C	Enhance recognition of the three major workplace accident prevention guidelines. Maintain the lost time injury frequency rates at under 0.25.	Labor practices	47
	The number of workplaces with high health risk values was reduced from 63 of FY2010 to 61.	A	Continue with workplace environment improvement activities after implementing assessments of work stress in all workplaces.		48
	Made decision to place clinical psychotherapists, counselors and health nurses in the Healthcare Administration Office. Maintained a face-to-face counseling system involving visiting counselors.	A	Enhance the individual counseling system both internally and externally.	Labor practices	48
	No change in FY2011 as a result of the review.	A	Review nano-material handling guidelines following the changes in regulations.		48

\*3 Waste with no effective use: Waste that is simply incinerated or put directly into landfill.

\*4 Zero emissions: Reducing the ratio of "waste with no effective use" to 1% or less of the total waste generated.

## Corporate Governance 4.1 4.2 4.5 4.6 4.7 4.10

The Teijin Group positions corporate governance as an essential element in realizing sustainable improvements in shareholder value and fulfilling our responsibility to stakeholders including employees, customers, the local community and residents, and we are implementing measures to strengthen corporate governance.

### History of Corporate Governance Improvements

In 1999, the Teijin Group began a series of groundbreaking management reforms with the aim of achieving corporate governance that is built on fairness, transparency, quick decision-making, and ensuring objectivity.

These reforms include establishing the Advisory Board, reducing the number of directors, introducing a corporate officers' system and establishing a compensation system for directors in accordance with consolidated return on assets (ROA).

It is our practice to adopt corporate governance systems considered most appropriate to achieve our goals at that point in time. At present, we have judged that the best system of governance as a company with auditors is the following. First, the function of monitoring and supervising management fulfilled by a board of directors including independent outside directors, a corporate officer system and a board of corporate auditors system including independent outside corporate auditors, and second, the function of a nominating and compensation committee fulfilled by an advisory board.

Further evidence of our progressive actions was our pioneering release of the Corporate Governance Guide 2003, guidelines that integrated the Teijin Group's corporate governance and the supporting areas of compliance and risk management. In response to changes in social and legal circumstances, we have continued to revise these guidelines to reflect the appointment of independent outside directors and an increased number of independent outside corporate auditors. These guidelines are now published as the Teijin Group Corporate Governance Guide.

### Internal Control

The internal control system was established and is operated and improved according to annual decisions made by the Board of Directors regarding its functioning.

In accordance with the Financial Investments & Exchange Act, this report includes the opinions of an accounting auditor and helps to ensure the reliability of financial reporting.

In addition, a body under the direct control of the CEO has been established in order to increase the effectiveness of our internal control activities.

### Separation and Strengthening of Decision-making, Internal Operation and Monitoring/Supervision Roles

Our articles of incorporation limit the size of Teijin Limited's Board of Directors to 10 members with the goal of realizing quick decision-making and clear accountability. We have also introduced a corporate officers' system and delegated considerable authority and responsibility to corporate officers.

Four of the 10 directors are independent individuals appointed from outside the Group. To separate responsibilities for monitoring/supervision and those for internal operations, the Teijin Limited Chairman of the Board is not involved as a corporate officer.

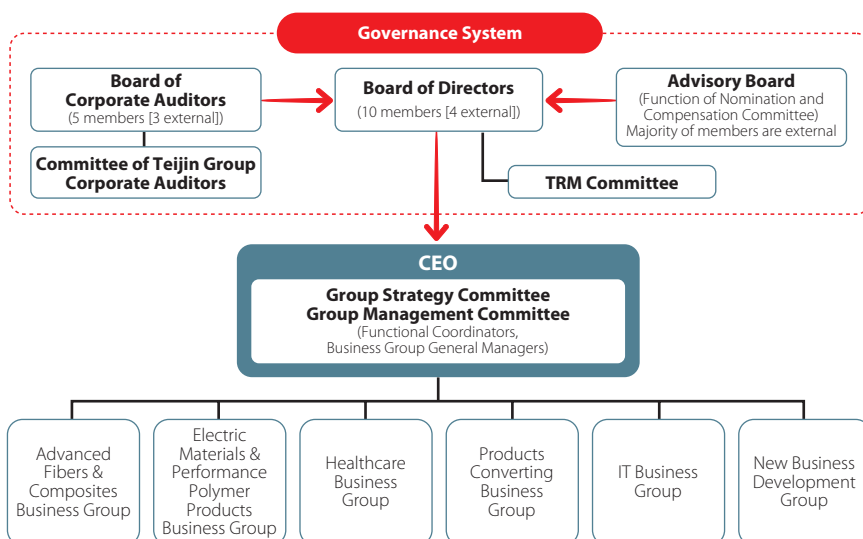
The Board of Corporate Auditors consists of five members and is in charge of overseeing and auditing management. The majority (three) of the Corporate Auditors are independent and appointed from outside the Group to ensure outward transparency in management. Additionally, we have established the Committee of Teijin Group Corporate Auditors (which meets once every two months) consisting of auditors of Teijin Limited and core group companies. Through sharing of group auditing policy and auditing information, this board, which integrates management of the group, seeks to increase the effectiveness of group-wide monitoring/auditing and maintain a fair auditing system.

### Total Risk Management

To protect itself from the uncertainty that it faces, the Teijin Group established the Total Risk Management (TRM) Committee under the Board of Directors to manage risk in an integrated manner from strategic and operating perspectives.

### Teijin Group's Corporate Governance System

As of June 22, 2012



• Business groups have been reorganized with the objective of maximizing our overall strength as a group and facilitating implementation of our growth strategy. The changes are effective as of April 2012.



## Mini-feature

### Business Activities that Reflect the Advice/Suggestions of the Advisory Board

In June 1999, Teijin Limited established the Advisory Board to further increase the level of management transparency. Since that time, the Advisory Board has fulfilled its role as an advisory body for the Board of Directors.

#### Advisory Board Functions as the Nominating and Compensation Committee

Teijin Limited's Advisory Board consists of five to six independent outside experts from Japan and overseas (three Japanese and two to three non-Japanese), the chairperson and the CEO. Pluralistic and objective judgments are possible through the eyes of members from Japan and overseas and from both inside and outside the company.

The Advisory Board has seven functions including to give advice and make suggestions regarding overall management, deliberate a change of CEO and nomination of successor (nominating committee function) and to give advice and make suggestions regarding compensation and evaluation of Teijin Group directors (compensation committee function). Regular meetings are held twice a year (once in Japan and once overseas). In FY2011, meetings were held in Tokyo in May and in the US in November.



Photo of a regular Advisory Board meeting

#### Members of the Advisory Board

As of the end of March 2012

<b>Mr. Toru Nagashima</b> (Chairperson)	Chairman of the Board, Teijin Limited
<b>Mr. Shigeo Ohyagi</b>	President and CEO, Teijin Limited
<b>Mr. John W. Himes</b>	Former Senior Vice President of DuPont
<b>Lord Leon Brittan</b>	Vice Chairman, UBS Investment Bank
<b>Mr. Kunio Suzuki</b>	Counselor, Mitsui O.S.K. Lines, Ltd.
<b>Mr. Hajime Sawabe</b>	Director and Chairman of the Board, TDK Corporation
<b>Mr. Yutaka Iimura</b>	Japanese Government Representative (for Middle East and Europe)

#### Deliberation Items (Nominating Committee Function)

1. Change of CEO and nomination of successor (decided by the Board of Directors)\*
2. Selection of CEO successor candidates, deliberation on plan to foster candidates formulated by the CEO and progress review
3. Deliberation on election of the Chairman based on the suggestion of the CEO
4. Deliberation on election of representative director candidates based on the proposal of the CEO

#### Deliberation Items (Compensation Committee Function)

5. Deliberation on compensation system for Teijin Group directors
6. Deliberation on compensation level for the Teijin Group directors\*
7. Performance evaluation of CEO\*
8. Performance evaluation of representative director based on the suggestion of the CEO

\* For items 1, 6 and 7 above, as a rule, the CEO leaves the room and does not participate in the deliberation. For matters relating to the Chairman, the Chairman leaves the room and does not participate in the deliberation.

#### Example of Advisory Board Deliberation Items

Meeting Date	Spring (April to May)	Autumn (November)
Venue	Japan	Overseas (held alternately in Europe/USA)
Agenda	<ul style="list-style-type: none"> <li>■ Report on previous fiscal year performance</li> <li>■ Report on business plan for the new fiscal year</li> <li>■ Evaluation of CEO performance for the previous fiscal year and discussion of the bonus amount</li> <li>■ Deliberation on CEO's targets for the new fiscal year</li> <li>■ Report on specific matters* raised at previous meeting</li> <li>■ Specific matters* to be reported on at the next and subsequent meetings</li> </ul>	<ul style="list-style-type: none"> <li>■ First-half performance report</li> <li>■ Report on prospects for the second half</li> <li>■ Successor plan</li> <li>■ Report on specific matters* raised at a previous meeting</li> <li>■ Specific matters* to be reported on at the next and subsequent meetings</li> </ul>

\* Examples of specific matters: Management benchmarks, major M&A and subsequent results, R&D strategy.

## Promoting Compliance and Risk Management

We believe that compliance and risk management are the two pillars of internal control. They form the basis for sound corporate governance and are a focus of our CSR activities. We are working hard to ensure that corporate ethics are followed closely at all group companies and to implement business continuity plans.

### Compliance and Risk Management

S02 S04 S07

#### Compliance and Risk Management System

The Group Compliance and Risk Management Subcommittee has been established under the Group CSR Committee (see pages 17–18) chaired by the Chief Social Responsibility Officer. Subcommittee members include the Risk Management Office General Manager as chairman, business group representatives and functional staff. The Subcommittee helps promote the Teijin Group compliance and risk management and makes suggestions to the Group CSR Committee on policies, targets and strategies.

We also appoint personnel responsible for promoting compliance and risk management at all group companies. These personnel manage and operate activities in each workplace. Subcommittee meetings are held twice a year and there is annual training for those responsible for promotion.

#### Promoting Compliance and Risk Management at Overseas Group Companies

We are promoting compliance and risk management at overseas group companies while maintaining the Teijin Group's basic policies and considering the culture and traditions of each country. In addition to each

business group carrying out independent training, we hold corporate-hosted compliance and risk management meetings in major overseas regions every year. For FY2011, meetings were held in Obergünzburg, Germany and in Arnhem, the Netherlands in September and in Shanghai, China in October.

#### Results of Reviews by Chief Social Responsibility Officer (Law Violations and Occurrence of Accidents)

Since FY2003, every February, the Chief Social Responsibility Officer has reviewed the activities of the previous calendar year. This review assesses whether there were any serious violations of laws or accidents in this area, and confirms the compliance and risk management activities of each group company and each business group on the basis of the compliance and risk management activity survey submitted. In FY2011, 53 of 57 companies in Japan and 35 of 67 companies overseas submitted a survey form.

For major incidents and accidents in the group reported to the CEO and Chief Social Responsibility Officer during FY2011, there was a serious accident involving leakage of a hazardous substance at the Matsuyama Plant of Teijin Techno Products Limited (see page 46). To respond to the accident, we established an accident countermeasures committee consisting of the Matsuyama

Factory Manager as chairman, the manager of the manufacturing plant in question as vice-chairman, the person in charge of business group ESH as secretary-general, and the staff of the Corporate ESH Office and relevant departments as committee members. As well as planning and implementing countermeasures to prevent recurrence we aimed to apply them to other business sites group-wide.

There was also one case of an employee being dismissed for violating the Road Traffic Law by driving under the influence of alcohol while commuting to work for a night shift.

### Corporate Ethics and Compliance Activities

S03

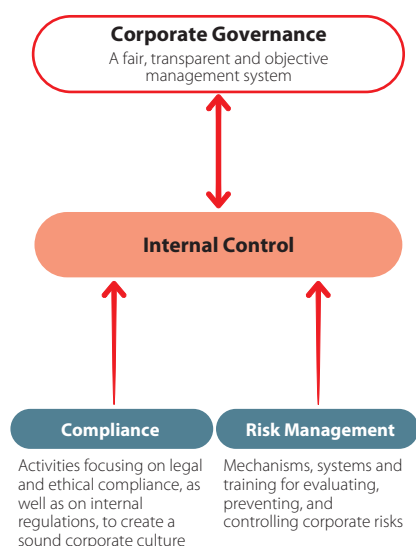
Compliance is essential for creating a sound corporate culture. With this in mind, we carry out educational programs not only on internal rules and laws relevant to our business but also on various aspects of corporate ethics.

We also operate a counseling and reporting system (hotline) that is designed to facilitate self-resolution of internal legal and ethical problems.

#### Revision of the Teijin Group Corporate Ethics Handbook

The Teijin Group established the Corporate Code of Conduct in 1993, followed by the

### Positioning of Compliance and Risk Management



### PDCA Cycle of Compliance and Risk Management Activities



Corporate Standards of Conduct for work-related behavior in 1998. To put together these standards, we created a Corporate Ethics Handbook and have since been revising it to reflect the changing social demands on corporations.

In FY2011, we reviewed the Corporate Code of Conduct and Corporate Standards of Conduct to more clearly define our approach to environmental management and our response to international standards such as the UN Global Compact. The Japanese version is scheduled to be revised in July 2012 and the overseas version (USA, Europe, China, Thailand, Indonesia) by the end of FY2012.

### Group-wide Application of Corporate Ethics and Compliance

#### 1. Level-based Workshop Training

As part of level-based workshop training for employees at group companies in Japan, the CSR Planning Office conducted training for new recruits, staff in mid-level positions, staff newly assigned to managerial positions, newly assigned department managers and newly appointed directors of group companies (in FY2011, 284 participants in total)★.

#### 2. Training for Promoting-managers

The CSR Planning Office organized training sessions held at the Tokyo and Osaka head

offices in which 94 promoting-managers participated. In addition to confirming serious risks and policies/plans for activities, we invited a visiting lecturer to talk about a case study relating to the Whistleblower Protection Act★.

#### 3. Workplace Training/Education

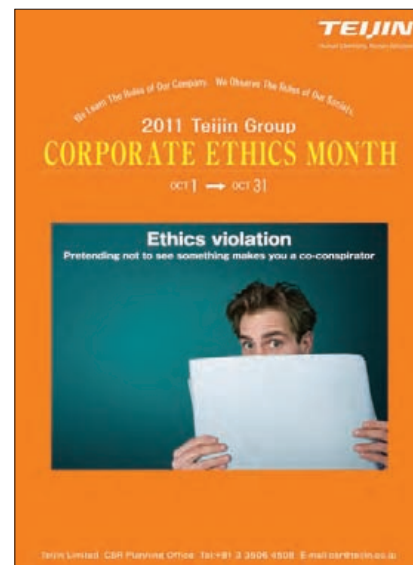
Promoting-managers conduct training at each workplace in Japan and overseas at least once a year. Relevant materials and case examples are always available on the intranet to create an environment facilitating independent training and learning at each workplace.

During the Corporate Ethics Month campaign every October, a message from the CEO in six languages (Japanese, English, Chinese, Thai, Indonesian and German) is distributed to each workplace, and starting with display of the Corporate Ethics Month campaign poster, the Corporate Code of Conduct and other standards are reconfirmed at each workplace in Japan and overseas. The slogan on the FY2011 poster, chosen from employee suggestions, was "Pretending not to see something makes you a co-conspirator."

#### 4. E-learning

Staff newly assigned to managerial positions and other employees of group companies in Japan take part in compliance e-learning. Of the 200 participants in FY2011, 182 passed with a score of 70 points or higher★.

From FY2012, to increase the number of



Corporate Ethics Month campaign poster

participants, we will prepare separate materials for new recruits, staff in mid-level positions and staff newly assigned to managerial positions and thereby introduce level-based e-learning.

### Check Sheets to Survey All Employees at the Corporate Ethics Workshop

To increase the interest and awareness of all group employees in relation to the Corporate Code of Conduct and Corporate Standards of Conduct, we have conducted a questionnaire on the Teijin Group Corporate Ethics Handbook since FY2007. As of FY2009, we use check sheets, which have further improved upon the questionnaire.

The check sheet contains nine questions directed at group company executives and employees in managerial positions, and another nine for other employees. The check sheets measure the participation rate in workshops for all employees and examine the level of interest and comprehension of corporate ethics through asking questions such as: "If you became aware of a violation, would you report it?" and "Do you observe the Code of Conduct and the Standards of Conduct?"

The survey was completed by a total of 12,128 executives, and full-time and contract employees at group companies in Japan in FY2011. Of these, a total of 11,631 responses (approx. 96% response rate) were obtained★.

The participation rate in workshops for all employees was 88% for group company executives and employees in managerial positions and 92% for other employees. Adding those who could not participate but

## TOPICS Corporate Ethics Workshop for All Employees at Overseas Operations of Teijin Chemicals Ltd.

Workshops for all employees are held at all the overseas operations of Teijin Chemicals Ltd. during the Corporate Ethics Month campaign every October.

In FY2011, a participatory program was used including a read-through of the CEO message and the Corporate Code of Conduct, and discussions regarding past compliance violations. In the discussions, there was a lively exchange of views such as, "The initiative shown by leaders of each division increased the knowledge and shared awareness of members" and "I realized that corporate ethics is an issue involving everyone." As was in the case in Japan, check sheets were submitted by all employees after the workshop.



Scenes at workshops during the Corporate Ethics Month campaign  
Top: Teijin Kasei America, Inc.  
Bottom: Teijin Chemicals Plastic Compounds Shanghai Ltd. (TCS)

## Social Report

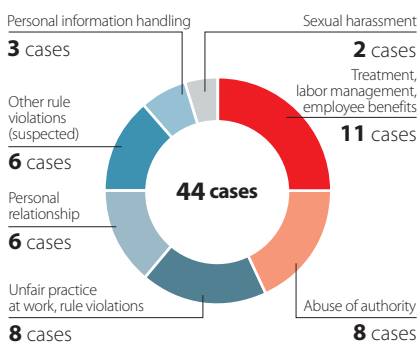
studied by themselves, the figure of those who learnt about corporate ethics was almost 100% at every employee level. In addition, a common reason given for not being fully confident in one's adherence to Code of Conduct and Standards of Conduct was that in reality it can be hard to follow rules exactly. We will consider additional materials that will be of help in this situation.

### Counseling and Reporting System (Hotline) Operations 4.4

The Teijin Group counseling and reporting (hotline) system was launched in 1999 on the intranet and via a consultation center operated through a contract with an external organization. The system is not limited to full-time employees; it is also open to contract and temporary employees. Since 2006, a consultation link for business partners has been available on our website.

