



Mitsui Chemicals

MITSUI CHEMICALS

# CSR Report 2008

The Mitsui Chemicals Group—Chemistry, Innovation, Dreams—



# Profile of the Mitsui Chemicals Group

In order to enrich people's lives, the Mitsui Chemicals Group is constantly pursuing innovation and materializing dreams with the wonder of chemistry.

## Corporate Profile (as of March 31, 2008)

### Company Name

Mitsui Chemicals, Inc.

### Head Office

Shiodome City Center, 1-5-2,  
Higashi-Shimbashi, Minato-ku,  
Tokyo, Japan 105-7117

### President

Kenji Fujiyoshi

### Paid-in Capital

¥103,226 million

### Employees

12,814 (Consolidated)

### Domestic Manufacturing Sites

Ichihara Works (including Mobara Branch Factory),  
Nagoya Works, Osaka Works, Iwakuni-Ohtake Works,  
and Omuta Works

### R&D Laboratory

Sodegaura Center

### Domestic Sales Offices

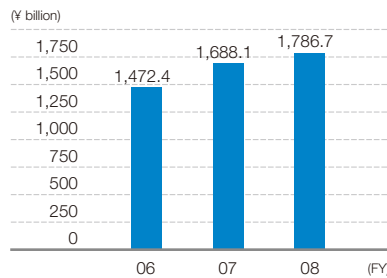
Head Office and three branches  
(Nagoya, Osaka, and Fukuoka)

### Overseas Office

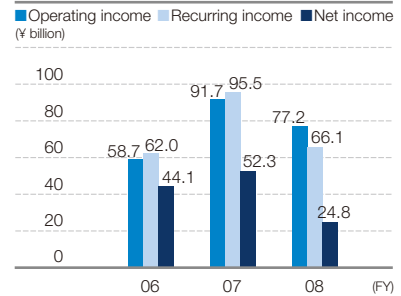
Beijing Office

[WEB](#) About Us > Corporate Overview

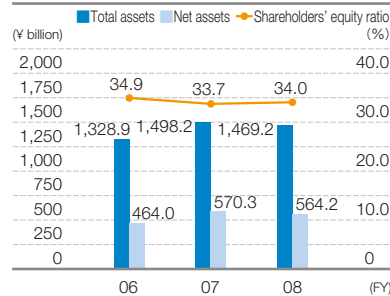
### Net sales



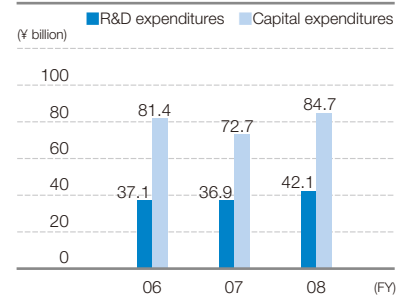
### Operating income, recurring income, and net income



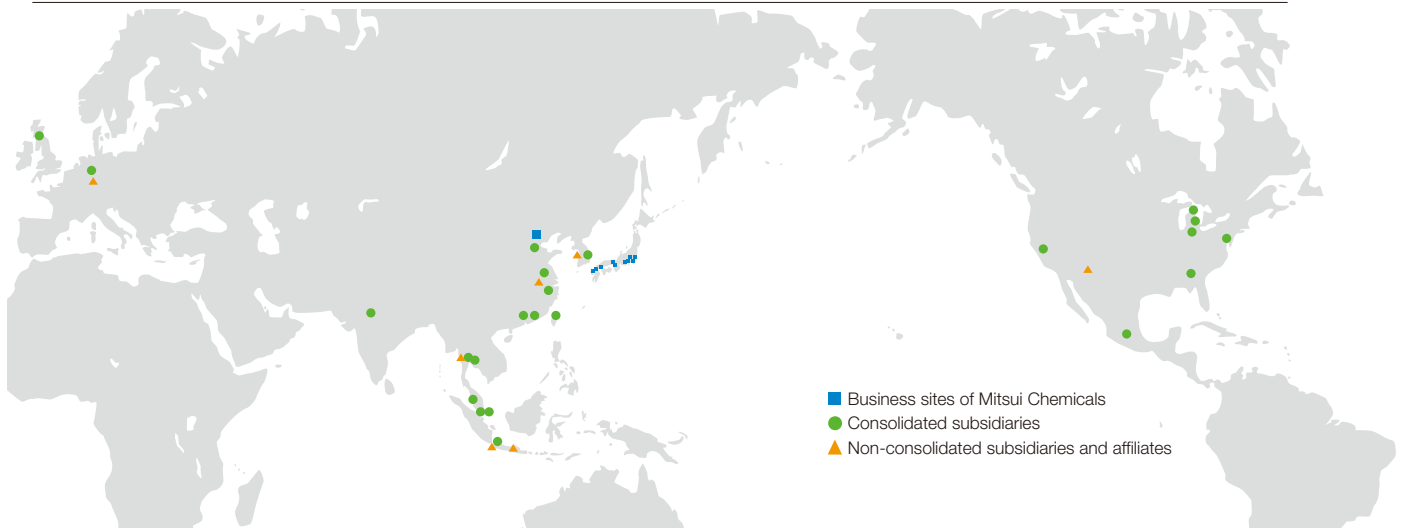
### Total assets, net assets, and shareholders' equity ratio



### R&D and capital expenditures



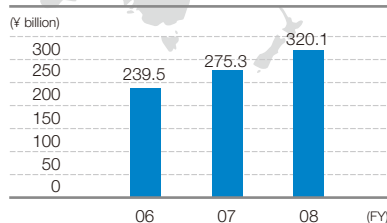
## Globalization of Our Business Operations



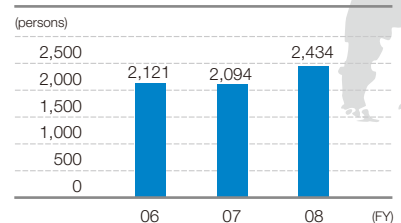
### Number of subsidiaries and affiliates

	64 domestic companies	37 overseas companies
63 consolidated subsidiaries	35	28
38 non-consolidated subsidiaries and affiliates	29	9

### Net sales of overseas consolidated subsidiaries



### Number of employees of overseas consolidated subsidiaries



# Products and materials offered by the Mitsui Chemicals Group



### Personal computers

- BRIGHT REFLECTOR™ (reflector for liquid crystal backlights)
- ★ ARLEN™ (heat-resistant resin suitable for use with lead-free solder)
- Nitrogen trifluoride (cleaning agent for semiconductor and liquid crystal production equipment)

### Liquid crystal displays

- ★ ■ Monosilane (raw material for silicon membranes)
- Bisphenol A (raw material for polycarbonate resin of high impact resistance and weather resistance)
- LC STRUCTBOND™ (sealants)

### Mobile phones

- NEOFLEX™ (flexible printed-circuit board materials)
- PLAPAC™ (materials for flexible printed circuit boards with excellent humidity resistance and dimensional precision)
- APEL™ (materials for compact and vivid camera lenses)