The hotline system is operated under the direction of the Chief Social Responsibility Officer in accordance with corporate ethics regulations that protect privacy/other personal information and specify that there shall be no prejudicial treatment regarding consultation/reporting. Major risk issues are also reported to the Total Risk Management Committee (see page 23), and are handled by top management. While protecting privacy, the content and responses to issues raised by employees via consultation/reports are summarized and disclosed to employees every six months for educational purposes. In FY2011, there were 44 cases of reporting/consultation by employees and others outside the group; this figure has been maintained between 40 and 50

### Content of Reports/Consultation From Employees/ Those Outside the Group in FY2011\*



over the past several years, showing that the presence of the hotline is well recognized by employees.

### Risk Management Activities

Since FY2003, in accordance with the COSO\* guidelines and in order to strengthen its risk management, the Teijin Group has been focusing on: (1) clarifying risks, (2) assessing risks based on frequency and effect, (3) risk prevention and control and (4) emergency response training. Each Teijin Group company worldwide prepares a "heat map" (risk management chart) once a year to aid in understanding the level of importance and management status of risks to their own company. The details of the heat map are reviewed by the Chief Social Responsibility Officer every year.

As for serious risks for the Teijin Group, the Chief Social Responsibility Officer extracts 20 major risks, reports them to TRM Committee (see page 23) and responds appropriately. One of the serious risks for FY2011 was the occurrence of a large-scale earthquake. In response to this risk, we created a business group BCP, revised the earthquake manual, reviewed our tsunami simulations and implemented evacuation drills. From FY2012, through the newly established Risk Management Office under the Chief Social Responsibility Officer, we will strengthen risk management relating to the operations of the Teijin Group.

\* COSO: Global standards for internal control systems created by the Committee of Sponsoring Organizations of the Treadway Commission

### Progress of Business Continuity Plans

A business continuity plan (BCP) is "an action plan by which a company can protect itself from loss of corporate value in emergencies, such as accidents and disasters, by preventing interruption of its business activities or by quickly restoring the activities if interrupted."

The Teijin Group established BCP basic policies in FY2006 and first formulated a BCP for central management (top-level management under the CEO) to prepare for large earthquakes in metropolitan areas. We are also gradually

expanding the implementation of BCPs to group companies.

In FY2011, we formulated BCPs for nine companies (mainly core companies) and we plan to expand the use of BCPs to other group companies from FY2012 onwards. Moreover, as a part of the BCP to respond to large earthquakes, we considered a temporary shift of the functions of head office and set up a work-at-home system in the case of scheduled power outages in Tokyo. In FY2011, we also conducted earthquake and tsunami evacuation drills at all business locations in Japan and all group employees in Japan participated in reporting drills. The earthquake evacuation drills involved 9,240 employees at 237 locations, and evacuation sites and the emergency contact network were confirmed. For reporting drills, 12,589 employees participated utilizing *Emergency Call™*, a system to verify employees' safety in emergencies provided by Infocom Corporation, a Teijin Group company★. We will continue these drills regularly (twice a year) and make improvements as required.

### Revision of the Large Earthquake Response Manual

In FY2011, from the lessons we learnt after the Great East Japan Earthquake, we reviewed our corporate countermeasures headquarters structure to respond to earthquakes affecting wide areas and, in the manual, clarified the decision-making function, execution/support function and the chain of command in regards to local countermeasures headquarters. As well, we stipulated implementation of tsunami evacuation drills. Future intentions are to use drills and other measures to make improvements and ensure the full awareness of all employees in this area.

### Response to the Thailand Floods

The Thailand floods of October 2011 resulted in damage to certain group companies. However, we were able to apply lessons learnt after the Great East Japan Earthquake to promptly establish a corporate countermeasures headquarters through which we collaborated to extend on-site support and work towards a quick recovery (see page 12).





## Ensuring Provision of Safe Products

Our product liability/quality assurance activities are promoted under the Teijin Group's unique management system in order to ensure provision of safe products to customers while also responding quickly to the diversifying social environment.

### Teijin Group Management System

The Teijin Group Product Liability/Quality Assurance Regulations apply to all Teijin Group products and services and can be considered the base for our product safety and quality assurance activities. Based on these regulations, we are promoting product liability/quality assurance activities for our business groups through basic policies and associated targets set by the Group Product Liability/Quality Assurance Subcommittee.

We have also created a product liability/quality assurance unit system for the product range of each business group. This quality assurance management system, which is unique to the Teijin Group, aims to enhance customer satisfaction, prevent product defects, and ensure appropriate responses in the event of that defects occur. The system not only covers the whole scope of the ISO standards for quality management systems but also incorporates perspectives of product liability/quality assurance such as the response to customers and product safety.

### Implementation of Product Liability/Quality Assurance Audits

Since FY2005, the chairman of the Product Liability/Quality Assurance Subcommittee has performed audits on all business groups that have introduced the Product Liability/Quality Assurance Unit System (10 business groups and six directly managed companies as of March 2011). As well as being used to check

how the system is working and to verify its effectiveness, the audits bring issues to light which are then improved through implementing the PDCA approach.

In FY2011, we continued our regular audits and gave directions for improvements to business groups and directly managed companies. Special audits were also conducted for business groups specified as requiring reconfirmation in the FY2010 audits, and the extent of improvement was checked.

### FY2011 Measures to Enhance Operations

PR1

In FY2011, based on FY2010 audit results, we took the following measures to enhance operations.

#### Measures to Enhance Operations

##### 1. Enhance Operations of Product Liability/Quality Assurance Assessments

The product liability/quality assurance assessment system is used to examine safety and quality throughout the product life cycle in the event of changes in the product/new product environment or 4M\*1 changes. In FY2011, to enhance operation of this system, we made it a practice for the chairman of the Product Liability/Quality Assurance Subcommittee to check the assessment details of products that have a high risk of causing harm to humans, and for the Business Group General Managers to approve these details.

\*1 4M: Stands for man, machine, material and method, which are management resources affecting quality.

##### 2. Enhance Operation of Business Group Product Liability/Quality Assurance Organizations

We are continuing with efforts to ensure the independence of quality assurance organizations of each business group and improve functioning in other areas. Additionally, the secretariat of the Group Product Liability/Quality Assurance Subcommittee participates in the Business Group Product Liability/Quality Assurance Committee held for each business group and shares information.

##### 3. Conduct Thorough Product Liability/Quality Assurance Education

We held group product liability/quality assurance workshops for newly appointed administrators and managers. As part of this, a lecture was given by a visiting lecturer from the National Institute of Technology and Evaluation.

##### 4. Respond to New Chemical Substance Regulations

REACH information meetings, special subcommittees set up within the Group Product Liability/Quality Assurance Subcommittee, were renamed as chemical substance information meetings to reflect the response to laws and regulations not only in Europe but also in other countries such as China and South Korea.

#### Response to Claims

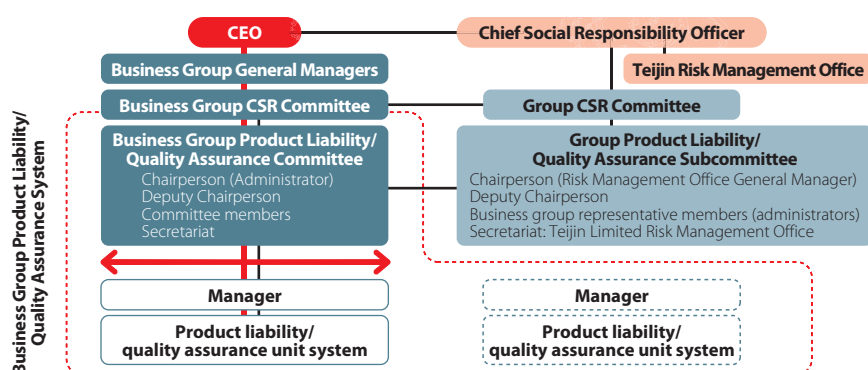
In FY2011 we once again achieved zero product liability claims\*2 but there were seven serious quality claims\*3★.

\*2 Product liability claim: A claim involving (large-scale) damage to property or people caused by a product defect, where a cause-and-effect relationship is established between the damage and the defect.

\*3 Serious quality claim: A claim relating to a product defect where there is no related damage but a strong possibility that there may be, or a defect that causes or is likely to cause loss of trust in the Teijin Group.

### Group-wide Product Liability/Quality Assurance System

From April 1, 2012



### FY2012 Initiatives

In FY2012, we will review our Product Liability/Quality Assurance System based on the Teijin Group medium- to long-term management vision "CHANGE for 2016" formulated in February 2012. We will establish the Risk Management Office and promote activities to further reduce product liability/quality assurance risks under the supervision of Chief Social Responsibility Officer.

## Allowing Employees to Grow and Achieve Work–Life Balance

The Teijin Group makes continual efforts to improve the quality of life of our employees. In FY2011, in spite of the tough economic circumstances, we made all possible efforts to secure employment at group companies. We also worked to further develop human resources and to help employees realize work–life balance.

### Teijin Group Human Resources Policy and Mid-term Plan

The Teijin Group established the Teijin Group Basic Human Resources Policy in 2003 aiming to improve employees' quality of life under our corporate philosophy of "empowering our people."

As stated in the mid-term management plan, one of the most important policies is to hire, train and cultivate human resources. To this end, we have set the following five ideals as the focus of human resources management: promote global expansion of our business, strengthen group management, review personnel management to stay ahead of changes in the business environment, increase the vitality of employees and the organization, and ensure appropriate management of company-owned facilities. As part of this management, which is being carried out from group-wide and global perspectives, we are pushing ahead with group-wide measures to secure employment, promote diversity and realize work–life balance while considering the sense of value of all group employees, and aiming for a smooth handover of technologies and skills to the next generation.

### Human Resources Development LA11

The Teijin Group has put systems in place to support employees in developing their capabilities.

#### Overseas Training for New Recruits

To strengthen the fast-tracking of human resources development in response to the globalization of business, we sent new recruits of the 12 core companies in Japan (74 employees) for training in China and India.

Divided into small groups of 12 to 14, recruits gained firsthand experience of various cultures and customs through discussions with high-achieving local human resources of the same generation, visits to companies, participation in NGO activities and so on.

We will continue this training program in FY2012.

#### Group Core Human Resources Development Systems

The Strategic Executive Team Challenge (STRETCH) I and II are group-wide core human resources development programs used to develop human resources who can work actively on the global stage. The programs target employees at all group companies including overseas. In addition, the Strategic Leader Development Program (SLP), aimed at employees in mid-level positions, seeks to foster core human resources.

Through these three programs, we are striving to develop human resources who will forge the future of the Teijin Group.

#### Promoting Diversity Among Employees

See website for more detailed information

In the Teijin Group, in all facets of our business, but particularly in recruiting, employment and promotion, we respect the character and individuality of all our employees regardless of gender, age, nationality, race, disability etc., and support our employees in reaching their full potential.

We employ experienced workers and run a year-round recruitment program for foreign students and foreign nationals in Japan.

We also promote the recruitment of those with a disability; as of April 1, 2012, at 33 group companies in Japan, the number of employees

with a disability was 212 exceeding the figure of 200 required★. Despite this, 11 individual companies have not met the legal requirement. Seeking to remedy this, we will take measures such as setting up a permanent recruitment center★.

In relation to future appointments and promotions, we will set specific goals for all our businesses and aim to appoint a diverse range of people in managerial positions.

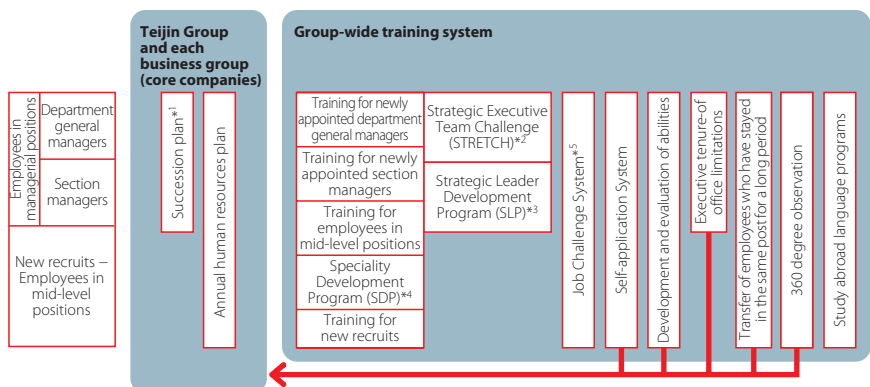
#### Progress of Measures to Promote Female Career Development

For recruitment at 12 core group companies in Japan\*1, we have set a goal of maintaining the ratio of newly recruited career-oriented female university graduates at 30% or more. For the combined total of FY2011 and FY2012, we achieved a ratio of 31%.

We have also set a goal of increasing the total number of women in managerial positions, that is, the equivalent of section manager or above, at 12 core group companies in Japan\*1 to 60, triple the FY2002 level. We reached this goal in FY2007, and the figure has risen to 79 as of the end of FY2011.

However, we did not achieve our end-of-FY2011 goal set in our FY2009–2011 mid-term management plan of increasing the number of women in section manager

### The Teijin Group Training and Job Rotation/Appointment System



\*1 Succession plan: A plan to foster successors to important posts from the viewpoint of business continuity.

\*2 Strategic Executive Team Challenge (STRETCH): A group core human resources development system for leaders.

\*3 Strategic Leader Development Program (SLP): Leadership skills development program for employees in mid-level positions with a desire to become key staff in the future.

\*4 Specialty Development Program (SDP): An educational program designed to enable career-oriented employees to gain specialized knowledge relating to marketing, engineering or clerical work.

\*5 Job Challenge System: An in-house staff recruitment system. Any employee can file an application for a position without permission from the division manager, and the manager cannot overrule decisions.



- Job Rotation/Appointment System
- Human Rights Protection
- Maintaining Sound Working Relationships
- Employee Satisfaction Survey
- Data on Human Resources

positions to 28, 1.5-fold the number at the end of FY2008, only achieving a 1.3-fold increase to 24★.

\*1 Twelve core group companies in Japan, accounting for 77% of all Teijin Group employees in Japan.

### Global Management of Human Resources

In 2009, we established the Global Human Resources Office in the Human Resources Division to facilitate creation of personnel management and appointment systems to aid group employees overseas and in Japan to be active on a global basis.

One specific example of this is the group-wide leader training program, EaGLES (see page 31), which started in March 2011.

### Measures to Promote Work-Life Balance

See website for more detailed information



The Teijin Group is focusing on activities that facilitate work-life balance in order to respond to employees' diversified perspectives on work.

For example, Teijin Limited and other group companies in Japan are proceeding with activities aiming to decrease the number of working hours such as enforcing a system of prior application for overtime work and strict implementation of the no-overtime-day rule. The average overtime per month for employees at 12 core group companies in Japan in FY2011 was 12.3 hours, and the rate of taking annual paid holidays was 77%★, an

improvement from the FY2010 results of 13.8 hours and 64%. We will continue to work on improving facets such as the work environment.

At 10 group companies in Japan, we also introduced a work-at-home system.

### Promoting Childcare Leave for Employees

The number of employees at 12 core group companies who took childcare leave in FY2011 was 201 (including 39 men), an increase from 171 (including 38 men) in FY2010.

To promote childcare leave for male employees, 12 core group companies in Japan have submitted action plans based on the next-generation law (stage 1: FY2005–2006, stage 2: FY2007–2011, stage 3: FY2012–2014). As specific measures, this action plan lists expanding the system for promoting short-term childcare leave and awareness-raising activities.

In FY2012, we will reinforce awareness-raising measures and aim for further expansion of users.

### Re-employment Systems

As re-employment systems, the Teijin Group has established the Hello Again System operating at eight core group companies in Japan and the Senior Partner System operating at all group companies in Japan.

The Hello Again System targets employees who left the company for reasons including marriage, pregnancy, child-rearing, nursing care, or work transfer of their spouse.

Employees in this situation who wish to return to Teijin due to the reason for leaving no longer applying will be rehired as full-time employees on the condition that it is not more than 10 years since they left and provided that the need exists. To date, seven people have been rehired under this system. Additionally, regardless of whether the employee's spouse is an employee of the Teijin Group, if an employee wishes to accompany his/her spouse to a transfer destination, we will try to arrange the employee's transfer to an appropriate location to avoid the employee having to leave his/her job. Overall, there have been over 20 instances of such cases.

The Senior Partner System aims to facilitate re-employment of former employees after mandatory retirement if they wish to rejoin the company. In FY2011, of the 101 employees who retired at the fixed age and wished to be re-employed, 96 (95%) were re-employed (total for 48 group companies)★.

### Expanding the Nursing Care Leave System

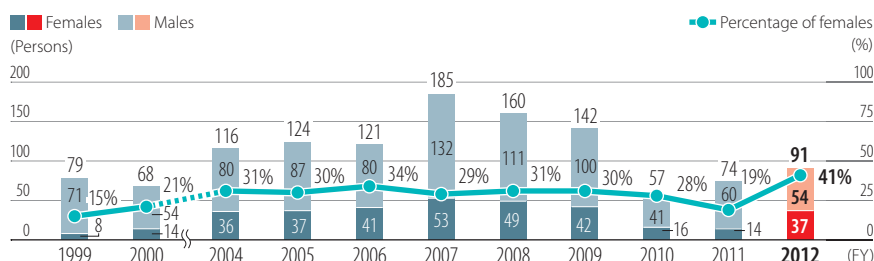
Our nursing care leave system operating at nine group companies in Japan allows each applicant to take up to 730 days of nursing care leave per reason, which can be taken in portions. This far exceeds the 93 days of leave specified under the Child Care and Family Care Leave Law.

In FY2011, a total of five group employees (including one male) used the system★.

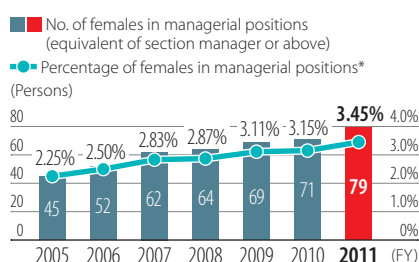
### Volunteer Leave System

The Teijin Group has introduced a Volunteer Leave System (paid) at 10 core group companies in Japan. As of March 31, 2012, there were 12 employees using the Volunteer Leave System★.

### Changes in the Number and Ratio of Newly Recruited Career-oriented Female University Graduates★

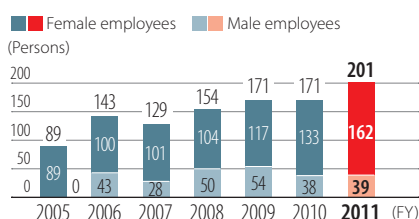


### Changes in the Number of Female Employees in Managerial Positions★



\* Percentage of female employees in managerial positions of the total number of managerial positions in the company.

### Trends in the Number of Employees Taking Childcare Leave★



### Determining the Status of Group-wide Labor Management

See website for more detailed information



The Teijin Group carries out regular surveys on labor management at group companies. We identify management issues in our group personnel management system and implement effective measures as required, particularly from the viewpoint of labor CSR.

Survey forms are sent to 68 group companies, 57 in Japan and 11 overseas, every year. From the survey, we obtain data on basic labor CSR indicators.

## Mini-feature

## Fostering Leaders to Respond to Global Expansion

To respond quickly and precisely to the growing diversity of our employees and the expansion of global operations, we have been expanding the application of our group-wide leadership training program, EaGLES, on a global basis since FY2011.

### Developed Group-wide Leader Training for Employees Newly Assigned to Managerial Positions Overseas and in Japan

From the viewpoint of the increased diversity of employees in terms of nationality and race owing to our global focus in regard to human resources and business, it is essential that all group employees fully understand and share the basic concept of the company, as expressed in our corporate philosophy and our sense of value. There is also an urgent and growing need to efficiently and effectively foster managers capable of responding to our global expansion, particularly in overseas group companies.

It was in this context that we developed the Teijin Group leadership training standards, EaGLES (Global Leadership Excellence Standard for Early newly assigned manager) for

group companies overseas and in Japan, and started operation in March 2011.

### Program Expanded to Application in Four Languages to Meet Needs of Group Companies

The training program is implemented in four languages (Japanese, English, Chinese and Thai) and consists of three steps, (1) e-learning, (2) group training in five regions (EU, US, China, Thailand and Japan) and (3) measuring learning outcomes (see chart on left). In the group training in the EU, US and China, meetings with regional representatives of Teijin Limited were also held. In FY2011, there were a total of 88 participants (EU: 14, US: 13, China: 8, Japan: 53).

In FY2012, referring to the opinions of participants in FY2011, we divided e-learning, which has a large amount of content, into two sessions and changed group training from an optional to required basis. Meetings with top management are also held in all regions.

Looking forward, we will aim to position this training as a program for all managers rather than for newly assigned managers only and also expand its scale.

#### EaGLES Program Structure

##### Step 1: E-learning (four languages supported)

Self-learning of the Teijin Standard, which summarizes content such as the sense of value, management policy and history, and the Fundamentals of Leadership, which are required to be learnt as employees in managerial positions.



##### Step 2: Group training (conducted in five regions globally)

Training in groups of 10 to 15. Experiences are shared through group discussions and case studies to deepen understanding and master knowledge and skills learnt at a prior stage.



##### Step 3: Measure learning outcomes (four languages supported)

Confirmation of whether there have been any changes in attitude and behavior in the workplace. Attempt to practically implement and consolidate leadership skills, and instill the philosophy, sense of value and policies of the Teijin Group.

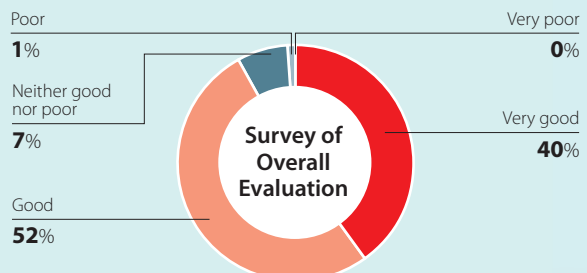


A training session



#### Participant Comments

- The group training was very practical, mainly consisting of discussions and case studies.
- Talking with regional representatives had a lot of significance for me.
- I would like meetings to be held with top management in Japan as well.
- Group training should be longer in terms of both hours/days.
- There were too many e-learning items to learn in the specified time.
- I would like to share training experiences with group employees in other areas.







## Social Report

## Promoting CSR Throughout the Supply Chain HR2

The Teijin Group has established and is putting into practice basic policies for purchasing and procurement activities and CSR procurement guidelines. Regular surveys of suppliers are performed to actively provide guidance and support for the CSR activities of these suppliers.

### Viewpoints/Standards Relating to CSR Procurement

To manufacture and distribute its products, the Teijin Group procures a large amount and wide variety of raw materials, equipment, components and services from many companies around the world. As part of CSR in supply chain management, we clarify and publicize our viewpoints and standards relating to CSR procurement and purchasing. Examples of this relate to improving the environmental performance of procured goods, encouraging environmental consideration, legal compliance and protection of human rights by suppliers, and also promoting fair trade practices with suppliers.

Since FY2006, the Teijin Group's basic policies for purchasing and procurement activities have been posted on the Teijin Group's website (in Japanese & English). In addition, CSR procurement guidelines have been posted on our website in Japanese since FY2006, and in English since FY2007 as part of our global expansion. In FY2011, we also progressed with preparations for Chinese versions of these documents.

### Ongoing Surveys and Ratings of Suppliers

In FY2007, the Teijin Group launched an originally developed system to grade the CSR of suppliers. The system uses an online questionnaire to confirm whether or not suppliers are meeting the standards of the Teijin Group CSR procurement guidelines. The results are used to grade suppliers from I to V with reference to specified standards and put into a database.

Suppliers respond to 70 questionnaire items and receive a score indicating the extent of compliance with standards specified in the Teijin Group CSR procurement guidelines. Suppliers are then ranked according to this score using on a percentage ratio and according to their credit status as ongoing suppliers. Using a matrix of these two rankings, suppliers are ranked from I to V. Ranks I to III equate to a

compliance ratio with CSR guidelines of 40% or more. Ranks IV and V with a ratio of under 40%, in which case suppliers are subject to guidance to assist in improvements.

In FY2008, Fiberfrontier Co., Ltd. took over operations of this system and we began joint management/cooperation with Toray Industries, Inc. for CSR procurement. This has realized use of common standards to evaluate the CSR performance throughout supply chains of the whole chemical synthetic fiber industry as well as our own supply chain.

\* Fiberfrontier Co., Ltd.: An electronic commerce textile sales and procurement management company jointly established by chemical synthetic fiber companies in Japan.

### FY2011 CSR Evaluations of Suppliers and Guidance/Support to Improve CSR Activities

In FY2011, 413 suppliers, accounting for 76% of the total purchasing value, were surveyed. This is seven more suppliers than in FY2010, representing a slight increase (1%) in the percent of total purchasing value.

Furthermore, in FY2011, owing to increased numbers of suppliers who had participated on a successive basis and because expansion had reached a certain level, we made our fiscal year objectives to advance the level of evaluations, review questionnaire items, make further subdivisions and add new questionnaire items relating to matters of increasing importance including the approach to biodiversity conservation and management of mineral resources in conflict zones (number

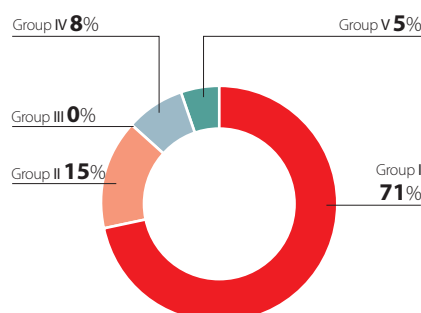
of questions was increased by 17 from 53 to 70).

The results of the survey revealed that, compared to 95% in FY2010, 86% of suppliers corresponded to groups I–III, the groups where continuing to do business with suppliers is no problem. In addition, the ratio of purchases from group I, II and III suppliers decreased from 99% in FY2010 to 98% in FY2011. The reason for this was analyzed to be the relatively advanced level, in terms of CSR standards, of the newly added items, which caused lower scores mainly for small and medium-sized suppliers. The results after excluding the newly added items were 93% and 99%, respectively, equivalent to FY2010 results.

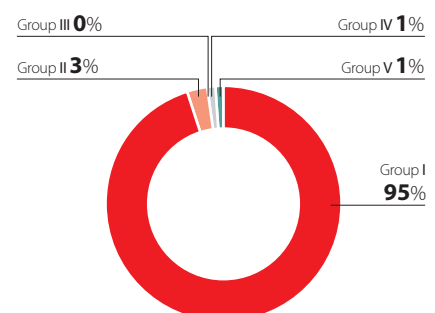
Furthermore, the individual guidance and support to help group IV and V suppliers improve, which started in FY2010, was continued in FY2011. As a result, eight of the 22 suppliers ranked in groups IV or V in FY2010 improved their rating to group III or better in FY2011. On the other hand, due to the effect of the newly added items, 26 suppliers were ranked in groups IV or V. We will continue to provide guidance and support to these suppliers and in doing so aim to raise the quality of CSR procurement.

We are also continuing preparations to expand CSR procurement to suppliers overseas in line with our global expansion. In FY2011, we trialed a printed version of the questionnaire and we are planning to take the next step to implement the system in FY2012. These activities are being conducted on a joint basis with Toray Industries Inc. through exchange of opinions.

### Breakdown of Suppliers by Rating



### Breakdown of Purchase Value by Rating



## Promoting Group-wide Social Contributions

Social contribution activities are being expanded on a group-wide basis and conducted at each plant and group company making use of their unique characteristics. In addition, we have set up comprehensive systems to support the volunteer activities of employees.

### Teijin Group Social Contribution Activities

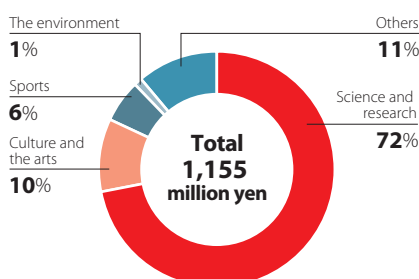
The Teijin Group has set basic policies for social contributions and the Group CSR Promotion Subcommittee meets twice annually to discuss the details of specific activities. In FY2011, among main items on the agenda were the activities in response to the Great East Japan Earthquake.

#### ■ Teijin Group Basic Policies for Social Contributions

1. Social contribution activities are positioned as a pursuit of the Teijin Group corporate philosophy and as practical implementation of the Code of Conduct.
2. Social contribution activities are to be implemented proactively, and show respect for the particular characteristics of the business and region.
3. Volunteer activities of employees are encouraged and support shall be provided to foster volunteer personnel.
4. Priority fields in social contributions in terms of group-wide activities are the environment, international exchange and social education.
5. Donations shall be made according to need for humanitarian purposes such as after natural disasters.

Since joining the Keidanren (Japan Business Federation) 1% Club in FY2003, the Teijin Group has been setting aside at least 1% of current profits for social contribution costs. In FY2011, we spent approximately 1.16 billion yen on social contribution activities (24% increase from the previous fiscal year).

#### Expenses of Social Contribution Activities★



#### Breakdown of Spending on Social Contribution Activities★

Item	Description	Amount (millions of yen)
Monetary	Monetary donations and other expenses for social contribution activities	965
Donations of goods	Donations of our products and other goods to social welfare organizations	5
Free renting of company facilities	Expenses for free renting of company facilities such as gyms and playgrounds	49
Participation/Dispatch of employees	Personnel expenses for employees who participated in philanthropic activities during their work hours, such as joining local events as part of their work, and employees who gave lectures at meetings	136
<b>Total</b>		<b>1,155</b>

★ Data for all group companies, based on the Keidanren "Procedures for Implementing FY2011 Survey on Results of Corporate Philanthropic Activities".

★ Money used to support the areas affected by the Great East Japan Earthquake is not included.

In FY2006, we established the Teijin CEO Social Contributions Award to award employees and organizations that demonstrate good performance in social contribution activities. In FY2011, the activities of the Home Healthcare Business to help those affected by the Great East Japan Earthquake were commended.

### Fostering Volunteer Personnel

#### Volunteer Support Program

In June 2011, we established the Volunteer Support Program, a new program aimed at encouraging employees' social contribution activities and fostering volunteer personnel. This program provides partial financial support for the volunteer activities of Teijin Group employees via the Teijin Group Social Contribution Fund made up of donations from volunteer employees and directors as well as from companies. Employees request support for activities, and the administration committee then deliberates on and decides which volunteer activities are to be supported.

In FY2011, the first recipients of support were the following four non-profit organizations (NPOs) where Teijin Group employees are involved in activities on a voluntary and ongoing basis. A donation of 100,000 yen was made to each organization.

- The Teijin Junior Soccer School, contributing to the local community through soccer.
- The Japan Association for Galapagos, involved in activities to conserve the nature of the Galapagos Islands.
- KAPATID, supporting activities such as management of kindergartens in the Philippines.
- The Nature Conservation Society of Osaka, engaged in activities such as nature observation programs and conservation of forest reserves.

### Fostering Volunteer Personnel In Other Areas

The Teijin Group is also supporting volunteer activities through systems such as a volunteer leave system, and a leave system for bone marrow transplant donors and registered firefighters.

Furthermore, since FY2007, we have assisted employees to participate in a nature observation leader workshop. Employees registered as leaders play a central role in implementing cicada exuviae surveys.

### Support for Areas Affected by the Great East Japan Earthquake

The Teijin Group has extended support to the areas affected by the Great East Japan Earthquake through donating relief money and goods as well as funds raised from volunteer employees in March and April of 2011.

There were many Teijin Group employees who participated in volunteer activities such as cleaning off mud and removing furniture and household goods in the disaster area from April to July, as well as packing relief goods in other areas in April and May. In total, 230 employees volunteered. In view of this situation, Teijin relaxed certain requirements for taking holidays for volunteer activities in the affected areas where activities needed to be continued.

#### Data on the Teijin Group Support for Affected Areas

Monetary support (donations, etc.)	105,479,855 yen
(Breakdown)	
Teijin Limited	100,000,000 yen
Group companies in Japan	2,043,000 yen
Overseas group companies	3,436,855 yen
Relief goods	29,482,862 yen
(Breakdown)	
Towels/Wet tissues	25,160
Stuffed toys made of Microguard®	1,000
Pulse oximeters	10
Blankets/Underwear	2,027
Flashlights and other emergency goods	1,060
Other	
Funds raised from volunteer employees	19,492,069 yen*1
(Breakdown)	
Group companies in Japan	11,709,207 yen
Overseas group companies	7,782,862 yen
<b>Total</b>	<b>154,454,786 yen*2</b>

\*1 This amount includes approx. 2.2 million yen that Teijin Limited donated to match funds raised.

\*2 Including free provision of home healthcare equipment, the total amount was 500 million yen or more.



## Fostering Young Scientists through the Teijin Scholarship Foundation

See website for more detailed information



Since 1954, the Teijin Group has offered the Teijin Kumura Scholarship named after Seita Kumura, a pioneer in the Japanese chemical fiber industry, aiming to pass on and develop an original R&D spirit, as well as foster young scientists who will contribute to social development and the creation of new culture (reorganized to the Teijin Scholarship Foundation in 2011).



"Father of the Japanese rayon industry,"  
Seita Kumura

This scholarship system was Japan's first scholarship created by a private company and 1,502 science and technological students have so far benefited from the scholarship over a period of almost 60 years. Dr. Ei-ichi Negishi, Distinguished Professor at Purdue University and a 2010 Nobel laureate in chemistry was a recipient of the Teijin Kumura Scholarship in its fifth year.

The scholarship now applies across a wide range, to the medical and pharmaceutical, bio-science, science and technology, engineering, information science and other fields. In FY2011, 47 graduate students (21 in master's courses, 26 in doctoral courses) received funds totaling 52.44 million yen.

## Scholarship System in China

The Teijin Scholarship Foundation established a scholarship system in China in June 2010 and has started operations to provide scholarship payments. The annual scholarship amount is 8,000 yuan per student and there were 24 recipients in FY2011. The project is planned for further expansion in FY2012 (see page 15).

## Co-sponsoring the Koshien Tournament of Science

In March 2012, the first Koshien National Tournament of Science organized by the Japan Science and Technology Agency was held. The Teijin Group participated as a supporting company.

The Koshien Tournament of Science was established with a view to broadening the base of people with a passion for science as well as improving the academic ability of those at the top. Students from 48 high schools who made it through the nationwide preliminary rounds competed in teams of six to eight students in multiple disciplines that tested their scientific knowledge and skills. The Teijin Award was presented to one of the schools that excelled.



A scene at the awards ceremony

## Picture Book Donation Activities –Book Dream Project–

The Book Dream Project was started in FY2008 to donate Japanese picture books to libraries in Indonesia after collecting used books and other items from group employees and exchanging them for cash. Translated caption sheets are added to the picture books by volunteer employees and books are delivered to libraries in Indonesia in cooperation with the Jakarta Japan Network. In FY2011, we donated 52 books.

In addition, since FY2010, we have been donating 50,000 yen of the total amount converted to support libraries in Thailand through the Shanti Volunteer Association.

In FY2011, the collection of used books yielded a total of 109,378 yen.



Donating Japanese picture books to libraries in Indonesia

## TOPICS Supporting Lung Walk Japan, an NPO-organized Charity Event

Lung Walk Japan is a charity walking event organized by the NPO, J-Breath. The event aims to raise awareness of the importance of breathing and make people think about lung-related diseases and the air. It is held during the season when the new green leaves are budding close to May 9, which sounds similar to "breathing day" when pronounced in Japanese.

Teijin Pharma Limited, which has a leading role in a medical and pharmaceutical business of the Teijin Group, endorses the event's cause and is a proud supporter. The fourth Lung Walk Japan (April 29, 2011) was cancelled due to the Great East Japan Earthquake, but in the fifth event (April 29, 2012), 500 participants walked around the outer gardens of the Imperial Palace.



Some employees participated with their families on a refreshing spring day

## Participant's Voice

I really enjoyed the five-kilometer walk. As we walked among the new green leaves around the Imperial Palace, the occasion made me think about LTOT patients... It was an entirely new experience.



**Takayuki Suzuki**  
Home Healthcare  
Sales Planning  
Department



## Promoting Group-wide ESH Management

We are establishing an integrated ESH management system.

### Group ESH Management System

The Teijin Group positions ESH as a key issue relating to all business operations. As basic management policies that relate to ESH, and on the basis of our corporate philosophy, we have established the Teijin Group Global Environmental Charter, the Teijin Group Global Environmental Activity Goals and the ESH Basic Policies.

In addition, in order to manage ESH, we have set-up the Group CSR Committee. This committee is chaired by the Chief Social Responsibility Officer who has authority and responsibility delegated from the CEO. Under the Group CSR Committee, is the Group ESH Subcommittee, which is chaired by the General Manager of the Teijin Limited ESH Office and has members including corporate staff leaders and the chairperson of each business group's ESH committee. The subcommittee discusses and makes decisions on various measures and activities regarding ESH management, and oversees the expansion of these measures/activities to each business group.