### Electrolyte for lithium cells

- MiReT™ (used in mobile phones, personal computers and digital cameras)

### Printers

- MITSUI EPT (used in printer paper feeder/discharger rolls)
- Hi-WAX (toner additive)
- FTR™ (toner additive)
- ★ ALMATEX™ (toner binder resin)
- ★ AURUM™ (bearings)

### Newspaper and corrugated cardboard

- Acrylamide (raw material for paper reinforcing agent)
- HOPELON™ (paper reinforcing agent)
- BONRON™ (paper processing resin)

### Sneakers

- ★ TAFMER™ (midsoles)

### Insulator for refrigerators

- Urethane

### Tea bags

- SWP™ (heat-seal type tea bags)

### Polyester fibers

- Purified terephthalic acid
- Ethylene glycol (polyester fiber feedstock)

### Detergent containers and food packages

- ★ HI-ZEX™
- ULTZEX™
- ★ EVOLVE™
- ★ PRIME POLYPRO™
- MIRASON™

### Cushions

- ★ ■ Urethane

### Flat panel displays

- NOTIO™ (protection films)
- ★ PRIME POLYPRO™ (condenser films)

### Digital cameras

- PLAPAC™ (plastic packages for image sensors)

### CDs and DVDs

- Bisphenol A (raw material for highly transparent polycarbonate resin)

### HDD suspensions

- NEOFLEX™ (flexible substrate)

### DVD drives

- APEL™ (resin used in pickup lenses)

### Termicides and insecticides

- ★ Mikeblock™
- Vermitol™
- Lenatop™

### Disposable diapers

- ★ ■ SYNTEX™
- ESPOIR™

### Wrapping films

- TPX™ (heat-resistant wrapping films)
- Hi-wrap™

### PET bottles

- MITSUI PET
- ★ PRIME POLYPRO™

### Pharmaceuticals

- Taurine

### Food packages

- ★ ADMER™ (adhesive for resins of different properties)
- ★ Urethane (adhesive for resins of different properties)
- ★ CHEMIPEARL™ (adhesive for sheets of different materials)

### Gas pipes

- MITSUI PE gas pipe system (pipes and fittings)

### Battery separators

- HI-ZEX MILLION™ (used for its high chemical resistance and strength)

### Gear oil/engine oil additive

- ★ LUCANT™

### Hoses

- MITSUI EPT
- ★ PRIME POLYPRO™

### Resin for headlamp lenses

- Bisphenol A (raw material for polycarbonate resin of high transparency)

### Antifreeze

- Ethylene glycol

### Pipes and fittings for cold/hot water

- ELMEX™

### Bumpers

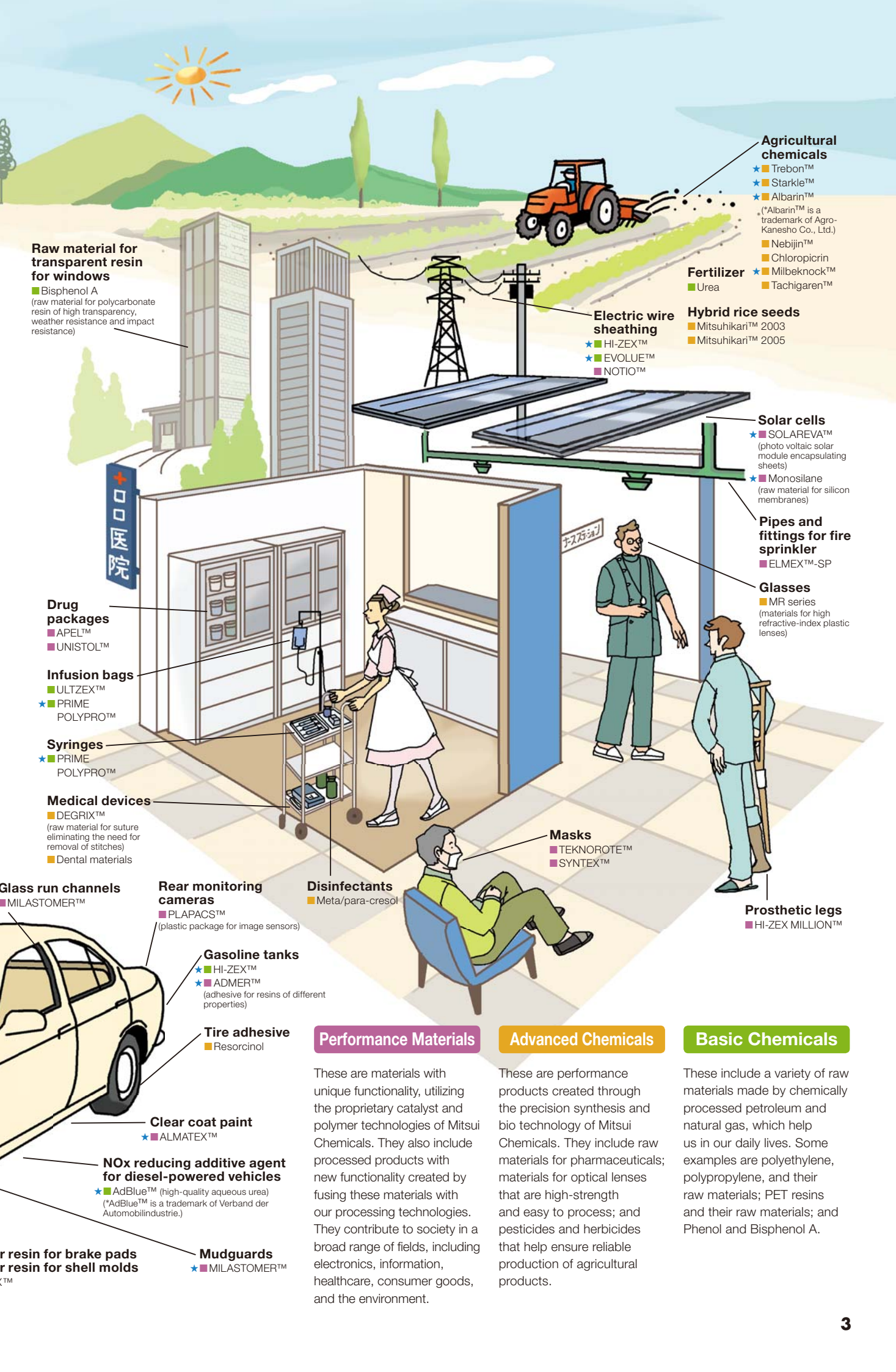
- ★ ■ PRIME POLYPRO™
- UNISTOLE™ (primer for resin coatings)
- ★ TAFMER™

### Binders

- ★ ■ MILEX™

- Performance material
- Advanced chemical
- Basic chemical
- ★ Products that contribute to environmental preservation

[WEB List of Businesses, Products, and Technologies Contributing to Environmental Preservation](#)



**Raw material for transparent resin for windows**

■ Bisphenol A (raw material for polycarbonate resin of high transparency, weather resistance and impact resistance)

**Agricultural chemicals**

- ★ Trebon™
- ★ Starkle™
- ★ Albarin™ (\*Albarin™ is a trademark of Agro-Kanesho Co., Ltd.)
- Nebijin™
- Chloropicrin
- ★ Milbeknock™
- Tachigaren™

**Fertilizer**

■ Urea

**Hybrid rice seeds**

- Mitsuikari™ 2003
- Mitsuikari™ 2005

**Electric wire sheathing**

- ★ HI-ZEX™
- ★ EVOLUE™
- NOTIO™

**Solar cells**

- ★ SOLAREVA™ (photo voltaic solar module encapsulating sheets)
- ★ Monosilane (raw material for silicon membranes)

**Pipes and fittings for fire sprinkler**

■ ELMEX™-SP

**Glasses**

- MR series (materials for high refractive-index plastic lenses)

**Drug packages**

- APEL™
- UNISTOL™

**Infusion bags**

- ULTZEX™
- ★ PRIME POLYPRO™

**Syringes**

- ★ PRIME POLYPRO™

**Medical devices**

- DEGRIX™ (raw material for suture eliminating the need for removal of stitches)
- Dental materials

**Glass run channels**

■ MILASTOMER™

**Rear monitoring cameras**

- PLAPACS™ (plastic package for image sensors)

**Gasoline tanks**

- ★ HI-ZEX™
- ★ ADMER™ (adhesive for resins of different properties)

**Tire adhesive**

■ Resorcinol

**Clear coat paint**

★ ALMATEX™

**NOx reducing additive agent for diesel-powered vehicles**

- ★ AdBlue™ (high-quality aqueous urea) (\*AdBlue™ is a trademark of Verband der Automobilindustrie.)

**Mudguards**

★ MILASTOMER™

**Disinfectants**

■ Meta/para-cresol

**Masks**

- TEKNOROT™
- SYNTAX™

**Prosthetic legs**

■ HI-ZEX MILLION™

**Performance Materials**

These are materials with unique functionality, utilizing the proprietary catalyst and polymer technologies of Mitsui Chemicals. They also include processed products with new functionality created by fusing these materials with our processing technologies. They contribute to society in a broad range of fields, including electronics, information, healthcare, consumer goods, and the environment.

**Advanced Chemicals**

These are performance products created through the precision synthesis and bio technology of Mitsui Chemicals. They include raw materials for pharmaceuticals; materials for optical lenses that are high-strength and easy to process; and pesticides and herbicides that help ensure reliable production of agricultural products.

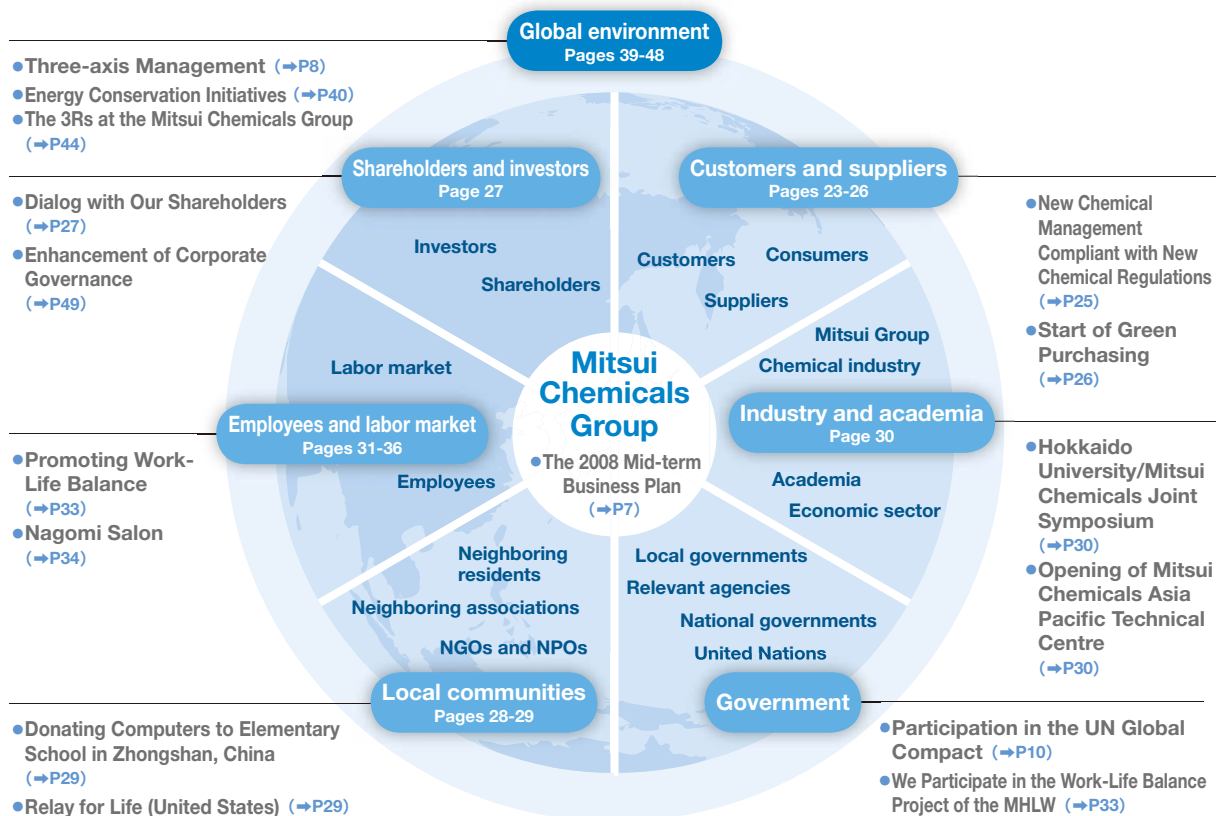
**Basic Chemicals**

These include a variety of raw materials made by chemically processed petroleum and natural gas, which help us in our daily lives. Some examples are polyethylene, polypropylene, and their raw materials; PET resins and their raw materials; and Phenol and Bisphenol A.