### ESH Auditing and Training Sessions

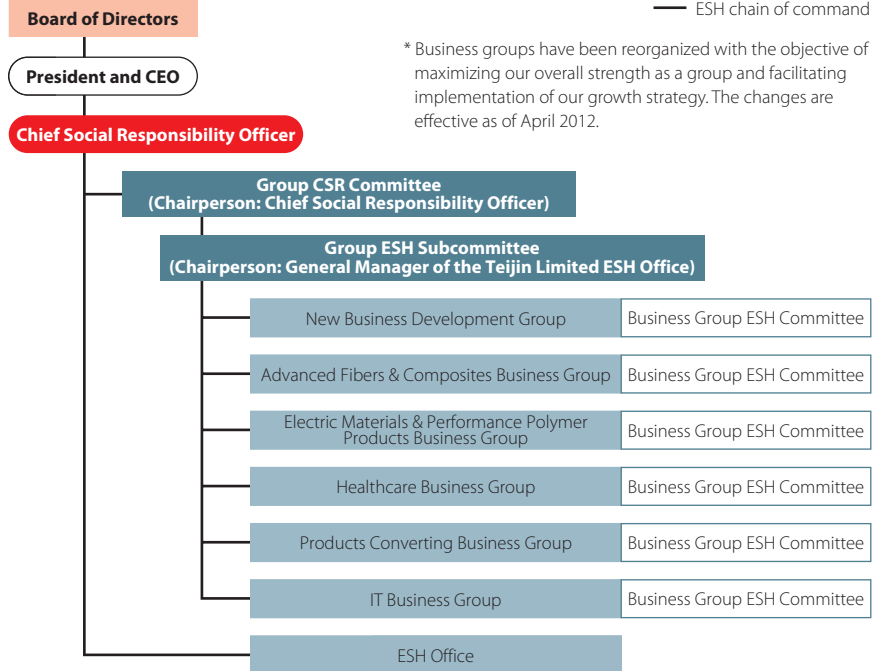
#### ESH Auditing

ESH Audits I, II and III are conducted according to our ESH Audit Regulations. A double audit system is used involving audits by the Chairperson of the ESH Committee for each business group and the Chief Social Responsibility Officer (see table on right).

As part of the audit process, each business group reports on ESH management status, any accidents, status of countermeasures, and status of ESH activities. This content is then audited, and confirmation and guidance is provided in relation to future issues and actions required before the next audit.

### ESH Promotion System

\* From April 2012.



### Group ESH Education

To enhance group-wide ESH management, we established the ESH Education Program for presidents and executives involved in ESH management, ESH staff, and production line managers in individual group companies. We hold a workshop once a year for group companies in Japan, and every two years for overseas group companies.

In FY2011, an ESH education workshop for group companies in Japan was held in July at the Osaka head office, with the participation of 195 employees (69 in the basic class, 66 in the management class, and 60 in the applied class)★. Overseas, a workshop was held at Teijin Polycarbonate China Ltd. in November.

### Training Seminar for Internal Auditors of ESH Compliance

To enhance compliance with laws and regulations related to ESH, we held an ESH compliance training seminar for internal auditors at the Osaka head office in January, 2012. A total of 52\* employees were newly approved as 1st-grade or 2nd-grade auditors. Since the system started in 2005, there have been a total of 664 internal auditors of ESH compliance★.

\* 1st-grade: 38 employees; 2nd-grade: 14 employees.

### Outline of the ESH Audits★

	Outline of the audits	Auditors	FY2011 audit results
ESH Audit I	ESH audits at production sites	Chairperson of Business Group ESH Committee	17 in Japan, five overseas
ESH Audit II	Audits mainly concerning environmental activities	Chairperson of Business Group ESH Committee	One annual audit for each of the eight business groups
ESH Audit III	Audits of the results of ESH Audits I and II	Chief Social Responsibility Officer	One annual audit of eight business groups and independently managed companies



## Reducing Environmental Impact over the Entire Product Life Cycle 3.9

Environmental preservation is one of the three core elements of the Teijin Group's Sustainable Environment Initiatives. With the goals of reducing waste and emissions of CO<sub>2</sub> and chemical substances, as well as managing waste more effectively, we evaluate the environmental impact of our business activities over the entire life cycle of each product and take positive measures to reduce our environmental impact.

### Initiatives to Reduce Environmental Impact in All Processes from Procurement to Disposal

In addition to compliance with rules and regulations and agreements with local governments relating to environmental impact, the Teijin Group is carrying out various voluntary activities aiming to further reduce the overall environmental impact of our business activities. These include efficient use of resources and energy, minimizing chemical substance emissions and preventing soil and groundwater pollution.

For processes other than manufacturing and processing, it is necessary to consider the environmental impact caused by the use, consumption, and disposal of products by customers of the Teijin Group. For this reason, we have established a system to assess the environmental impact of each product through its life cycle. We are also pursuing the creation of products that can be easily recycled and reused, and developing new functions for products to reduce environmental impact based on the Teijin Group Design for Environment system (see page 41).

### Three Core Elements of Teijin Group Environmental Management

#### 1 Environmental Preservation

Activities aimed at reducing the negative impact our daily business activities have on the environment.

#### 2 Design for Environment

Activities reflected in product and process design aimed at reducing the negative impact on the environment.

#### 3 Environmental Business

Business activities aimed at contributing to environmental improvement.

### Climate Change Initiatives

EN5 EN16 EN17 EN18

### Reducing Greenhouse Gases Emitted During Manufacturing

#### Targets for FY2012–2020

Group: Reduce CO<sub>2</sub> emissions per unit of production amount by 1% or more compared to the preceding fiscal year.

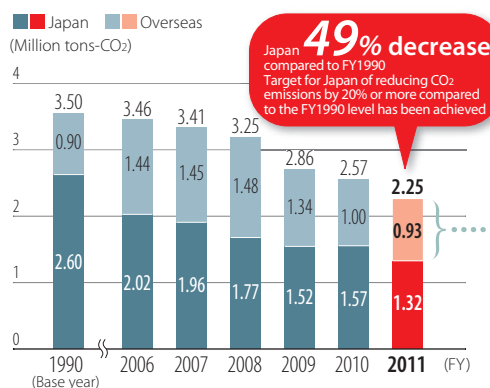
Japan: Reduce CO<sub>2</sub> emissions by 20% or more compared to the FY1990 level by FY2020.

In FY2011, at group companies in Japan, CO<sub>2</sub> emissions were 1.32 million tons, a 16% reduction from the FY2010 level of 1.57 million tons. This was achieved through

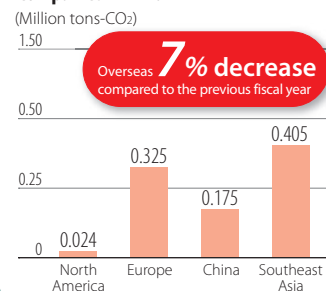
improved response efficiency as a result of updating the isomerization catalyst for the raw materials factory of the Matsuyama Plant as well as other energy-saving measures such as updating the refrigerators at the Gifu Plant of Teijin DuPont Films Japan Limited, and 100% external supply of electricity and reduced production at the Tokuyama Plant. This is a 49% reduction compared to the FY1990 level, thus achieving the FY2020 goal set for Japan. We will continue to promote energy savings, fuel conversion and other measures.

At overseas companies, CO<sub>2</sub> emissions were 0.93 million tons, a 7% decrease from FY2010. This was achieved through renewal

### Trends in Greenhouse Gas Emissions from Manufacturing Operations ★



### Greenhouse Gas Emissions at Overseas Companies in FY2011



• Includes CO<sub>2</sub>, methane and nitrous oxide.

• Calorific values and CO<sub>2</sub> emissions are calculated according to the coefficient specified in the Law Concerning the Promotion of Measures to Cope with Global Warming (an emissions factor for electricity of 0.555 kg-CO<sub>2</sub>/kWh is used for every fiscal year). For power purchased overseas, where known, the relevant emissions factor is used for calculations.

• There was a substantial decrease in FY2010 because TIFICO, who emitted 0.47 million tons of CO<sub>2</sub> in FY2009, was excluded from the calculations.

### Environmental Impact of the Teijin Group in FY2011 by Input/Output ★ EN1 EN3 EN16

See website for more detailed information

Web

### INPUT

Energy  
**34.3 × 10<sup>6</sup> GJ**

Chemical substances handled  
**1.272 million tons**

Freshwater consumption  
**86 million tons**

Seawater consumption  
**76 million tons**



### OUTPUT

CO<sub>2</sub>  
**2.25 million tons**

Chemical substances  
**2,279 tons**

Waste with no effective use  
**4.6 thousand tons**

Total water discharged  
**154 million tons**

of the thermal boiler for the dyeing machine at Nantong Teijin Co., Ltd. and other energy-saving efforts such as introducing energy-efficient lighting at all plants. We will strive to reach next year's CO<sub>2</sub> emissions target, which will be measured per unit of production amount and based on FY2011 emissions.

Group-wide CO<sub>2</sub> emissions amounted to 2.25 million tons in FY2011, a 12% decrease from the FY2010 level.

### Efforts to Reduce CO<sub>2</sub> Emissions from Offices and Company Vehicles

In FY2008, we began collecting data on CO<sub>2</sub> emissions of our offices and company vehicles. We set independent numerical targets for each site in FY2009, and are promoting activities to cut emissions.

Measures at offices include improving the efficiency of energy use at Osaka head office (company-owned building), group company head offices and sales branches, and proactively cooperating in energy-saving efforts such as dimming or turning off certain lights on all floors at Tokyo head office. At the Tokyo Research Center, an energy-saving monitoring system was introduced in FY2010, facilitating visualization of energy use. Given that the center is subject to the Tokyo metropolitan government's mandatory CO<sub>2</sub> reductions, we promoted increased efforts to lower CO<sub>2</sub> emissions.

As measures to reduce CO<sub>2</sub> emissions of company vehicles, we have updated to eco-cars and we are promoting fuel-efficient driving. At Teijin Pharma Limited, in addition to the above measures, we have introduced a system of recording fuel consumed and distance driven.

These measures resulted in office CO<sub>2</sub> emissions of 11 thousand tons, a 13% decrease compared to FY2010, and company vehicle emissions of 8,448 tons, a slight increase from FY2010\*.

### Reducing CO<sub>2</sub> Emissions in Logistics

In FY2011, CO<sub>2</sub> emissions associated with the shipment of products of Teijin Fibers Limited, Teijin Dupont Films Japan Limited, and Teijin Chemicals Ltd., amounted to 14,216 tons, a

4,000-ton reduction from the previous fiscal year. Per 1,000 ton-kms, the specific emissions unit index was 1.018 (FY2006 = 1). This represents a 14.8% increase, at odds with our annual target of reducing CO<sub>2</sub> emissions per unit of transportation amount by 1% compared to the previous fiscal year. Possible main reasons for this are the effect of the Great East Japan Earthquake and Thailand floods and changes in the supply chain based on business structure reform.

One of the effects of the Great East Japan Earthquake was damage to the ports used for sea transport. As an alternative, we selected ports close to the final destination but this led to increased distance of truck transportation. Due to the Thailand flooding, production of the raw materials we had imported to Japan ceased, prompting us to use the Matsuyama Plant for alternate production. This in turn caused the need for truck transportation in Japan. As a result of the business structure reform, shipping of large-volume lots via sea transport was eliminated and the truck transportation ratio increased.

Even in this tough situation, we are making full efforts to reduce environmental impact as demonstrated by a higher ratio of batch transportation using large trucks, minimizing truck transportation through a

review of Japanese domestic shipping routes in line with conditions after the Great East Japan Earthquake and maintaining the usage ratio of JR Freight containers. In 2012, we will review overall distribution and set environmental-impact reduction measures according to the circumstances.

### Employee-oriented Environmental Activities

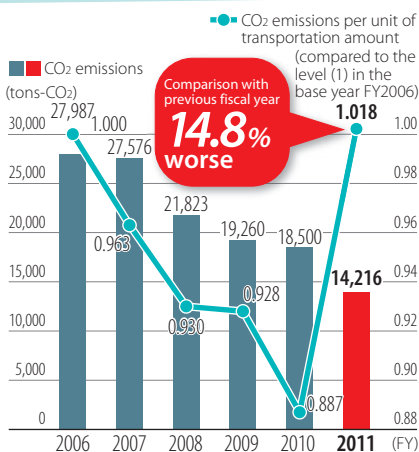
As part of environmental and biodiversity education, with the cooperation of the Bousou Nougai company, Teijin Limited joined with Infocom Corporation to hold a Field-mustard Farm Project at a forest reserve in Kimitsu, Chiba on November 13, 2011. There were 30 participants, consisting of employees and their families.

On the day, participants planted field-mustard seeds in the morning, listened to a talk by a field-mustard expert over lunch and then in the afternoon had a chance to experience activities such as harvesting taro potatoes, visiting a vegetable market, and digging a well using an old-fashioned method known as *kazusabori*. During the day's activities, the CO<sub>2</sub> emitted from the participants' transportation was offset. This event is scheduled to be held again in FY2012.



Field-mustard Farm Project participants

### Trends in CO<sub>2</sub> Emissions in Logistics and the Unit Index for Teijin Group Specific Consignors\*



- Although the raw materials and polymer business were transferred from Teijin Fibers Limited to Teijin Limited in April 2010, for comparison purposes, the figures for these businesses have been included in those of Teijin Fibers.
- The calorific value of light oil was changed to 37.7 GJ/kL in FY2010 (38.2 GJ/kL till FY2009)

### Reducing Chemical Substance Emissions

EN8 EN20 EN21

#### Targets for FY2006–2011

Group-wide: Reduce chemical substance emissions by 30% or more compared to the FY2005 level by FY2011.

Japan: Reduce emissions of volatile organic compounds (VOCs) by 50% or more compared to the FY2000 level by FY2010.

The Teijin Group is actively committed to reducing emissions of all chemical substances listed as Class 1 chemical substances in the Chemical Substances Management Law\*<sup>1</sup> revised in April 2010 (462 substances), and those specified by the Japan Chemical

Industry Association (433 substances).

Excluding duplicated listings, there are 575 specified chemical substances.

At group companies in Japan, in addition to the efforts mentioned above, we have set the goal of reducing emissions of volatile organic compounds (VOCs) by 50% or more compared to the FY2000 level by the end of FY2010 (by 72% or more compared to the FY1998 level). We have also established a long-term goal for reducing emissions of chemical substances by 80% or more compared to the FY1998 level by FY2020.

From FY2010, in addition to these goals, the Teijin Group has been focusing on reducing substances that have a large impact on the environment, ecosystems and humans even when emitted in small amounts. To this end, we have been using LIME2\*2 (see page 39) to promote targeted environmental-impact reduction.

\*1 Chemical Substance Management Law: Law Concerning Reporting, etc., of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management.

\*2 LIME2: The second version of the Life Cycle Impact Assessment Method Based on Endpoint Modeling (LIME) developed in Japan.

### Details of Chemical Substance Emissions

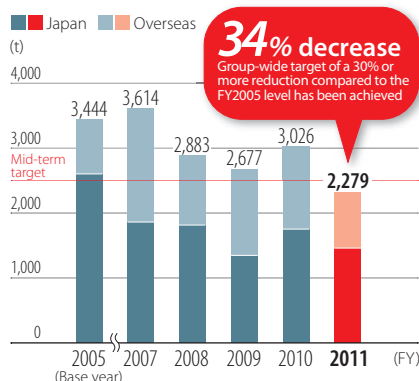
FY2011 chemical substance emissions in Japan were 1,456 tons, a 17% decrease from the previous year.

Overseas, emissions fell to 824 tons, a 35% drop compared to FY2010. This was due in large part to the suspension of operations at three Polyester Fibers Business Group plants in Thailand after the devastating floods that occurred there in the second half of the fiscal year. Group-wide, emissions fell 25% to 2,279 tons. Compared to FY2005, this is a 34% decrease, meaning that we achieved our goal of a 30% decrease.

Of the total chemical substances emitted into the environment, 97.9% was released into the atmosphere, 2.1% into the water, and 0% into landfill or the soil.

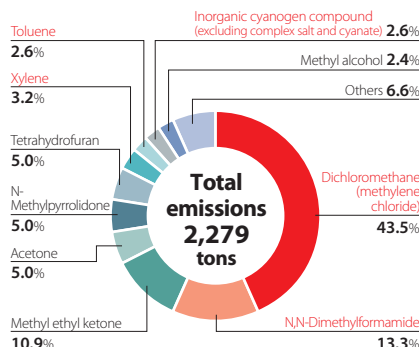
In addition, VOC emissions for FY2011 in Japan were 1,360 tons, a 17% decrease compared to FY2010\*.

### Trends in Chemical Substance Emissions ★



• Emissions of Class 1 chemical substances listed in the Chemical Substances Management Law and chemical substances specified by the Japan Chemical Industry Association. The figures shown are the total of emissions into the atmosphere, soil and water, and landfill amount within business sites.

### Top 10 Chemicals Substance Emissions in FY2011 ★



• Red text denotes chemical substances specified as Class 1 in the Chemical Substances Management Law.

### SOx Emissions and Wastewater Loading (COD, BOD)

EN8 EN20

In FY2011, group companies in Japan generated 4.2 thousand tons of SOx as a result of fuel use, a 13% decrease compared to the FY2010 level.

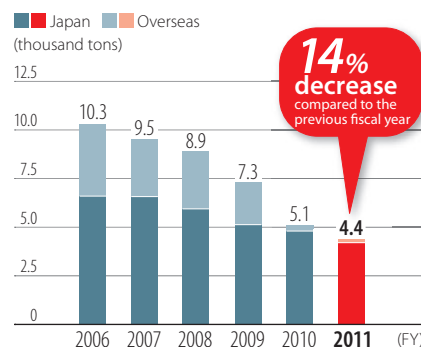
Overseas, 0.2 thousand tons were generated, thus making the group-wide emissions 4.4 thousand tons, a 14% decrease compared to FY2010.

In FY2011, the Teijin Group used a total of 86 million tons of freshwater (industrial water, tap water and groundwater). In addition, we used 76 million tons of seawater, mainly for cooling applications. Both freshwater and seawater consumption was reduced compared to FY2010. Group-wide, a total of 154 million tons of water was discharged, a 15% decrease from FY2010.

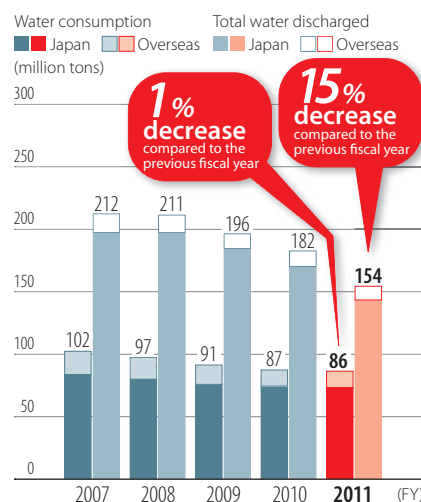
Additionally, the total amount of chemical

oxygen demand (COD) load and biochemical oxygen demand (BOD) load associated with the water discharged group-wide was 664 tons, an 18% decrease compared to FY2010.