# TABLE OF CONTENTS

Profile of the Mitsui Chemicals Group .....	1	Activities Contributing to Society .....	37
Products and materials offered by the Mitsui Chemicals Group ...	2	<b>  The Mitsui Chemicals Group and the Environment</b>	
Table of Contents .....	4	Commitment to Global Warming Prevention .....	39
Message from the President .....	5	Business Activities and Environmental Impact .....	41
Commitment to Growth .....	7	Commitment to Environmental Impact Reduction.....	43
CSR at the Mitsui Chemicals Group .....	9	Commitment to Accident and Disaster Prevention .....	47
<b>Special Feature 1 Chemistry</b>			
Employees Simultaneously Improve Works and Reduce CO <sub>2</sub> .....	11	<b>  The Systems Supporting Our CSR Initiatives</b>	
<b>Special Feature 2 Innovation</b>			
Making Use of Non-fossil, Inedible Castor Oil to Derive Innovative New Materials from Plants .....	13	Corporate Governance .....	49
<b>Special Feature 3 Dreams</b>			
The Challenge of Greening the Deserts of Inner Mongolia through the Wonder of Chemistry .....	15	Risk & Compliance Management .....	51
<b>Stakeholder Dialog</b>			
Our Commitment to Harmony with the Global Environment .....	17	Responsible Care Management .....	53
Goals and Results .....	21	We Use Feedback from Inside and Outside the Company to Improve our CSR Activities and Reports .....	55
<b>  The Mitsui Chemicals Group and Society</b>			
Together with Our Customers .....	23	Third-party Comments on CSR Report 2008 .....	57
Together with Our Suppliers.....	26	Commendations from Society/History of Activities for Sustainable Growth/Editor's Notes .....	58
Together with Our Shareholders .....	27	CSR Supporters for the Third Term.....	59
Together with Local Communities .....	28	Editorial Policy/Scope of the Report/Guidelines Referred to in Preparing the Report/Date of Issue ...	Back cover
Together with Industry and Academia.....	30	<b>About the Cover</b> The cover design is made to create an image of warmth by a mascot symbolizing the three pillars of the Mitsui Chemicals Group Action Guidelines (established in February 2006): Always in Good Faith, For People and Society, and Dream-Inspiring Innovation. It quietly expresses how the Mitsui Chemicals Group helps make our lives better.	
Together with Our Employees .....	31		

## Stakeholders and Main Initiatives for FY 2008



# We value communication with all our stakeholders, and our corporate group is committed to earning the trust of society

**It is a critical management challenge for the Mitsui Chemicals Group to actively promote CSR. We are advancing CSR with a commitment to earning the trust of society, while placing great emphasis on the following four points.**

## Contribution through Our Main Business Is CSR Itself

---

As stated in our Corporate Mission, we work to “Contribute broadly to society by providing high-quality products and services to customers through innovations and the creation of materials and products, while keeping in harmony with the global environment.” I believe that achieving this mission through our main business is what CSR is all about.

In order to achieve this, we created Grand Design – our long-term management vision. This vision defines long-term management targets for profits as well as the environment. These targets do not treat the environment as a restriction on our economic activities. Rather, they represent an active commitment to respond to global environmental issues by such means as reducing greenhouse gases (GHG) and the utilizing non-fossil fuels.

We have also introduced a new system for evaluating performance based on three axes: the economy, the environment and society. We do not evaluate our managers and officers on the economic axis (e.g. business income) alone; we also consider initiatives on the environmental axis and the social axis (e.g. legal compliance and reducing occupational injuries) to be critical elements for performance evaluations. In this way, we strike a balance along the three axes in our operations.

## Employee-driven CSR: CSR Supporters Are at the Core

---

In addition to the abovementioned initiatives involving our operations as a whole, I also believe that it is vital for each employee to think and act independently. We have selected roughly 470 CSR supporters from each workplace in our group, including affiliates. These supporters form the core of our CSR efforts, each working actively from his or her situation and vantage point. Local employees from key overseas subsidiaries in Asia are also active as CSR supporters.

We created the Mitsui Chemicals Group Action Guidelines through enthusiastic discussion by our CSR supporters. We are currently working to make these guidelines more widely recognized and firmly rooted in the Mitsui Chemicals Group, and our CSR supporters are playing a central role in our group-wide efforts to promote discussions about the Action Guidelines.

## Compliance Is the Groundwork of CSR

---

Compliance with laws and regulations is an essential prerequisite to earning the trust of society. We are committed to ensuring thorough compliance;



the first item in the Mitsui Chemicals Group Action Guidelines states, “We will give priority to compliance with laws and regulations over any pursuit of profit.”

We remain committed to building a rock-solid compliance system, with continued initiatives to accurately promote internal control and build an open corporate culture that does not allow the violation of laws or regulations.

## We Value Communication

Two-way communication is critical for earning the trust of society. It is essential to both “receive” – listen to what our stakeholders have to say – and “transmit” – actively provide information about our corporate activities. We will continue to enhance and broaden our “receivers” and “transmitters” in a wide range of situations, in order to better communicate with our stakeholders.

We have created and published our CSR Report 2008 based on the points above.

This year, we have placed particular focus on global warming, and we describe our initiatives through a dialog between outside experts and employees. We hope that this can give a sense of the ingenuity and advances being made at production sites.

It is my sincere wish that reading this report will give you a greater understanding of our company. We welcome your comments and suggestions.

Kenji Fujiyoshi  
President  
Mitsui Chemicals, Inc.

# Commitment to Growth

October 2007 marked the 10th anniversary of the founding of Mitsui Chemicals. We commemorated this event by creating Grand Design, our roadmap for even greater growth over the next 10 to 15 years. We also created our 2008 Mid-term Business Plan. This plan defines medium-term business goals over the first four years of the Grand Design, as the first step toward achieving our long-term management targets.

## Grand Design of the Mitsui Chemicals Group (Basic Management Framework)



## Grand Design

The Grand Design is the basic framework for management at Mitsui Chemicals. We are committed to continuous corporate growth, with an emphasis on management balanced along the three axes of economy, environment, and society.

Our long-term management targets are targets that we aim to achieve within 8 to 10 years.

Our financial (economic) goals are to achieve operating income (an indicator of profits in our core business) of at least ¥150 billion; and return on assets (ROA; an indicator of business efficiency) of at least 10%.

Our environmental goals are to reduce our greenhouse gas (GHG) Intensity Index and the volume of landfilled industrial waste, and develop technologies that utilize non-fossil resources. A GHG Intensity is the volume of GHG (in tons) emitted per ton of products produced. Our target is to reduce our GHG Intensity Index (see formula below) to no more than 90 compared to fiscal 1991 levels (set as 100).

$$\text{GHG Intensity Index} = \frac{\text{Current GHG Intensity} \times 100}{\text{GHG Intensity for Fiscal 1991}}$$

Our target for reducing the volume of landfilled industrial waste is to reduce the proportion of waste to landfill to be no more than 1% to the total industrial waste produced by our home plants and production sites at our domestic and overseas consolidated subsidiaries.

We added an additional target of developing technologies utilizing non-fossil resources: creating chemical products by such means as using plant resources in place of petroleum.

Our social goal is to achieve the world-top class safety level.

## The 2008 Mid-term Business Plan

Our 2008 Mid-term Business Plan, which started in fiscal 2009, maps out the first four years of the long-term management targets of the Grand Design. Under the 2008 Mid-term Business Plan, we will work to establish the three axes of economy, environment, and society, as well as create new value through innovative new technologies.

Below are the management targets in our 2008 Mid-term Business Plan that we are aiming to achieve by fiscal 2012.



**Financial (economic) goals**

- Operating income: ¥130 billion
- ROA: 7.5%

**Environmental goals**

- GHG Intensity Index: No more than 85  
(Energy Intensity Index: No more than 80)
- Landfill rate of industrial waste:  
No more than 1% for all production sites in Japan  
(minimization) and average of no more than 5% for  
overseas consolidated subsidiaries

**Social goals**

- Occupational injury frequency rate<sup>\*2</sup>: No more than 0.15  
days away from work cases (DAFWC); no more than 1.8  
combined for DAFWC + restricted work or transfer to  
another job cases (RWTC) + medical treatment beyond  
first aid cases (MTC)

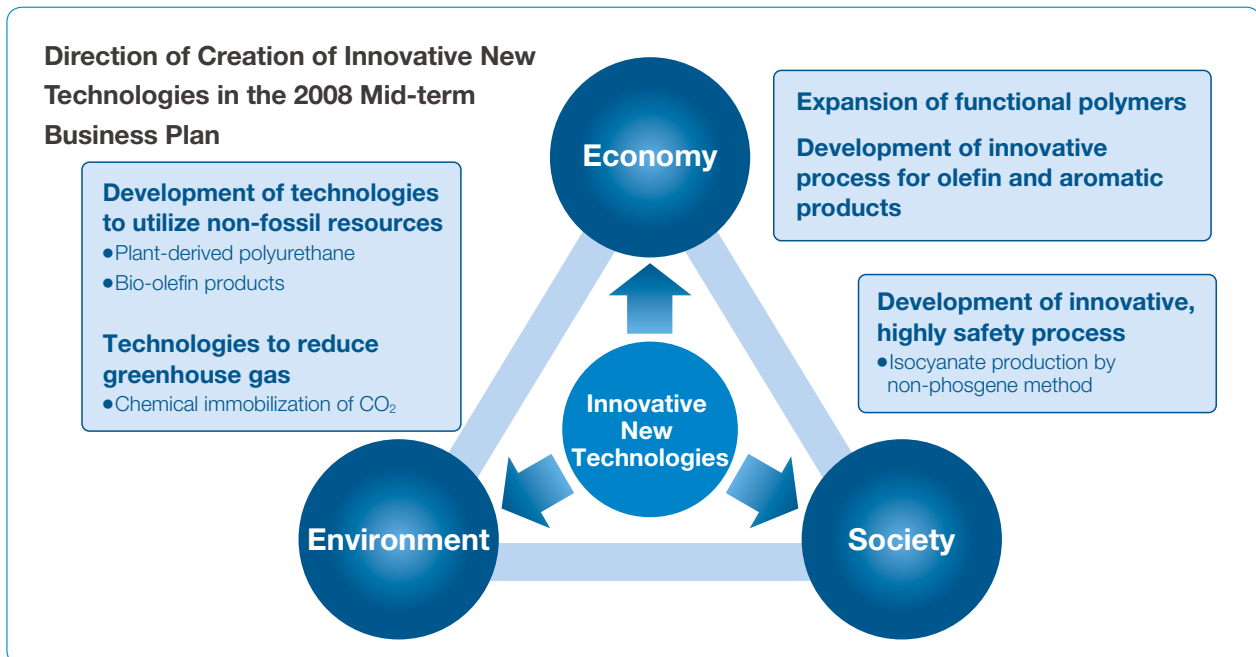
Developing innovative technologies will be one of the keys to achieving our management targets along these three axes. Under our 2008 Mid-term Business Plan, we will accelerate our technology development, including expansion of functional polymers; development of innovative process for olefin and aromatic products; development of technologies to utilize non-fossil resources; technologies to reduce greenhouse gas; and development of innovative, highly safety process.

<sup>\*2</sup> Occupational injury frequency rate: Number of occupational injuries x 1 million hours / total hours worked by all employees

**Three-axis Management**

Our Grand Design and 2008 Mid-term Business Plan are not focused exclusively on economic aspects; rather, they lay out balanced business goals along three axes, including environmental and social aspects. Rather than emphasizing the economic axis only with priority on income, we are also focused on environmental awareness and contributing to society. We will improve our management while maintaining a balance between these three axes.

As with our 2008 Mid-term Business Plan, our budget for fiscal 2009 has been set for our management targets along the three axes. We are committed to earning the trust of our stakeholders by ensuring that all employees understand the significance of these efforts, and continually act with self awareness.



# CSR at the Mitsui Chemicals Group

The Mitsui Chemicals Group is committed to advancing CSR by benefiting our stakeholders through our main business. Through CSR, we are committed to earning the trust of our stakeholders and being a Good and Trustworthy Company that our employees can take pride in, by contributing to society as stated in our Corporate Mission.

## Aims of CSR

P7

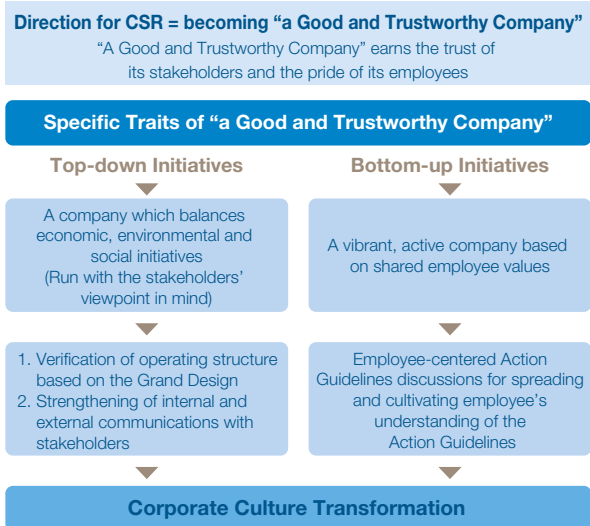
At the Mitsui Chemicals Group, we are committed to earning the trust of our stakeholders and being a Good and Trustworthy Company that our employees can take pride in by advancing CSR.

Balance along the three axes of economy, environment, and society is an absolute requirement to create a Good and Trustworthy Company. We will advance our business objectives from our stakeholders' perspective in accordance with our Grand Design, created in February 2007.

The actions and behaviors of our employees are also vital for building a Good and Trustworthy Company. In fiscal 2008, we began holding discussions about the Mitsui Chemicals Group Action Guidelines at each worksite with the goal of making the guidelines more widely recognized and firmly rooted, in order to ensure that employee conduct in their daily duties is always worthy of society's trust, and to create an active, motivating working environment.

We, from top management to line employees, will contribute to our stakeholders through our main business with an unflinching commitment.