### Trends in SOx Emissions ★

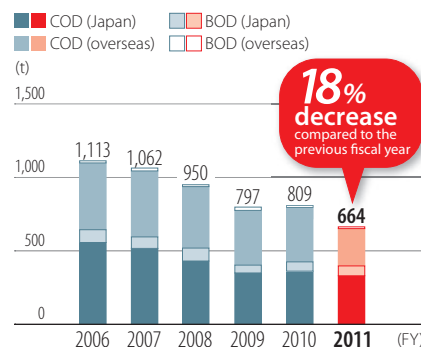


### Trends in Water Consumption and Total Water Discharged ★



• Water consumption amount includes industrial water, groundwater and tap water.  
• Total water discharged includes seawater used for cooling.

### Trends in COD/BOD Load ★



• Applies to wastewater discharged into rivers, oceans and lakes.  
• COD data is used in cases where both COD and BOD data are available.



Mini-feature

## Reducing Chemical Substance Emissions Using LIME2-based Evaluations of Environmental Impact

The Teijin Group has used LIME2\* since FY2010 as part of its focused initiatives to manage and reduce chemical substances that effect the environment and ecosystems.

### “Environmental Impact Risk”: A New Outlook Built into Initiatives to Reduce Chemical Substances

LIME2 is a life cycle assessment (LCA) method developed through a national project of the National Institute of Advanced Industrial Science and Technology. It involves measuring and assessing overall environmental impact according to 15 categories of environmental impact including hazardous chemical substances, ozone-layer destruction and global warming.

Till FY2010, the Teijin Group's approach to reducing chemical substances was to specify chemical substances for management based on their hazardous properties. After introducing LIME2 in FY2010, we have newly incorporated the perspective of the risk of environmental impact, deciding to focus on management and reduction of substances that have a large impact on the environment.

This has been applied to targets as well; we have set targets not only for chemical substances emissions but also targets to reduce environmental impact. Specifically, the FY2020 emissions goal is a 48% reduction compared to the FY2005 level, whereas the environmental-impact goal is an 87.5% reduction. According to in-house simulations, even if small-impact chemical substances are reduced and the FY2020 emissions goal is achieved, environmental impact will only be reduced 5.5%. This reinforces the importance of reducing chemical substances from the perspective of environmental impact.

### Targeted Reduction of Large-impact Chemical Substances at all Business Groups

In FY2011, the LIME2-based quantitative evaluation and analysis of group-wide chemical substance emissions was completed.

The results showed that we are having a large impact on the environment in the areas of ecotoxicity, which impacts on biodiversity, and photochemical oxidants, which effect human health and cause atmospheric pollution. In addition, we found that there are chemical substances that have a large impact on the environment even in small amounts.

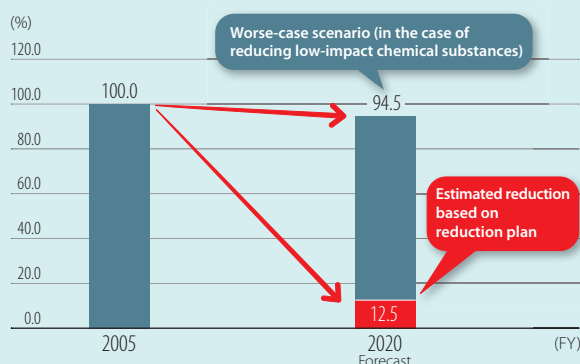
At the same time, based on the finding that there are other factors impacting on the environment apart from chemical substances, we have started analysis using a wider scope. One of these factors is freshwater (industrial water, tap water and groundwater) used by the Teijin Group worldwide. For FY2010 results, we found that the environmental impact was large in Thailand, China and the Netherlands, but small in Japan despite high consumption in comparison to other countries.

In the future, each business group will use this data to rank substances in terms of priority for reduction and establish/promote emission-reduction and action plans. Finally, the Teijin Group will consider how we can take an even more multidimensional approach in evaluating environmental impact globally.

#### The 15 Environmental Impact Categories in LIME2

- Urban area atmospheric pollution
- Indoor air quality pollution
- Hazardous chemical substances
- Noise
- Global warming
- Ecotoxicity
- Eutrophication
- Soil use
- Consumption of mineral resources
- Consumption of fossil fuels
- Consumption of biological resources
- Ozone-layer destruction
- Photochemical oxidants
- Acidification
- Waste

#### Environmental Impact of Chemical Substance Emissions Using LIME2 (indexed by setting FY2005 to 100)



\* LIME2: The second version of the Life Cycle Impact Assessment Method Based on Endpoint Modeling (LIME) developed in Japan.

## Reducing/Managing Waste **EN22**

### ■ Targets for FY2006–2011

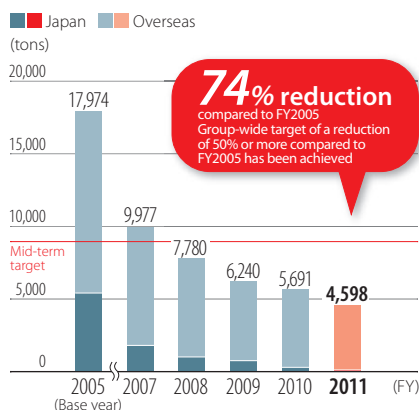
Reduce “waste with no effective use” by 50% or more compared to the FY2005 level by FY2011

The Teijin Group has made a strong commitment to reducing the amount of waste generated, and also reducing the “waste with no effective use.” This is manifested in promoting reuse of waste, and shifting from simple incineration/landfill to material, chemical, and thermal recycling.

Our mid-term target for “waste with no effective use” is a reduction of 50% or more compared to the FY2005 level by FY2011. When compared to FY1998, this represents a reduction of 81%. In our long-term target for FY2020, we aim to achieve a reduction of 85% or more compared to FY1998.

In FY2011, group-wide, we generated 4.6 thousand tons of “waste with no effective use,” 6.7% of the total 68 thousand tons of waste generated. This represents a 74% reduction compared to the FY2005 level, thus achieving the mid-term target of a reduction of 50% or more. This result reflects the decreased production and the reduction efforts at each business site, a prime example being the improved tank-residue recovery ratio at the No. 1 polymerization factory at the Matsuyama Plant.

### Trends in “Waste with no Effective Use”<sup>\*)</sup>



In addition, the Teijin Group has defined zero emissions as reducing the ratio of “waste with no effective use” to 1% or less of the total waste generated, and each business site/plant has been able to take independent reduction initiatives. Notably, business sites in Japan that produce 500 or more tons of waste all achieved zero emissions by FY2011. “Waste with no effective use” totaled 182 tons in Japan in FY2011, a 46% reduction compared to FY2010. Starting from FY2012, we have set the annual goal of a 1% reduction per unit of production amount.

Overseas, 4.4 thousand tons of waste with no effective use were generated, a 19% reduction from FY2010. As was the case in FY2010, only three business sites/plants achieved zero emissions. As overseas group companies are lagging behind those in Japan in this area, in FY2012, we will continue to make improvements such as searching for suitable recycling companies.

## Water Purification and Preventing Soil/Groundwater Pollution

In FY2006, the Teijin Group formulated guidelines for preventing soil and groundwater pollution. Under the guidelines, we are striving to prevent soil and groundwater pollution resulting from our business operations in Japan and overseas. We are also taking appropriate action in response to revisions of the Water Quality Pollution Control Act effective as of June, 2012.

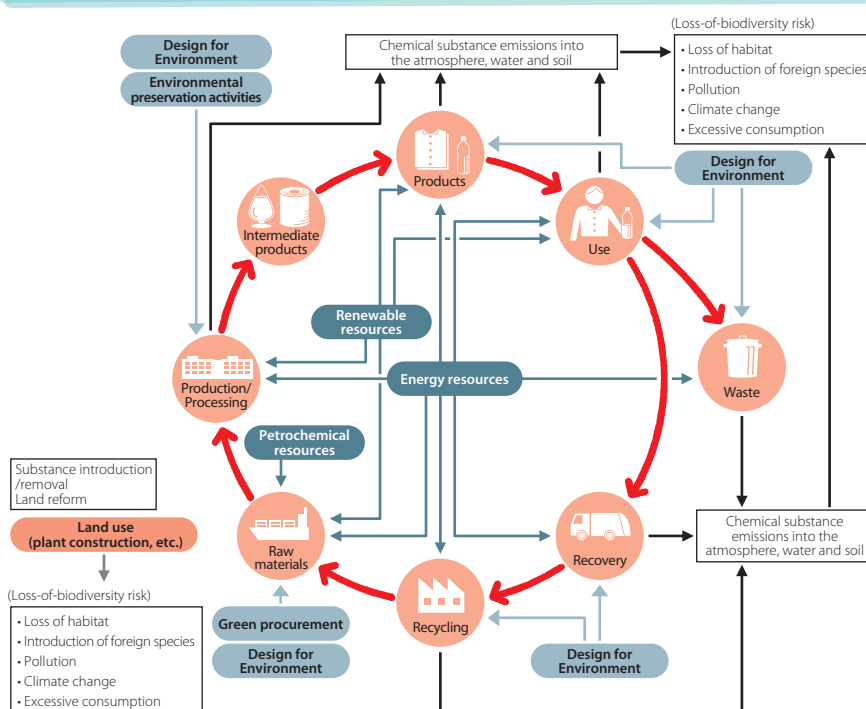
## Biodiversity Conservation **EN14**

See website for more detailed information



Biodiversity is affected by chemical substances, greenhouse gases, waste and other forms of environmental impact resulting from business activities. To enable visualization of this situation, the Teijin Group has created a map showing risks relating to loss of biodiversity due to business activities and activities to conserve biodiversity. This will facilitate all employees having a clear awareness of the impact of business activities on biodiversity, helping to propel conservation activities forward.

### Map of Risks (Biodiversity Loss) and Initiatives (Biodiversity Conservation)



## Product and Manufacturing Process Design Contributing to Reduced

All products, manufacturing processes, and IT services are designed based on evaluations of the environmental impact throughout the product's life cycle.

### What is Design for Environment?

The Teijin Group positions Design for Environment as one of the three core elements of environmental management. Design for Environment is defined as: "Product design that aims to reduce the environmental impact of each product through evaluating the overall environmental impact throughout the product life cycle including raw materials, production, use and disposal." (Environmental impact includes release of CO<sub>2</sub>/sulfur oxides that contribute to global warming/air pollution.) Based on this definition, in January 2008, we established the Teijin Group Design for Environment Guidelines, which apply to six areas; safety, energy saving, resource saving, environmental conservation, provision of information, and environmental impact reduction in the manufacturing stage.

When a product, manufacturing process or IT service is newly designed or the design is improved, the guidelines and a special checklist are used to evaluate the design. Various measures to

reduce the environmental impact are investigated, and the results are reflected in the design of new products, manufacturing processes and IT services.

### Design for Environment Approval System

The Teijin Group has an original system for approving Design for Environment products, in place since January 2008.

The approval system applies to products and IT/services for which sales are expected to exceed a specified amount, or products, manufacturing processes or IT/services for which there is a specific desire to obtain Design for Environment approval.

The chairman of the Expert Committee for Promoting Design for Environment examines applications and grants approval. In FY2011, five products were granted approval (see below).

Even after approval, compliance is checked periodically through product liability/quality assurance audits, and decisions on whether to renew or withdraw approvals are made.

### Design for Environment Approved Products "Earth Symphony"

In February 2010, we developed the "Earth Symphony" concept, a logo to be displayed on products that have received Design for Environment approval. In June 2010, "Earth Symphony" became a registered trademark of the Teijin Group (in Japan).

In FY2011, this trademark was registered in the EU, China and Singapore. Future plans are to register it in the US and various Asian countries where the Teijin Group is expanding its products, and thereby aim to increase global awareness and wider use of Earth Symphony® in the market.



This logo is used to promote awareness among the general public of our initiative for harmonization with the global environment through environmentally conscious corporate activities based on the Teijin Group Design for Environment Guidelines.

## Products that Received Design for Environment Approval in FY2011

### Resource Saving



Used in the arms of  
Megane Ichiba  
eyeglasses

#### BIOFRONT®

Despite being a bioplastic, BIOFRONT® has high heat resistance owing to its stereocomplex polylactic acid crystal structure. Its melting point of 200°C or higher is equal to that of petroleum-derived polyester (PET, PBT) and it is suited to applications for industry and durable consumables.

### Energy Saving/Environmental Conservation



Photo shows 2012 models

#### Artificial leather Cordley® (using ECOPET®SF and AEROTOP®SF)

Cordley® has a structure similar to natural leather while weighing approx. 20% less than our conventional artificial leather. It is used in school bags sold by Nitori throughout Japan (during certain seasons).

### Enhanced Safety



#### TRIPROTECH™ (laminated cloth for new fire-fighting uniforms)

TRIPROTECH™ is a lightweight cloth for fire-fighting uniforms providing superior safety through combining three-layered cloth with high-strength, highly heat-resistant fibers.

### Energy Saving

#### Hi-Sanso™ 7R

Hi-Sanso™ 7R is a home healthcare oxygen concentrator that provides safe, anxiety-free and energy-saving performance. It features the lowest power consumption in the industry and is compatible with a system that automatically monitors equipment operational status.



### Reduced CO<sub>2</sub> Emissions

#### E-COMMUTE® (polycarbonate-polylactate alloy)

E-COMMUTE® is a biomass alloy compliant with the biomass-based plastics identification system and electronic products environmental assessment tool (EPEAT). The compatibilizing technology developed has significantly improved appearance, hydrolysis resistance and moldability.



# Environmental Impact



- Summary of the Design for Environment Evaluation Checklist
- Design for Environment Organizational Bodies
- List of Products and Processes that have Received Design for Environment Approval

## Reviewing the Guidelines

The United Nations declared 2010 as the International Year of Biodiversity. In FY2011, we started using the Design for Environment Guidelines that had been revised to enable a more detailed evaluation of the impact on biodiversity in relation to the item “environmental impact reduction in the manufacturing stage.” In specific terms, we used LIME2 (see page 39) to evaluate items such as the impact due to the use and disposal of specific chemical substances.

## Engaged in LCA Activities via Industry

In a report entitled “Innovations for Greenhouse Gas Reductions—Life Cycle Analysis of Chemical Products in Japan”

published by the International Council of Chemical Associations (ICCA) in 2009 and the Japan Chemical Industry Association (JCIA) in July 2011, it was clearly shown using the carbon life cycle analysis (c-LCA)\*1 method that the chemical industry is contributing significantly to global CO<sub>2</sub> emission reductions.

In 2011, Teijin Limited also participated in creating guidelines for calculating the contribution to CO<sub>2</sub> reduction using the c-LCA method adopted by the JCIA. As part of a joint Ministry of the Environment/Ministry of Economy, Trade and Industry research project regarding greenhouse gas emissions in supply chains of organizations, a global-response subcommittee chemical working group reported these guidelines as an important achievement. The guidelines also contributed to a proposal to aim to develop a “green value chain standard.”

In addition, Teijin Limited participates in LCA working group activities of the Japan Chemical Fibers Association.

\*1 c-LCA: A method used to investigate and analyze CO<sub>2</sub> emissions of each process from a perspective overlooking the entire life cycle of products from collection of raw materials to disposal.

## Future Developments

In FY2012, we will newly establish a Group Environmental Management Promotion Subcommittee and review the system of promoting overall environmental management activities. The new subcommittee will take an overall perspective in reviewing issues and consider policies and measures to further develop Design for Environment.

## Dialogue with an Environmental Expert 4.17

On March 26, 2012, we held a dialogue with Dr. Masahiko Hirao, a professor at the School of Engineering of the University of Tokyo. In light of a progress report from Teijin Limited, we exchanged opinions regarding operations and challenges.

Here, we present some of Dr. Hirao's opinions on the progress of the Teijin Group activities in relation to the four challenges he raised in FY2010 as well as his opinions on future challenges.



**Dr. Masahiko Hirao, Ph. D.**

Professor  
School of Engineering  
The University of Tokyo

### Challenge 1: Create an independent PDCA system that enables all products to be designed and manufactured according to the Design for Environment guidelines

I understand that in aiming to strengthen environmental management Teijin has conducted structural reorganization and is making progress in creating an independent PDCA system. I look forward to hearing about specific actions under the new system from April 2012.

### Challenge 2: Develop Design for Environment through collaboration within supply chains beyond company and department frameworks

Environmental initiatives for automobiles and infrastructure-related products in particular tend to obtain high recognition. However, the societal and environmental benefits of chemical products are seen for the first time when they are used. In this respect, I have high expectations that Teijin can find the best match for customer needs and expand in various fields.

**Future Challenges** Material manufacturers tend to be behind the scenes. This is true of environmental initiatives too in that customers of material manufacturers tend to get the recognition for considering the environment. At the same time, there is also an unreasonable misconception that it is the material manufacturer that causes CO<sub>2</sub> emissions. It will therefore be important to further appeal to the environmental conservation and social contributions of chemical materials and products.

### Challenge 3: Perform quantitative evaluations using LCA

I understand that in aiming to strengthen environmental management Teijin has conducted structural reorganization and is making progress in creating an independent PDCA system. I look forward to hearing about specific actions under the new system from April 2012.

### Challenge 4: Create activities that involve all employees in environmentally friendly manufacturing

Evidence that progress in activities is being made could be seen in the fact that more than 60 opinions were expressed by high-level development and design managers in Japan including harsh opinions such as “Why are these activities necessary?” However, further enlightenment is necessary to instill a mindset that it is natural that certain activities are required.

See the website for more detailed information





## Promoting Businesses Contributing to Reduced Environmental Impact

With the ultimate aim of helping solve global environmental issues, we are utilizing our technologies cultivated over many years to focus efforts on developing cutting-edge materials that contribute to reducing CO<sub>2</sub> emissions, recycling technologies that enable reuse of water and other resources, as well as wider adoption of our products.

### Teijin Group's Environmental Businesses

The Teijin Group Global Environmental Charter was established in 1992. Subsequently, in 2007, we announced the Declaration of Sustainable Environment Initiatives. Recognizing the substantial impact of our business activities on the global environment, we are striving to preserve the environment through providing products and services that reduce environmental impact.

Additionally, the medium- to long-term management vision, CHANGE for 2016, announced in February 2012, outlines our basic policy to promote growth strategies in green chemistry, healthcare and overlapping domains, clarifying our intention to provide solutions that have sustainable value.