### Direction for CSR (i.e., to be "a Good and Trustworthy Company")



## CSR Promotion System for Creating a Good and Trustworthy Company

P51

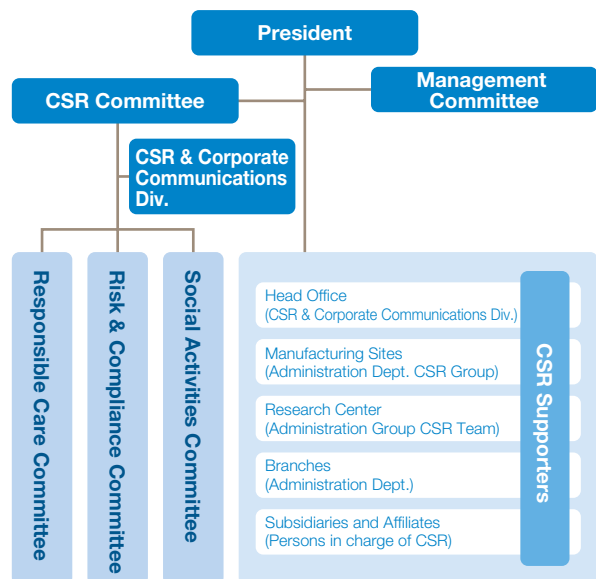
P53

The CSR Committee, which is chaired by the company president, drafts policies and plans relating to promoting and familiarizing CSR within the group. There are three committees under the CSR Committee, each chaired by the director in charge of that area: the Social Activities Committee, Risk & Compliance Committee, and Responsible Care Committee. Each of these committees provides a company-wide perspective to supplement the individual programs proposed and executed by line organizations.

We additionally have a CSR & Corporate Communications Division at our head office. We have centralized CSR and corporate communications within a single division in order to enhance our communication with our stakeholders and build a relationship with them that is based on trust. Each operating site and facility also has its own department in charge of CSR in order to enhance our CSR promotion system at the site level.

Starting in fiscal 2009, we expanded our CSR efforts to domestic and overseas consolidated subsidiaries, as we strive to make the Mitsui Chemicals Group a Good and Trustworthy Company.

### CSR Promotion System



## CSR Supporters

▶ P59

One major feature that sets apart CSR efforts at our group is our CSR Supporters System. CSR Supporters are committed to making the group a Good and Trustworthy Company, regardless of position or nationality.



CSR Supporter camps

They work to promote and improve the recognition of CSR at each worksite, which are the point of contact with our stakeholders. Starting in fiscal 2009, we expanded this program to domestic and overseas consolidated subsidiaries. We have appointed a total of 468 CSR Supporters in our worldwide group.

CSR Supporters also attend our annual CSR Supporter camps, where they confirm the group's CSR policies, share challenges faced with activities at their worksites, and work to resolve them.

## Discussions about the Action Guidelines

Our CSR Supporters at each worksite lead discussions about the Mitsui Chemicals Group Action Guidelines attended by all employees. There, employees discuss changes that individual employees can make to their actions to make this a Good and Trustworthy Company and put these ideas into practice.

CSR must not be a solely top-down effort: the actions of individual employees, placing their stakeholders first, are also essential. We actively conduct these discussions at all group companies and worksites, in order to increase the recognition of the action guidelines that serve as the foundation for employee conduct, vitalize communication at each worksite, and improve the workplace environment.

Discussions about the action guidelines are employee driven and led by the CSR Supporters.

### THE THREE PILLARS OF THE MITSUI CHEMICALS GROUP ACTION GUIDELINES

Every officer and employee of the Mitsui Chemicals Group will act in accordance with the action guidelines to enhance the sustainable development of society and the company by making contributions to each of our stakeholders. The three pillars of the action guidelines are described in the following:

**We will always act in good faith.**

**We will have a high regard for people and society.**

**We will aim for the "Dream-Inspiring Innovation."**

### Participation in the UN Global Compact

We joined the Global Compact on January 25, 2008. We joined the compact because we support its mission of overcoming global challenges through actions as a responsible corporate citizen. We will continue to support the 10 principles of the compact, and work to increase our awareness of human rights and the environment.



#### The Global Compact's Ten Principles

##### Human Rights

**Principle 1:** Businesses should support and respect the protection of internationally proclaimed human rights; and

**Principle 2:** make sure that they are not complicit in human rights abuses.

##### Labour Standards

**Principle 3:** Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;

**Principle 4:** the elimination of all forms of forced and compulsory labour;

**Principle 5:** the effective abolition of child labour; and

**Principle 6:** the elimination of discrimination in respect of employment and occupation.

##### Environment

**Principle 7:** Businesses should support a precautionary approach to environmental challenges;

**Principle 8:** undertake initiatives to promote greater environmental responsibility; and

**Principle 9:** encourage the development and diffusion of environmentally friendly technologies.

##### Anti-Corruption

**Principle 10:** Businesses should work against corruption in all its forms, including extortion and bribery.

**We are committed to preventing global warming, remaining in balance with the global environment and achieving the Corporate Target of the Mitsui Chemicals Group—Chemistry, Innovation, Dreams. Today, an even strong commitment to reducing greenhouse gases is being required; for example, the greenhouse-gas (GHG) emissions reduction targets of the Kyoto Protocol are currently being revised. We are thus advancing initiatives to enhance our factories to make them more cost competitive, while at the same time reducing GHG emissions.**

### Setting Strict Targets to Reduce GHG Emissions

We remain tirelessly committed to reducing GHG emissions by setting ever stricter targets. One of the industry groups, the Japan Chemical Industry Association (JCIA), has revised the voluntary target from “Improve the energy intensity index by 10% from fiscal 1991 levels by fiscal 2011,” to “Improve by 20% on average by fiscal 2009 to 2013.” We have also set our own target in our 2008 Mid-term Business Plan: “Reduce our GHG Intensity Index to no more than 85% of fiscal 1991 levels, and our Energy Intensity Index to no more than 80%, by fiscal 2012.”

In fiscal 2008, our GHG Intensity Index was 88, and our Energy Intensity Index was 84. Further efforts are required to achieve continuous corporate growth, while at the same time achieving further reductions. We continue to validate thoroughly all fields of our production processes, and painstakingly implement improvements.

### Betting the Future of Our Business on Single-boiler Operation

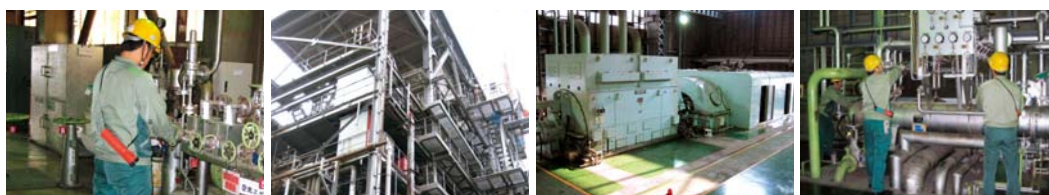
One example of our improvement efforts is Omuta Works, where we switched over our system for supplying steam and electricity in 2005. Until then, the Omuta Works used a two-boiler, two-turbine system fueled by coal and heavy oil to power its generators. The plant began studying a project to switch over to a single-boiler, single-turbine system fueled by coal, however, due to expectations that the prices of heavy oil were about to skyrocket, and in order to reduce our GHG emissions as well. “We had a huge sense of crisis when we started this project. The original plan that we studied actually contained the words, ‘We are betting the future of the business’” reflects Takeshi Saruwatari, senior engineer in the plant planning section.

### Willing to Brave the Cold for the Sake of Reduction

Switching to a single-boiler, single-turbine system enabled the plant to reduce its CO<sub>2</sub> emissions by 145,000 tons in fiscal 2008 compared to fiscal 2005 levels (see Fig. at right). The plant additionally reduced its steam and power costs by 800 million yen per year. The initiative thus succeeded at both improving the environment and ensuring greater profits.

A single-boiler, single-turbine system entails risks, however. In fact, in December 2005—shortly after we switched over operations—we increased production in response to improved market conditions. This coincided with the need to supply heating due to a wave of cold weather, and together these factors put our system at full capacity. A boiler is the lifeline of a factory. Shutting down the boiler means

# Employees Simultaneously Improve Works and Reduce CO<sub>2</sub>

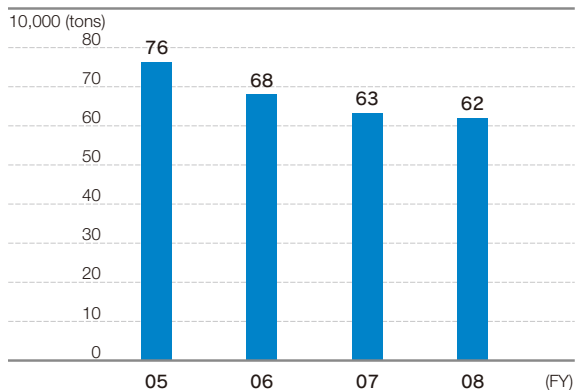




an immediate halt to operations. “We shut down steam heating in our offices in order to conserve on steam,” recalls Saruwatari. “As a result, the room temperature sometimes fell as low as 18°C (about 64°F). We managed to get through it with considerable effort: we searched for steam leaks, managing to reduce steam by 10 tons per hour.”

The plant also had problems with the boiler’s coal feeder chute becoming blocked. One by one, the issues were resolved, including installing a monitor window and a blockage sensor on the coal feeder, and finding and installing machinery that would automatically knock free any coal that got jammed in the chute. Through these efforts, the boiler achieved stable operation.

#### GHG emissions at the Omuta Works



### A Biomass Boiler that Does Not Depend on Heavy Oil

Also in 2005, just as our Omuta Works was implementing its improvements, Shimonoseki Mitsui Chemicals replaced one of its heavy-oil boilers with a biomass boiler fueled by wood chips. Until that time, the company’s annual GHG emissions were 100,000 tons, but this improvement reduced its emissions by 28,000 tons. The biomass boiler is part of an Energy Service Company (ESCO) initiative, in which a dedicated provider invests independently to install energy-efficient equipment.

Meanwhile, our Omuta Works uses coal from China, which generates high levels of heat. Due to several trends, however, including rising prices and export restrictions, we are currently considering switching over to Russian coal. The aims of these initiatives are to simultaneously improve our production system and technologies, and reduce our impact on the environment. They are also serving to build new business models.



Biomass boiler at Shimonoseki Mitsui Chemicals

### We achieved the changeover to single-boiler, single-turbine operation through the cooperation of all employees

When we began studying the issue, nobody thought that we could achieve single-boiler, single-turbine operation. During the first winter after the changeover, we had a very bad spell of cold weather, and our offices were without steam for heating day after day. This was particularly hard on everyone at the plant. We were able to achieve this system, however, thanks to everyone’s cooperation. Before the changeover, we identified all possible issues, including plant availability, measures against steam leaks, long-term fuel contracts, and ensuring a power supply, and determined measures one by one to resolve each of these issues. I believe that this enabled us to achieve a smooth changeover.



**Takeshi Saruwatari**  
 Planning Sect.  
 Planning & Cost  
 Management Dept.  
 Omuta Works

# Making Use of Non-fossil, Inedible Castor Oil to Derive Innovative New Materials from Plants

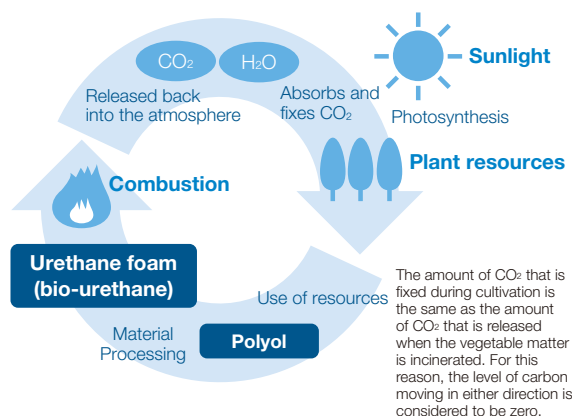


Low-resilience foam pillows are very popular for providing a pleasant sleeping experience. We are currently developing environmentally friendly products in this field using plant-derived polyurethane. The raw materials are being developed by a research team at Mitsui Chemicals Polyurethanes, who focused on castor oil\*. Of the many plant-derived polyurethanes available, castor oil helps avoid stressing the food supply because it is an inedible raw material.

\*Castor oil: Oil from the seeds of the castor plant (*Ricinus communis*), which is in the spurge family (*Euphorbiaceae*).

chemical manufacturers are now working toward a “Copernican revolution” of making plastics without using any petroleum. Mitsui Chemicals Polyurethanes began full-scale research around 2002. At first, they continued research into liquefying wood chips through a process of trial and error. Having a hydroxyl group, castor oil was suitable as a raw material for polyurethane. It was already being used for paint and adhesives. The research team focused on these properties.

## The “carbon neutral” approach



## Focus on Inedible Raw Materials

“First of all, please remember the concept of ‘carbon neutrality,’” says Shinsuke Matsumoto, senior researcher at the Mitsui Chemicals Polyurethanes Technology Development Center Division. Matsumoto is advancing research into plant-derived polyurethane using castor oil. If you make plastic products from plants that have absorbed CO<sub>2</sub> from the atmosphere, then when you dispose of them, only that carbon is emitted back into the atmosphere as CO<sub>2</sub> through biodegradation or incineration. As a result, the amount of CO<sub>2</sub> in the atmosphere is not increased. This is called *carbon neutrality*.

“Polyurethane resins and foams,” says Matsumoto, “are created through reactions between two liquid chemicals: isocyanate and polyol components. Mitsui Chemicals Polyurethanes succeeded at creating carbon-neutral polyurethane by making the polyol component from castor oil, which is not derived from petroleum, and is inedible as well.”