We are also strengthening efforts in development of bioplastics to contribute to inhibiting CO<sub>2</sub> emissions and consumption of oil resources and development of advanced and composite materials to contribute to conserving energy and resources.

### Products/Technologies Contributing to Environmental Improvement

#### Weight Reductions in Transportation

In the automotive and aircraft industries, initiatives to improve fuel efficiency and reduce CO<sub>2</sub> emissions are continuing.

In order to realize lighter chassis and fuselages, and thereby contribute to improved fuel efficiency and reduced CO<sub>2</sub> emissions, the Teijin Group is working hard to develop and increase the widespread use of carbon fiber and polycarbonate resin, materials which are more lightweight and stronger than conventional materials such as iron, aluminum and glass.

##### 1. Tenax® Carbon Fiber

The Teijin Group has established a world-first technology enabling mass-production of composite products for automobiles through the use of thermoplastic resin with carbon fiber reinforced plastic (CFRP). As the first step to realizing automotive applications, we have started joint development with GM, one of the world's largest automotive manufacturers and we will create a business aiming for full-scale application to mass-produced cars (see feature on pages 13–14).

Applications for aircraft include the upper-deck floor cross beam of the AIRBUS A380, the world's largest passenger aircraft.

##### 2. Panlite® Polycarbonate Resin

Polycarbonate resin is used in automobile as well as the N700 Series Shinkansen train windows. In addition to being lightweight, polycarbonate resin has superior processing characteristics, raising expectations of further improvements in design.

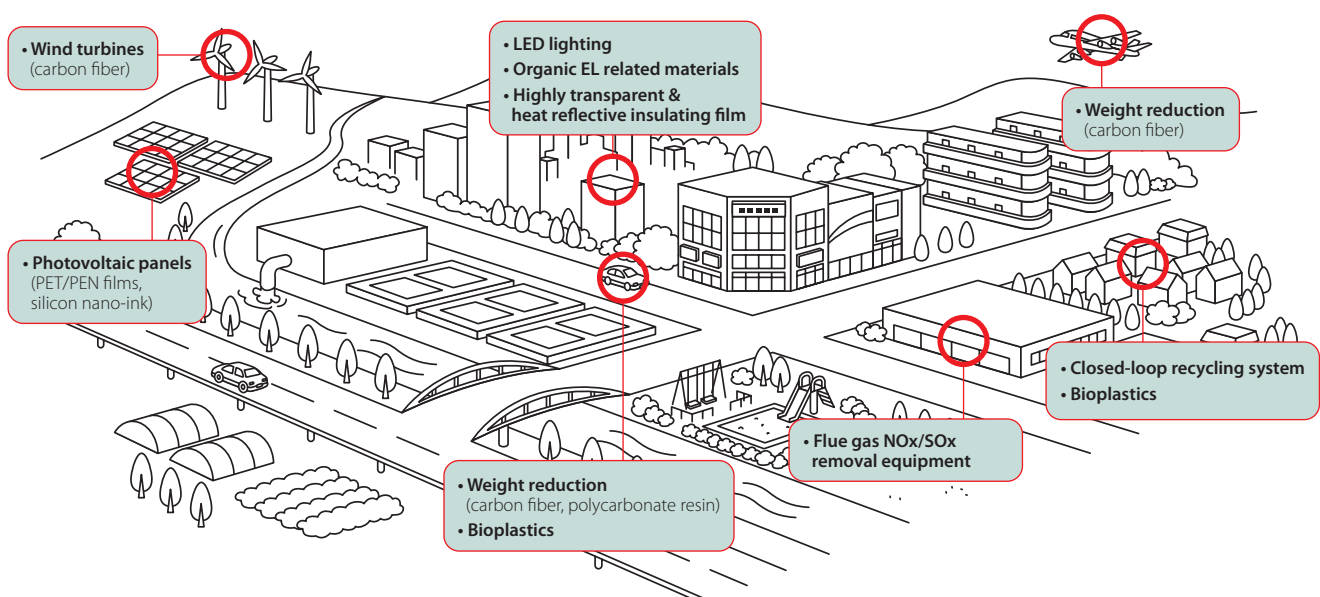
#### Contributing to Wider Use of New Energies

The use of clean energy sources that do not emit CO<sub>2</sub> such as photovoltaic (PV) and wind power generation is continuing to become more widespread. In these new energy fields, Teijin Group products are making vital contributions.

For example, in PV generation, PET film is used in back sheets of PV panels. Furthermore, through use of silicon nano-ink, currently under development, for power generation materials, we will aim for improved productivity leading to substantial cost reduction.

In wind power generation, Tenax® carbon fibers enable larger wind turbine blades, contributing to improved power generation efficiency.

### Examples of How Teijin Group Environmental Businesses are Reducing Environmental Impact





### Bioplastics: Contributing to Reduced CO<sub>2</sub> Emissions and Resource Savings

The Teijin Group is developing bioplastics with performance comparable to that of petroleum-derived engineering plastics.

Bioplastics are made from renewable resources such as plants, therefore inhibiting the consumption of oil, a finite resource. In addition, plants, the raw material, absorb CO<sub>2</sub> in the process of growing, so increased CO<sub>2</sub> concentration in the atmosphere can also be inhibited.

#### 1. BIOFRONT®

Compared to PLA, the conventional bioplastic, *BIOFRONT®* has higher heat-resistance as well as excellent durability, moldability and transparency with a bio-content of close to 100%. Making the most of these features, we are developing new applications for the electronics and automotive fields.

#### 2. PLANEXT®

*PLANEXT®* is an eco-friendly polycarbonate-like resin, containing isosorbide made from corn and other plants. With the bio-content as high as 70%, it has excellent transparency, chemical resistance, scratch resistance and durability. We are developing applications that take advantage of these features in the automotive/electronics, optical, medical, food, cosmetics and other industries.

Extending further, we are fully utilizing our compounding and alloying technologies to propel development of *E-COMMUTE®*, a plant-derived polymer alloy material, thus taking up the challenge of pioneering development of new markets.

### 3. ECO CIRCLE™ Plantfiber

*ECO CIRCLE™* Plantfiber is a partially bio-derived PET. Ethylene glycol, one of the components of PET resin, is made from biofuels derived from biomass such as sugarcane. The bio-content of *ECO CIRCLE™* Plantfiber is a little over 30% and it has the same characteristics and quality of oil-derived PET. Recycling is also possible via the *ECO CIRCLE™* closed-loop recycling system.

Full-scale production mainly for application to car seats started in April 2012 and has been expanding steadily. This is the world's first full-scale expansion of a bio-derived PET fiber product.

#### Closed-loop Recycling System Contributing to Resource Savings EN27

*ECO CIRCLE™* is a closed-loop recycling system based on a world-first chemical recycling technology developed by Teijin Fibers Limited. Through chemically decomposing polyester products to the molecular level, an endless cycle of regenerating used products into new products without loss of quality is possible. In addition to reducing waste, *ECO CIRCLE™* recycling realizes an approximate 80%\* reduction in energy consumption and CO<sub>2</sub> emissions compared to newly producing polyester feedstock (DMT) from petroleum.

Product development, collection and recycling are now in progress in cooperation with more than 150 apparel manufacturers and sporting goods manufacturers in Japan and overseas.

\* 80% reduction: Source: Report on "Textile Goods Life Cycle Assessment (LCA) Survey," Ministry of Economy, Trade and Industry, Japan. CO<sub>2</sub> emissions include those produced during incineration.

#### Wastewater Recycling/Reuse through Biological Processes

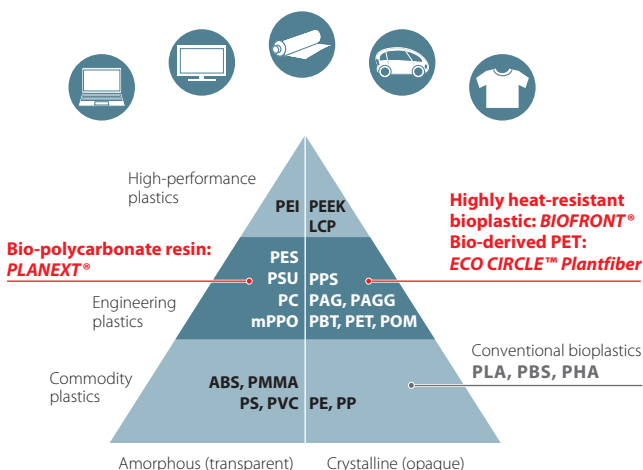
Water shortages and water pollution are becoming increasingly serious problems in various areas of the world. Raising hopes of a solution are Japan's outstanding water purification treatment technologies. The Teijin Group is part of this solution through our initiatives to alleviate water shortages around the world. To this end, we are proactively promoting our water purification treatment business under the concept of recycling and reuse of wastewater.

The core technology of our wastewater purification treatment system is the multistage activated biological process (*MSABP®*). As well as purifying wastewater via microorganisms, *MSABP®* uses the microbial food chain to control the generation of excess sludge. As a result, compared to ordinary activated sludge equipment, energy savings and cost reductions are realized.

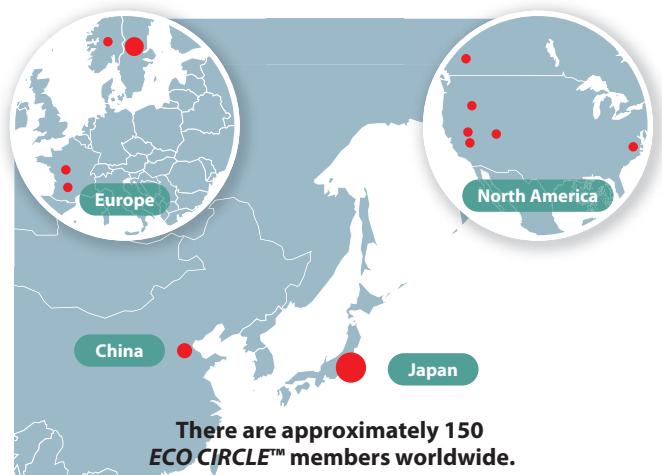
We have also developed sophisticated technologies for wastewater reuse, including *ELCAT™*, an electro catalytic method, and *HiPOx®*, an advanced oxidation water treatment.

In response to user needs, through combining *MSABP®*, *ELCAT™* and *HiPOx®* and membrane technologies we are aiming to realize recirculation/reuse of wastewater at plants and other facilities.

#### Development of Teijin's Bioplastics



#### Global Expansion of ECO CIRCLE™



## TOPICS

**Comprehensive Partnership Agreement with the China Chemical Fibers Association**

In March 2012, Teijin Limited agreed to a partnership with the China Chemical Fibers Association\* aiming to develop the chemical fibers and related industries in China and expand the Teijin Group fibers business in China. Through the partnership, the Teijin Group will utilize its technologies and knowledge to contribute with solutions that promote energy savings and environmental conservation in the chemical fibers industry, which was specified as a strategic new industry in China's 12th five-year plan.

In addition to detailed talks already underway with local businesses regarding the closed-loop recycling system for polyester products, in April 2012, the Teijin Product Development China Co., Ltd. was established in Nantong, Jiangsu as a base for yarn and textile product development aiming to strengthen R&D functions in China.

\* China Chemical Fibers Association: The only and largest nationwide organization in China's chemical fiber industry. It is a non-profit organization established in 1993 and is made up of approximately 400 members from related businesses, universities and research institutions.

## TOPICS

**Expansion of Innovative Separators for Lithium-ion Secondary Batteries**

Lithium-ion secondary batteries are used in tablet computers and smartphones, both products on a rapid rise, as well as in EVs, next-generation eco-cars. The relentless pursuit of high energy density in the battery design means that materials with a high level of safety and high resistance to chemical reactions are required.

In 2007, Teijin commercialized high heat-resistance separators coated with *Teijinconex*® meta aramid on both sides. The next step was the new development of *LIELSORT*®, an innovative separator for lithium-ion secondary batteries with a world-first fluorine-based compound coating. This development enables lithium-ion secondary batteries with high output power and long service life while ensuring safety.

Together with CNF, a leading film processor in South Korea, we have established Teijin CNF Korea Co., Ltd, a joint venture, and production is scheduled to start in June 2012. Marketing is mainly being handled by Teijin Electronics Korea Co., Ltd., our sales subsidiary in South Korea, with a view to fast-tracking expansion of the rapid-growth lithium-ion secondary battery market.



*LIELSORT*® separator for lithium-ion secondary batteries

## TOPICS

**Global Expansion of *MSABP*®: An Energy-saving and Low-cost Solution to Wastewater Treatment Needs Arising from Urbanization and Industrialization in Emerging Nations**

*MSABP*®, a multistage activated biological process, is a core technology of Teijin's wastewater treatment system and its overseas expansion is steadily progressing. *MSABP*® has been adopted for multiple new sewage treatment plants in the Hunnan New District of Shenyang city, Liaoning province, China. Shenyang city, which develops the Hunnan New District for the National Games of the People's Republic of China in 2013, chose *MSABP*® because of the low initial investment and maintenance costs as a result of the minimized need for sludge disposal, and a shorter construction time as a result of the minimized sewer network maintenance work owing to its decentralized system. Furthermore, when the system is eventually replaced with a larger centralized system to accommodate the area's anticipated population growth, it will be possible to relocate the decentralized and container-size *MSABP*® plants to other areas of the city. All these factors were highly evaluated and led to the package contract.

Additionally, in Yixing city, Jiangsu Province, China, a pilot system is being tested for the development of wastewater treatment systems for rural communities. *MSABP*® has also been adopted in Angola and other countries mainly for factory wastewater treatment.

Future plans are to further develop our unique total wastewater treatment solutions both in Japan and overseas to contribute to wastewater recycling, energy savings and reduced CO<sub>2</sub> emissions.



*MSABP*®

## Protecting Local Communities and Employees from Disasters

In order to prevent accidents and disasters such as explosions, fires, and leaks/spills of hazardous substances, we are enhancing disaster prevention management including fire prevention and earthquake/tsunami countermeasures.

### Promoting Disaster Prevention Management **EN23**

Our disaster prevention activities are based on the group-wide Disaster Prevention Guidelines. Our efforts range from preventative measures such as disaster prevention assessment and fire prevention, as well as earthquake countermeasures and activities to prevent the expansion of damage, including disaster prevention training, drills and upgrading of fire prevention equipment.

In 2011, these activities resulted in the number of disasters at group companies in Japan and overseas being zero. However, there was one accident involving leakage of a hazardous substance (Matsuyama Plant, Teijin Techno Products Limited). Immediately after the accident, we established a countermeasures committee to examine the accident cause and enact countermeasures. The assistant to the Chief Social Responsibility Officer (responsible for disaster prevention) conducted an audit, and the General Manager of the Teijin Limited ESH Office conducted a reaudit. The accident cause was failure to properly remove a hazardous substance, which leaked from a pipe onto a container while pouring the substance into

tanks at the time of receipt. When the container was being transported, the hazardous substance leaked onto the road. We sincerely regret this accident and are taking measures to ensure that an accident such as this never happens again, including a review of operations/equipment for receipt/shipping of hazardous substances and increasing the thoroughness of training. In doing so, we aim to strengthen our disaster prevention to a higher level (see page 18).

### Implementing Disaster Prevention Assessments

The Teijin Group has been conducting disaster prevention assessments in line with our own independent standards since 1980. Safety is assessed every five years by experts in manufacturing, facilities and environment, safety and health at a total of 22 plants in Japan and internationally. These are plants where large amounts of high-pressure gases or hazardous substances are handled. Experts review and upgrade the safety and disaster prevention measures. In 2011, assessments were carried out at four domestic plants and one overseas plant to check items such as whether the disaster prevention management system is capable of

handling the environmental changes that have occurred over the past five years. We identified many points for improvement such as strengthening earthquake countermeasures. In the future, we will systematically proceed with countermeasures.

Two mini disaster prevention assessments were also conducted in 2011. In place since 2008, these mini assessments focus on locations where there may be a risk of small-scale fires, such as near boilers and places where hazardous materials and combustibles are stored.

In FY2012, standard and mini disaster prevention assessments are scheduled for one plant and six business sites, respectively.

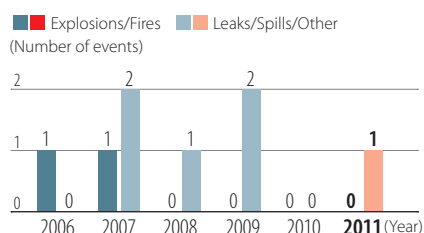


Disaster prevention assessment reporting committee

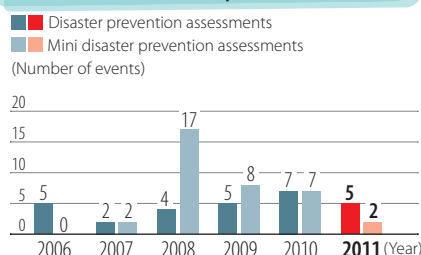
### Accident Prevention Measures

In FY2011, we considered measures to restrict damage in the event of a large earthquake/tsunami, identifying plants where there is a high risk of damage not only to the company but also to the local community. As well as reinforcing the stability of equipment, we reviewed emergency procedures. In the future, while proceeding with these measures, we will take actions in accordance with the reviews of local community disaster prevention plans conducted by the Japanese government Central Disaster Prevention Council.

### Trends in the Number of Serious Accidents and Disasters★



### Trends in the Number of Disaster-prevention-assessed Plants★



## TOPICS Training in How to Put Out Fires Using Actual Fire Extinguishers (DSC)

Every year, with the cooperation of the local fire department, Diversified Structural Composites, Inc. (DSC) in Kentucky USA conducts training in how to extinguish a fire in its initial stages. Employees from each worksite take it in turns to do the training course, which is based on lectures and use of powder, foam and various other fire extinguisher types. In contrast to training in Japan, which usually involves spraying water at the target from a fire extinguisher, at DSC actual fire extinguishers are used.



Spraying fire retardant used in actual fire extinguishers. All employees engaged enthusiastically in the task.





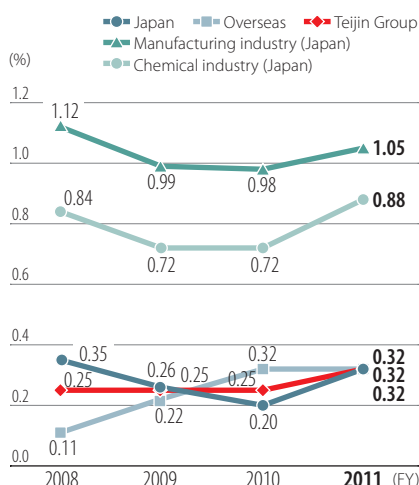
## Creating a Safe and Secure Workplace Environment

Aiming to realize zero serious workplace accidents and to upgrade group-wide safety, we implement both preventative and recurrence-prevention measures.

### Occupational Safety Initiatives LA7

The Teijin Group places a strong emphasis on accident prevention activities. In 2008, one of the targets set in the mid-term plan was to maintain the lost time injury frequency rates\* below 0.3. We achieved this target for three successive years in 2008, 2009 and 2010 with a lost time injury frequency rate of 0.25. However, despite maintaining the rate at less than the average for the Japanese domestic chemical industry (0.88 in 2011), the target was not achieved in 2011 with a lost time injury frequency rate of 0.32.

#### Lost Time Injury Frequency Rates★



group-wide and in Japan.

In FY2012, through promoting the three pillars of our safety activities, we will continue to strengthen activities including prevention of workplace accidents, sharing workplace-accident information and applying it group-wide, as well as ESH training and guidance in Japan and overseas. In doing this, we will aim for the twin goals of zero serious workplace accidents and reducing lost time injury frequency rates.

\* Lost time injury frequency rate: The number of workplace accidents resulting in leave of absence per one million labor hours.

### Promoting the Three Pillars of Safety Activities LA9

In order to prevent workplace accidents, the Teijin Group has established three pillars of safety activities: the "5S" initiative (five Japanese words [*seiri, seiton, seisou, seiketsu* and *shitsuke*] which correspond to organization, tidiness, cleaning, hygiene and discipline), the "Hiyari-Hatto" (meaning close call or near miss) initiative and safety patrols.

Utilizing the information obtained through these activities, we aim to enhance individual awareness of risks, and communication in the workplace.

### Sharing Workplace Accident Information and Preventing Recurrences LA9

Information relating to all workplace accidents that occur at Teijin Group companies is distributed group-wide via an Intranet to enable these experiences to be used as a reference, and to help prevent the recurrence of similar accidents.

The three major kinds of workplace accidents have been specified as: 1) accidents involving being caught in rotating machinery, 2) accidents involving contact or collision with transport equipment, and 3) falls or slips on walkways or staircases. We have established prevention guidelines for these three major kinds of workplace accidents as well as machinery safety assessment standards. Through safety and enlightenment activities we are making every possible effort to prevent these kinds of accidents.

For serious accidents, which are defined in our rules for reporting accidents related to the environment, safety and health (ESH), measures to prevent recurrence of similar accidents are implemented group-wide. In 2011, a chemical poisoning workplace accident occurred in June at a company affiliated with our plastics business. In response, through all safety management departments within the group, we investigated the usage status of protective equipment and work management system at related sites, and based on simulations of the same conditions, improved the thoroughness of countermeasures.

## TOPICS Distinctive ESH Activities Developed at Two US Plants at the Core of the Carbon Fibers Business

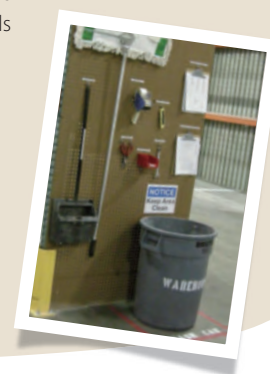
### Comprehensive Employee Training at TTA

At Toho Tenax America (TTA) in Tennessee, specialist staff use training rooms to conduct employee safety training. The content is practical, with specialized safety knowledge unique to individual factories added to general items regarding protective equipment and lockout procedures and other safety and hygiene items specified by the United States Occupational Safety and Health Administration (OSHA). The meticulous level of training is also evident in other aspects such as yearly training plans created for each individual employee.



### Proactive Actions for 5S (DSC)

The 5S concept used in Japan relating to basic safety activities is also being widely enacted in the US under the name, "5 Steps Housekeeping." At Diversified Structural Composites (DSC) in Kentucky, colored lines are used to divide walkways, work areas and storage areas in the plant and tools are arranged with each tool having its own place to be put away. This work environment improvement proposal was an employee initiative that has increased safety awareness and facilitated vitalization of the entire workplace.



## Enhancing the Healthcare Management System to Foster Employees with Healthy Minds and Bodies LA8

Collaborating internally to enhance the healthcare management system (incl. mental health)/work environment.

### Enhancing Mental Health Measures

The Teijin Group established the Health Care Administration Office in April 2009. Through collaboration between group companies in Japan, we are building a system for integrated management of employee health status. The Health Care Administration Office collects mental health data from group companies in Japan every month and reports the results to management and each business. It also diagnoses stress levels at all workplaces every March and for workplaces where health risk values exceed the Teijin Group workplace improvement standard, it proposes improvement activities matched to the workplace (e.g., increasing opportunities for bosses to provide information or setting aside time for discussion at weekly/monthly meetings).

Proposals made to 63 workplaces during FY2010 resulted in improvements at 86% of these workplaces. Employees involved in improvement activities said that the workplace environment changed within six months and communication between employees improved.

In FY2011, due partly to the Great East Japan Earthquake, stress and health risk levels varied depending on the business group. However, in March 2012, we confirmed that activities at 61 workplaces had resulted in improvements at 86% of these workplaces, an equivalent result to the previous year.

For FY2012, with the objective of preventing mental disorders and their progression through early detection and treatment, we will create a counseling system so that employees can feel free to talk about any worries or troubles before they lead to health problems. Specifically, specialists such as clinical psychotherapists, counselors and public health nurses will be stationed at the Health Care Administration Office to consult with employees, and we will aim to strengthen the group-wide consultation system through collaboration between staff of businesses, business administration offices and clinics. Furthermore, with the support of the external Employee Assistance Program (EAP), we will set in order a system to provide counseling via telephone/e-mail or face-to-face through sending counselors to any worksite in Japan as requested by employees.

### Promoting Health Management and Prevention of Lifestyle-related Diseases

In April 2008, it became mandatory for health insurance providers in Japan to provide specific medical check-ups and guidance (also known as metabolic syndrome check-ups/health guidance). Check-ups are conducted by industry medical staff at head offices and other business sites on a group or individual basis, and ongoing support is provided for six months. Under the national standard, all employees aged 40 or over are subject to the check-ups. However, the Teijin Group has made all its employees subject to the check-ups regardless of age, and there is a declining trend among subjects.

We also hold the Teijin Group Health Walk every October with a view to preventing lifestyle-related diseases and raising mental health awareness. Employees enter the number of steps earned every day on a special website, allowing them to move forward in a virtual tour of World Heritage sites. As of 2011, we have changed the arrangement of voluntary participation, making it mandatory for all employees whose regular health check-up showed an abnormal finding on a metabolic-syndrome-related item (obesity, lipid abnormality, high blood pressure, high blood sugar levels). We have also introduced a system for employees to record in a mini-diary what they

saw/felt while walking and a system for employees to read the diary and express their support. During the period, there were over 22,000 messages of support including opinions like "Reading the comments of a complete stranger was so amusing I couldn't stop laughing" and "The messages from people I didn't even know encouraged me a lot." In this way, the event helped to foster exchange and a sense of solidarity among employees.

### Preventing Nano-material-related Health Problems

In July 2008, we established guidelines to prevent damage to health caused by work involving the production or handling of nano-materials in response to a notice issued by the Ministry of Health, Labor and Welfare, Japan.\*

Additionally, in March 2009, in response to a further three notices relating to nano-materials issued by the relevant authorities, we expanded the scope of our guidelines to apply to nano-materials as well as recycling of nano-materials. At the same time, we enhanced safety measures. In line with these revised guidelines, divisions that handle nano-materials are aiming to prevent recurrence of health problems.

\* Notice issued by the Ministry of Health, Labor and Welfare: "Measures to Prevent Exposure to Nano-materials at Workplaces Where They Are Produced or Handled."

## voice : Participating in the Teijin Group Health Walk

Two teams from our department participated and they were fortunate enough to finish third and win the booby prize. Celebrations with all members are being planned in combination with December and January birthday parties. A source of motivation for participation was increasing communication among staff, as many of us usually spend a lot of time staring at computer screens and reports. When we asked people to get involved, both full-time and temporary staff said they would participate. Thanks to this occasion, we have started to communicate with each other even outside of work, enabling us to get to know each other's personalities better and creating a friendly atmosphere in the workplace.

The prompt for me to start walking was when the public health nurse at the clinic told me that I was at risk of getting metabolic syndrome. During the first month, I felt like quitting, but I gradually started losing weight and learnt what it feels like to get positive comments about my weight loss from others, and now I am 11 kg lighter than I was at the start. My fitness has improved to the extent where I can even do light jogging. As well as experiencing the pleasure of self-achievement, an invaluable benefit has been the health-conscious atmosphere at the workplace that my weight loss has triggered.



**Yasuhiro Kumita**  
Healthcare Business Group  
Tokyo Head Office



**Haruhiko Takeda**  
Healthcare Business Group  
Iwakuni Plant

## For Constant, Efficient Improvements of ESH Activities

The Teijin Group promotes efforts to obtain certification for management system standards such as ISO and OHSAS. Furthermore, we quantitatively measure ESH-related investments/expenses and link this to efficient progress and improvements of ESH activities.

### ESH-related Accounting EN30

The Teijin Group calculates the investments, expenses, and effect of ESH activities at all group companies. The investments, expenses and effect of activities for environmental preservation, energy savings, reduced use of natural resources, and recycling are calculated with reference to the environmental accounting guidelines published by the Ministry of the Environment of Japan. We also calculate the investments and expenses for safety and disaster prevention, and health.

### Obtaining Management System Certifications

In the Teijin Group, each group company creates an environmental management system (EMS) based on ISO 14001 and Eco-Action 21 proposed by the Ministry of the Environment of Japan (and equivalent standards overseas if applicable). In doing this, we aim to take our independent activities for environmental preservation to the next level through continuous improvements.

In addition, we promote efforts to obtain certification for standards such as OHSAS 18001 (occupational health and safety) and ISO 9001 (quality assurance).

### Current Status of Teijin Group Management System Certifications

See website for details

#### Current Status of ISO 14001 Certification

- Japan (21 companies, 43 business sites)
- Overseas (13 companies, 16 business sites)

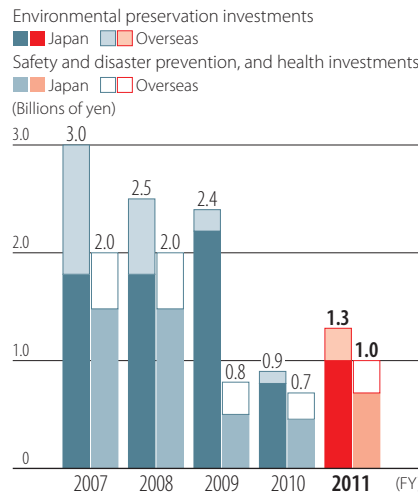
#### Current Status of OHSAS 18001 Certification

- Japan (20 companies, 34 business sites)
- Overseas (6 companies, 8 business sites)

#### Current Status of ISO 9001, ISO 13485, ISO 16949 and Other Certifications

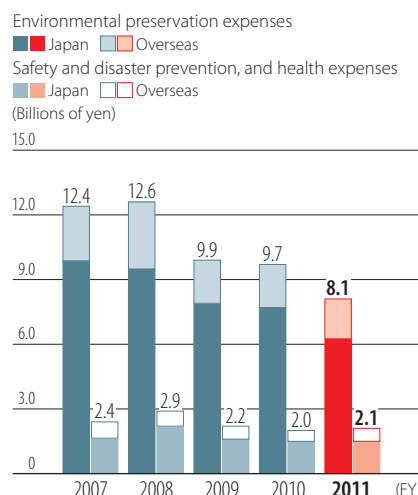
- Japan (30 companies, 57 business sites)
- Overseas (17 companies, 21 business sites)

### Trends in ESH-related Investments



- Environmental preservation investments in FY2011 were 1.3 billion yen, a 48% increase compared to the previous year. This result occurred based on a considerable increase in investments related to energy savings, and in spite of decreased investments in pollution prevention and R&D.
- Investments related to safety and disaster prevention, and health in FY2011 were 1 billion yen, a 51% increase compared to the previous year. This was based in particular on increased investments in disaster prevention, mainly for that after the Great East Japan Earthquake.

### Trends in ESH-related Expenses



- Environmental protection in FY2011 were 8.1 billion yen, a 16% decrease compared to the previous year. This decrease was in line with decreased expenses for pollution prevention and R&D, and occurred in spite of a slight increase in resource recycling expenses related to global environmental conservation and effective use of waste.
- Expenses related to safety and disaster prevention, and health in FY2011 were 2.1 billion yen, a 6% increase compared to the previous year. This was based on an increase in expenses for workplace environment improvement and disaster prevention, and occurred in spite of a decrease in occupational safety expenses.

### Environmental Performance Indicators and Boundaries for Reporting of ESH Accounting

#### Polyester Fibers

- **Japan:** Teijin Fibers, Teijin Tedy, Teijin Modern Yarn, Wako, Teijin Monofilament, Union Tire Cord, Unisel
- **Overseas:** Teijin Polyester (Thailand), TEIJIN (THAILAND), TEIJIN CORD (THAILAND), Thai Namsiri Intertex, Nantong Teijin, Teijin Modern Yarn (Nantong), Nantong Teijin Automotive Fabrics Finishing

#### Aramid Fibers

- **Japan:** Teijin Techno Products, Teijin Cordley
- **Overseas:** Teijin Aramid

#### Carbon Fibers

- **Japan:** Toho Tenax
- **Overseas:** Toho Tenax Europe, Toho Tenax America, Diversified Structural Composites

#### Films

- **Japan:** Teijin DuPont Films
- **Overseas:** P.T. INDONESIA TEIJIN DUPONT FILMS

#### Plastics

- **Japan:** Teijin Chemicals, Hiroshima Plastic, Kinkai Chemicals, Teiyo
- **Overseas:** TEIJIN POLYCARBONATE SINGAPORE, Teijin Chemicals Plastic Compounds Shanghai, TEIJIN POLYCARBONATE CHINA

#### Medical & Pharmaceutical

- **Japan:** Teijin Pharma, Teisan Pharmaceuticals, Teijin Home Healthcare

#### Trading and Retail

- **Japan:** N.I. Teijin Shoji, Teijin Associa Retail, Shinwa Gosen, Teikyo Lace, Teisho Sangyo, Techset, Folkner
- **Overseas:** FASHION FORCE NO.1 FACTORY

#### IT

- **Japan:** Infocom

#### Individual Management Companies

- **Japan:** Teijin Kosan, Kure Kogyo, Teijin Logistics, Teijin Eco-Science, Teijin Engineering

#### Corporate Staff and Others

- **Japan:** Teijin Creative Staff, Teijin Entech

- Company names are correct as of the end of March, 2012.
- Limited (Ltd.), Co., Ltd., Inc., GmbH, Corporation, B.V. and the like have been omitted from the company names.

## Distribution of Added Value to Stakeholders 4.14 EC1

There are a wide range of stakeholders in the Teijin Group. With this in mind, as the social responsibility of the Teijin Group, we place importance on maintaining a profit through our business, and distributing the resulting added value to stakeholders in an appropriate manner.

### Distribution of Added Value to Stakeholders (FY2011)

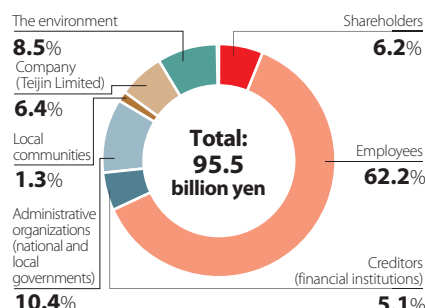
The added value obtained in FY2011 was distributed to major stakeholders as follows.

The total amount of added value was calculated by subtracting expenses for transportation, R&D, marketing promotion and tenancy, tariffs, depreciation, and other selling, general and administrative expenses (SGA) from gross operating profit (net sales minus

manufacturing cost), and adding independently calculated social contribution expenses and environmental preservation expenses.

These final two expenses are included in either other SGA or manufacturing costs. Additionally, social contribution expenses include the use of company facilities by local residents and services provided by employees converted to a monetary value. For distribution of added value, the stakeholder classification is listed as "local communities."

### Percent Allocation of Added Value to Stakeholders

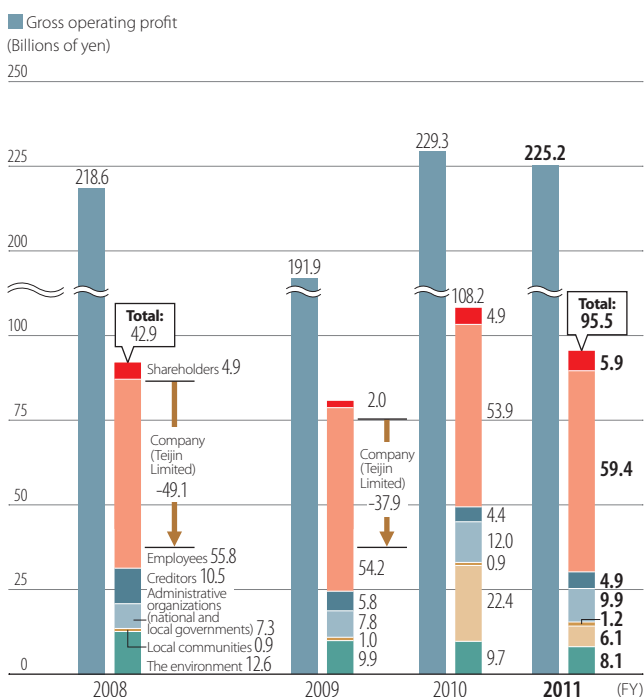


### Distribution of Added Value to Stakeholders ★

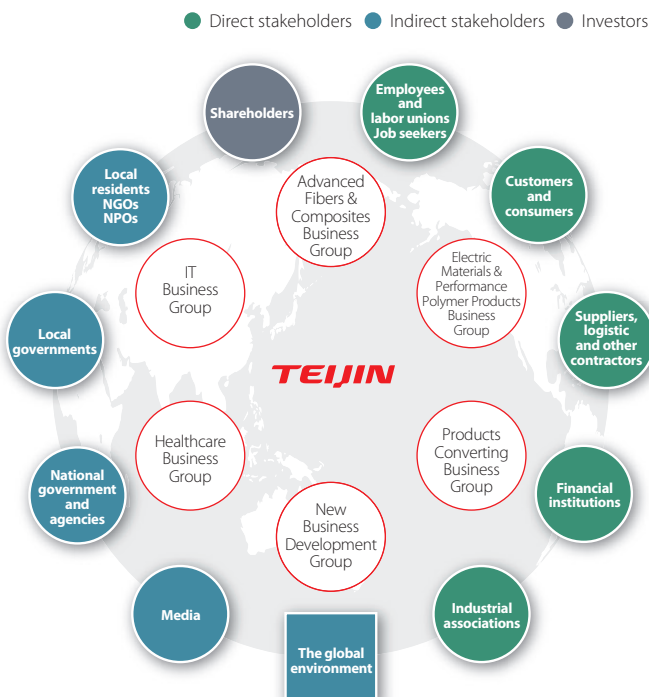
Stakeholders	Amount (billions of yen)	Breakdown	Remarks
Shareholders	5.9	Dividend	Figures are shown in financial statements (in the Dividends table of the Consolidated Financial Statements Summary [For the year ended March 31, 2012]).
Employees	59.4	Salaries/Wages, bonuses and retirement allowances	Figures are shown in financial statements. Note that the amounts shown above do not include personnel expenses that are calculated as part of production costs.
Creditors (financial institutions)	4.9	Interest paid	Figures are shown in financial statements (as Interest expenses in the Consolidated Financial Statements Summary [For the year ended March 31, 2012]).
Administrative organizations (national and local governments)	9.9	Taxes paid, such as corporation, local and business taxes	Figures are shown in financial statements (as Income taxes in the Consolidated Financial Statements Summary [For the year ended March 31, 2012]).
Local communities	1.2	Monetary donations, and article donations, free renting of company facilities, and services provided by employees converted to a monetary value using the Nippon Keidanren (Japan Business Federation) method.	Calculated by the CSR Planning Office (see page 33).
Company (Teijin Limited)	6.1	Increase in retained earnings	Figures are shown in financial statements (as Retained earnings in the Consolidated Financial Statements Summary [For the year ended March 31, 2012]).
The environment	8.1	Expenses for environmental preservation	Calculated by the Environment, Safety and Health Office (see page 49).
<b>Total amount</b>	<b>95.5</b>		

• Data in this table is rounded off to the nearest whole number.

### Trends in Added Value Distribution to Stakeholders



### Teijin Group's Stakeholders





### Report in More Detail about Distinctive Qualities and Differentiating Characteristics

Mainly on Corporate Governance and Corporate Ethics

Last year, I commented that in the Plans, Goals, Performance and Self-evaluations table, some of the challenges for the following fiscal year were too abstract and that the self-evaluation ratings were too ambiguous in some respects. Reading this report, I noticed that efforts have been made to make the targets more specific through conversion into numbers wherever possible.

However, there is still room for improvement. Although I appreciate that some targets are difficult to convert into numbers, I would like Teijin to continue to use their ingenuity in this respect.

I also think it would be better to provide more details on each individual initiative. For example, level-based workshop training, promoting-manager training, training at each workplace and e-learning are all mentioned as activities in the Group-wide Application of Corporate Ethics and Compliance section, but because there are no specific details, the difference between Teijin and other companies is not clear. I personally know that

Teijin prepares its own training materials rather than using ready-made training materials, and that it is serious about employee training. These kinds of good qualities should be fully conveyed to readers.

In addition, for focus areas or areas that Teijin is confident about, how about listing the main points in bullet-point form in addition to the main text? This will not only make it easier to understand but also help to provide a fresh perspective in the organization and review of initiatives.

In the Corporate Governance section, it is highly commendable that specific details about the Advisory Board are reported. Setting up this kind of organizational body and the Chief CSR Officer performing audits at worksites clearly express Teijin's seriousness about these issues. I have high expectations that the next report will include features such as comments from the board members and that even more detail will be provided.



**Dr. Yoshinari Koyama, Ph.D. (Commerce)**

Professor of Business Administration, College of Economics Kanto Gakuin University

After serving as an assistant professor at the School of Commerce of Yamanashi Gakuin University and associate professor at the College of Economics of Kanto Gakuin University, Professor Koyama assumed his current position in 2010. He is also a part-time lecturer at the School of Business Administration of Yokohama National University and a concurrent lecturer at the School of Commerce of Meiji University. He is the author of many literary works including "CSR Management" published by HAKUTO-SHOBO Publishing Co., "Gendai CSR Keiei Youron" (Modern CSR Management Summary) published by SOSEISHA Co. and "Nihon no Kigyuu Rinri" (Corporate Ethics in Japan) published by HAKUTO-SHOBO Publishing Co.

### Set Long-term Goals as Part of the Challenge to Become a Company Advanced in CSR

Mainly on Environmental Preservation Activities

In general, the environmental report is easier to understand than last year. For example, the graph showing the amount of environmental impact has separate numbers for Japan and overseas. However, there are still some areas requiring improvement.

Although environmental targets are set for up to 2020, there should also be goals looking as far forward as 2050. On climate change in particular, total volume targets for the entire group are needed. At the same time, targets relating to both mitigation (i.e., restricting CO<sub>2</sub> emissions) and adaptation (i.e., reduction of global warming effects) are required. In regard to biodiversity, while efforts to map relevance to business activities are commendable, it is necessary to set further guidelines that include supply chain management. At the same time, the steady development being made in environmental businesses was clear. In the future, I look forward to initiatives that seek to solve global water problems.

The revisions to the Basic CSR Policy

(2012–2015) in step with global societal challenges have achieved improvement. In the dialogue relating to the home healthcare business after the March 11 disaster, an outstanding aspect was the discussion on the nature of BCP in terms of measures to counter functional losses after the disaster. However, for group-wide BCP/BCM, the report does not go far enough and remains at a preventative level.

Improvement is also necessary in the handling of ISO 26000 in the Plans, Goals, Performance and Self-evaluations table. As is the case with the comparison chart of many companies, the seven core principles of ISO 26000 are matched to company initiatives, making it appear as though all ISO 26000 principles are covered. In reality, self-evaluation should be performed for the compliance status of all 37 issues that are included in the core principles.

In closing, although I have made various comments, I am certain that Teijin, who is aiming to be a company advanced in CSR, can improve and achieve their goals.



**Masahiko Kawamura**

Senior Research Fellow, Insurance Research Group, NLI Research Institute

Mr. Kawamura graduated from the Graduate School of Engineering, Kyushu University. After being engaged in offshore oil-related project management at MODEC, Inc., he joined NLI Research Institute in 1988. His research has centered on environmental management, environmental ratings, corporate social responsibility, and environmental business. Mr. Kawamura is the author of many papers including "CSR Keiei de Nani wo Mezasu no ka?" (What to Aim for in CSR Management), "CSR Houkokusho Kara Tougou Houkokusho e" (From a CSR report to an Integrated Report) and other publications such as "Kankyou Keiei Nyuumon—Sustainable Management wo Mezashite" (An Introduction to Environmental Management—Aiming for Sustainable Management) (Nippon Kogyo Shimbun), "SRI to Atarashii Kigyuu/Kinyuu" (SRI and New Corporate Finance) (Toyo Keizai Inc.), and "Carbon Disclosure" (Zeimukeiri Kyokai Co., Ltd.).

## Appropriate Action Required to Support Cultural Diversity and the Changes in Japanese Society

Mainly on Human Resources and Labor Management

Till now, one of main themes of Japanese businesses in terms of respect for diversity has been increasing recruitment and promotions of female employees. From now on, as companies expand their businesses to various countries, the response to cultural diversity will become important.

In this sense, I think it would be appropriate to set CSR goals based on factors such as how many languages the Teijin philosophy is translated into. Another suitable target would be to provide local employees of overseas companies with the same promotion opportunities and benefits as those provided in Japan. Of course, laws and situations vary from one country to another and there may be difficulties, but nevertheless, it is the social responsibility for leading companies to maintain personnel management systems at the same high standard globally. I would like Teijin to strive for such a goal.

In Japan, I am concerned about individualism and isolationism prevailing among the youth. It has become necessary to

address the issue by linking it with mental-health measures and to revive a sense of solidarity at the workplace within the training of newly recruited employees. A sense of solidarity among workers is the basis for growing as members of society. I would like Teijin, with its corporate philosophy of growth of individuals, to be engaged in this issue.

In Japan, formation of new structures and systems are required for a society that is both aging with a low birthrate and ageless in that people keep working past 65 years of age. While continuing with re-employment systems, Teijin should strive to establish systems for tomorrow's society.

Setting quantitative targets for CSR activities is a good thing, but when the goal is not achieved, there is a risk that the numbers alone will not truly reflect the efforts of people responsible. Please make sure to also pay attention to the details of activities so that the employees, who carry responsibility for CSR, feel assured that they being evaluated in a fair manner.



**Dr. Kohji Okubayashi, Ph.D.**  
(Business Administration)

Assistant President & Professor, Faculty of Business Administration, DBA, Osaka International University

After serving as a visiting researcher at the University of California, Berkeley, Dr. Okubayashi was a visiting fellow at the Industrial Relations Research Institute, the University of Wisconsin, a professor at the School of Business Administration at Kobe University, and a visiting professor at Aix-Marseille Université. He was Vice President of Setsunan University, and then assumed his present post in April 2012. Dr. Okubayashi is the author of many books including "Nyuumon. Jinteki Shigen Kanri" (Introduction to Human Resources Management) published by Chuokeizai-sha and "Kyu-Sorenpo no Roudou" (Labor in the Former Soviet Union) published by Chuokeizai-sha, and "Keiken Kara Manabu Keieigaku Nyuumon" (Introduction to Business Administration Learned from Experience) published by Yuhikaku.

## Persist with "Human Chemistry, Human Solutions" Even in Social Contribution Activities

Mainly on Social Contribution Activities

The Teijin Group Social Contribution Policy has been introduced in this report. The first item describes the intention of the policy to facilitate pursuit of the corporate philosophy and practical application of the code of conduct. Through clarifying the meaning of social contributions, this item provides an answer to the issue last year of the need to clearly explain the reason for engaging in social contribution activities. The fourth item specifies the environment, international exchange and social education as priority fields, but the categories in the expenses breakdown are listed as science and research, culture and the arts, sports, the environment and so forth. This should be organized appropriately.

For individual activities, I think the Teijin Scholarship is worthy of special mention in terms of future-oriented activities and its function, which expresses qualities unique to Teijin, of fostering human resources who will carry forward the "Human Chemistry, Human Solutions" brand statement. To emotionally engage and create pride among employees,

nothing is as important as activities that employees and other people concerned with Teijin can identify with and that reaffirm the value of Teijin. This will subsequently lead to greater volunteer involvement of employees and others. I would like Teijin to continue development in this regard together with the Volunteer Support Program that started last year. While adjusting existing programs to suit the current times, accelerated progress in CSR can be achieved by carefully nurturing the seeds that have been planted and repeating the PDCA cycle.

Lastly, there is little mention of ISO 26000 in the report; only in the Plans, Goals, Performance and Self-evaluations table. Description of application mechanisms are lacking. ISO 26000 is an effective yardstick for evaluating the CSR initiatives of one's own organization. Through comparing one's own company in the "mirror" of ISO 26000, it is possible to see whether the response to the present social challenges has been successful. I look forward to seeing Teijin accepting the challenge to take the next step forward.



**Yoko Takahashi**

President, Japan Philanthropic Association

Ms. Takahashi joined the Japan Philanthropic Association in 1991 after serving as a high school teacher and a psychologist. After positions as a director and the secretary-general, she assumed her present post in 2001. Ms. Takahashi is the author of "Philanthropy Nyuumon" (Introduction to Philanthropy) (Kainan Shobo) and "Rokujuusai Kara no Iki-iki Volunteer Nyuumon" (Introduction to Becoming an Active Volunteer After Reaching Sixty) (Nippon Kajo Shuppan).

# Independent Assurance Report



## Independent Assurance Report

To the President and CEO of Teijin Limited

### Purpose and Scope

We were engaged by Teijin Limited (the “Company”) to provide limited assurance on its CSR Report 2012 (the “Report”) for the fiscal year ended March 31, 2012. The purpose of our assurance engagement was to express our conclusion, based on our assurance procedures, on whether:

- the environmental and social performance indicators marked with a red star ★ included in the Report and the “Breakdown of ESH-related Costs of the Teijin Group in FY2011” and “Data on Human Resources” on its website ([www.teijin.co.jp/english/eco/](http://www.teijin.co.jp/english/eco/)) for the period from April 1, 2011 to March 31, 2012 (the “Indicators”) are prepared, in all material respects, in accordance with the Company’s reporting criteria; and
- all the material sustainability information defined by the Japanese Association of Assurance Organizations for Sustainability Information (“J-SUS”) is included in the Report.

The content of the Report is the responsibility of the Company’s management. Our responsibility is to carry out a limited assurance engagement and to express our conclusion based on the work performed.

### Criteria

The Company applies its own reporting criteria as described in the Report. These are derived, among others, from the Sustainability Reporting Guidelines 2006 of the Global Reporting Initiative and Environmental Reporting Guidelines of Japan’s Ministry of the Environment. We used these criteria to evaluate the Indicators. For the completeness of material sustainability information, we used the ‘Criteria for Granting a Sustainability Report Assurance and Registration Symbol’ of J-SUS.

### Procedures Performed

We conducted our engagement in accordance with ‘International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information’ issued by the International Auditing and Assurance Standards Board, and the ‘Practical Guidelines of Sustainability Information Assurance’ of J-SUS. The limited assurance engagement on the Report consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other procedures. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviews with the Company’s responsible personnel to obtain an understanding of its policy for the preparation of the Report.
- Reviews of the Company’s reporting criteria.
- Inquiries about the design of the systems and methods used to collect and process the Indicators.
- Analytical reviews of the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company’s reporting criteria, and also a recalculation of the Indicators.
- Visit to the Company’s domestic factory selected on the basis of a risk analysis.
- Assessment of whether or not all the material sustainability information defined by J-SUS is included in the Report.
- Evaluating the overall statement in which the Indicators are expressed.

### Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that:

- the Indicators in the Report are not prepared, in all material respects, in accordance with the Company’s reporting criteria as described in the Report; and
- all the material sustainability information defined by J-SUS is not included in the Report.

We have no conflict of interest relationships with the Company that are specified in the Code of Ethics of J-SUS.

*KPMG AZSA Sustainability Co., Ltd.*

KPMG AZSA Sustainability Co., Ltd.  
Tokyo, Japan  
August 20, 2012

# List of Website References

Information that could not be included due to space limitations has been published on our website.

<http://www.teijin.co.jp/english/eco/>

Contents of this report		Reference information on website	Website only	Detailed content on website
<b>Feature</b>	The 6th Stakeholder Dialogue	• Dialogue with Employees Engaged in Home Healthcare	●	
<b>Social Report</b>	Compliance and Risk Management	• Corporate Ethics Awareness Survey	●	
	Quality Assurance	• Efforts of the Teijin Group to Ensure Customer Satisfaction • Examples of Overseas Activities	●	
	Human Resources Management and Labor CSR	• Promoting Diversity Among Employees • Measures to Promote Work-Life Balance • Determining the Status of Group-wide Labor Management		●
		• Job Rotation/Appointment System • Human Rights Protection • Maintaining Sound Working Relationships • Employee Satisfaction Survey • Data on Human Resources	●	
		• Green Procurement/Purchasing • Consideration for Contractors and Work Contracts	●	
		• Fostering Young Scientists through the Teijin Scholarship Foundation • Examples of Social Contributions in Japan	●	●
<b>Environment, Safety and Health Report</b>	ESH Management	• The Teijin Group Global Environmental Charter • Teijin Group ESH Basic Policies • The Teijin Group Global Environmental Activity Goals • Group ESH Debriefing Session and Business Group Annual ESH General Assembly	●	
	Reducing Environmental Impact	• Teijin Group Environmental Input/Output (Trends in the Past Five Years) • Biodiversity Conservation		●
	Design for Environment	• Summary of the Design for Environment Evaluation Checklist • Design for Environment Organizational Bodies • List of Products and Processes that have Received Design for Environment Approval	●	
		• Dialogue with an Environmental Expert		●
	Environmental Businesses	• Environmental Impact Surveys and Monitoring • Other Feature Topics	●	
	Disaster Prevention Activities	• Activities of the Specialist Disaster Prevention Team • Fire Prevention Activities	●	
	Occupational Safety	• Current Status of OHSAS 18001 Certification • Response to Workplace Accidents	●	
	ESH Management Data	• Breakdown of ESH-related Costs of the Teijin Group in FY2011	●	
		• Current Status of ISO 14001 Certification • Current Status of OHSAS 18001 Certification • Current Status of ISO 9001, ISO 13485, ISO 16949 and Other Certifications		●

## Editor's Postscript

In the face of the 2011 catastrophes of the Great East Japan Earthquake and floods in Thailand, this has been a year in which the Teijin Group has been prompted to review its responses to disasters and its BCP. Under the theme of "CSR in disasters," the feature stakeholder dialogue this time reviews the responses of Teijin Home Healthcare Ltd. in Sendai, Miyagi after the Great East Japan Earthquake. This not only brought to the fore future challenges for the entire home healthcare business but also reaffirmed the importance of "collaboration" with stakeholders on a regular basis. We would like to sincerely thank Dr. Yanai of the Ishinomaki Red Cross Hospital, and Mr. Takahashi and Mr. Ohtomo, chairman and vice-chairman of Tohoku Hakuchokai, for their valuable comments.

The Teijin Group CSR Report contains opinions from third parties given every year by experts in four fields. The following are the points that we improved in this report based on the advice we received last year. The advice was useful in helping us to improve not only our CSR report but also all CSR activities in general.

1. In the Plans, Goals, Performance and Self-evaluations section, to address the slight lack of clarity in terms of target values and points for improvement, we set clear mid-/long-term and short-term targets and used quantitative indexes wherever possible.
2. In line with our global expansion, data and information is listed for each business region wherever possible (Japanese, English and Chinese [as of last year] versions)
3. To make the report easier to read, we have limited the number of pages and amount of text on each page, and have published more detailed information on our website.

Finally, this year, we were once again permitted to use the real names of many individuals, suppliers, NPOs and other organizations. All of these groups and individuals understand the objectives of our CSR reports well, and willingly cooperated in enabling us to disclose this information. We would like to take this opportunity to thank everyone for their cooperation and support.

Teijin Limited CSR Planning Office

J-SUS: Regarding the reliability of the sustainability information published in this CSR report, the J-SUS mark on the back cover is registration proof that the report satisfies the J-SUS mark standards formulated by the Japanese Association of Assurance Organizations for Sustainability Information (<http://j-sus.org/english.html>).



## TEIJIN LIMITED

Kasumigaseki Common Gate  
West Tower, 2-1 Kasumigaseki  
3-chome, Chiyoda-ku, Tokyo  
100-8585 Japan  
Contact: CSR Planning Office  
Tel: +81-3-3506-4508  
Fax: +81-3-3506-4037  
URL: <http://www.teijin.co.jp/english/>



Published in August, 2012