Plant-derived polyurethane is also called “biomass plastic.” Plastics were first made from petroleum, but

Using castor oil makes it easier to create the physical characteristics required for the product, such as making the material harder or softer through the selection of the polyol molecules. Castor oil also reduces the level of change in hardness due to temperature. On top of this, castor oil is inedible, which helps to alleviate the strain on the world’s food supply. In the past, however, castor oils have had

## Creating a Material that Equals Petroleum Products



**Kanae Morishita**  
New Materials Development Dept.  
Technology Development Center Div.  
Mitsui Chemicals Polyurethanes, Inc.

**Shinsuke Matsumoto**  
New Materials Development Dept.  
Technology Development Center Div.  
Mitsui Chemicals Polyurethanes, Inc.

poorer properties than petroleum-derived materials.

“With conventional petroleum polyurethane,” says Matsumoto, “we could control the molecular structure with an extremely high precision. It was a major challenge to create a molecular design that would approach this. Conversely, we were finding characteristics that we hadn’t foreseen at first, which we believe was due to the structure of the plants used as raw materials. We kept getting more deeply involved,” laughs Matsumoto.

Using castor oil, it is possible to make 100% plant-derived polyol to make plant-derived polyurethane (although it depends on the application), making it possible to make everything from soft foams, such as those used in low-resilience foam pillows, to harder foams, such as insulation.

## Goal Is to Make Polyurethane Completely from Plant-derived Materials

Matsumoto’s research team has four research topics aimed at further development of plant-derived polyurethane, and wide applications. One of the researchers on his staff in the New Materials Development Department is Kanae Morishita, who has been working at the company for less than two years. After a year of on-the-job training at a plant, she joined Matsumoto’s team in the spring of 2008.

“I’m currently researching ways to increase the level of plant-derived materials,” says Morishita. “It’s a revolutionary topic, and I feel very motivated. I chose to study chemistry because it’s so exciting to give new physical properties to my ideas, and this job reminds me of that original motivation,” she says enthusiastically.

Matsumoto, who is in his 19th year at the company, has spent his entire career researching polyurethane. His work has included the development of insulating materials for refrigerator and automotive seat materials to replace CFCs, and he is currently working on plant-derived raw

materials. “What makes organic synthesis interesting,” says Matsumoto, “is how the molecular design can change the form, physical properties, color, and other aspects of the material. My job gives me a true sense that I’m creating new materials.”

Mitsui Chemicals is advancing the development of revolutionary technologies along the three axes of economy, environment, and society. In other words, these innovative technologies make us more economically competitive, are friendly to the environment, and contribute to the development of society. Plant-derived polyurethane is a prime example of these initiatives. Matsumoto remains humble, however, stating, “There are still a lot of challenges.”

“Currently, the only vegetable component of our plant-derived polyurethane is the polyol,” he says. “We will only have completely plant-derived polyurethane when we can make plant-derived isocyanate components as well. It would be very economical if we could create isocyanate components with properties similar to petroleum-derived raw materials, because we could then use our current equipment. The only thing we can do now is to focus all our efforts on creating a completely plant-derived polyurethane.”



On the far left are castor seeds used as a raw material. To the right, castor oil is processed and refined into ricinoleic acid, which is used to make castor-oil polyol, shown on the far right.



Two types of plant-derived polyurethane foam with different levels of hardness.



# The Challenge of Greening the Deserts of Inner Mongolia through the Wonder of Chemistry



**Tongliao, in the Inner Mongolia Autonomous Region, is located 900 km to the northeast of Beijing, China. Global Environmental Supporters\* in Mitsui Chemicals' Chiba district are working to green the deserts of this region, which are also a source of the yellow sand that is blown to Japan from the Asian continent. This is not a mere volunteer effort: it is a verification effort aimed at determining whether Mitsui Chemicals technologies and products can support sustainable local development.**

\*Global Environmental Supporters: An internal study group at Mitsui Chemicals that considers the environment from a wide range of perspectives.

## Start of the Verification Experiment in the Inner Mongolia Autonomous Region

The 12 members of the Global Environmental Supporters in

the Chiba district began a project selecting desert greening in the Inner Mongolia Autonomous Region as their own topic. With the collaboration of NGOs and local university professors, the group first visited Tongliao in September 2007, where they began a small-scale experiment. They again visited Tongliao in May 2008, where they confirmed the results of the previous experiment, and began the full-scale verification experiment.

In the experiment, three types of seedlings – poplar, pine, and seaberry – are planted in (biodegradable) vegetation pots and foundation beds, and their growth in desert sand and alkaline soil is compared. While vegetation pots return to the soil a year or two after being planted, foundation beds have excellent water retention as a foundation for forestation, and are made from a material that will prevent water shortfalls after the trees are planted. The foundation beds were made from packed tree and brush trimmings. During the May visit, 200 vegetation pots and 374 foundation-bed sheets were used, and about 900 seedlings were planted (including those not using either vegetation pots or foundation beds).



## Tackling the Dilemma of Desertification: Alkaline Soil

This project is based on the desire to use Mitsui Chemicals technologies and products to help solve problems. Ayako Kadosaka, who researches biodegradable plastics, and Takeshi Ito, who researches foundation beds, are also participating in the project. "I feel that we need a new methodology for chemical materials and nature to get along well," says Kadosaka. "All you need is water to grow plants in the desert," says Ito. "But there's no local infrastructure for transporting water, and the alkaline soil has a pH of 9, which impedes plant growth. This has made soil improvement a critical need."

In fact, we are already active in the local desert, including collaborating with another Japanese company to plant poplar seedlings there. Although poplars grow rapidly, however, they consequently absorb large quantities of water from the soil, which creates a dilemma of actually promoting soil alkalinity. "This is precisely why there is room here for the scientific capabilities of a chemical company," says Tsuyoshi Iwa, another of the team's members. "Sufficient techniques to counter alkaline soil have not yet been established, and I'd like to pursue the possibility that a chemical company is better able to accomplish this."

technology in Japan, I was surprised by the students' level of environmental awareness when a student asked me, "The development of the local economy will cause desertification to advance. How can we strike a compromise?"



Ritsuko Fukuda works in the Global Environmental Supporter secretariat. "When we started," says Fukuda, "it was hard to imagine that we would ever accomplish this. But I believe that we have been able to come so far from planning to the present in just two years because we had our feet planted firmly on the ground. I believe this will be an epoch-making project for Mitsui Chemicals."

The team will visit the region again in September 2008, and verify the growth of the seedlings. "The seaberry has fruit that's sourer than a lemon," says Ito. "It would be fantastic if this fruit would fall to the ground and neutralize the soil," he says enthusiastically.

## Desert Greening and the Future of the Next Generation

During the May 2008 visit, the team outlined Mitsui Chemicals' businesses and desert-greening initiatives at a junior and senior high school in Tongliao. At the high school, team member Hajime Kurosawa gave a presentation on life in Japan and showed images of Japanese cities. "Everybody was surprised at how factories exist side by side with homes and farms where we live in Chiba," says Kurosawa. "While I'm glad that this communicated the current state of environmental



Foundation bed using Mitsui Chemicals' diphenylmethane diisocyanate (MDI)



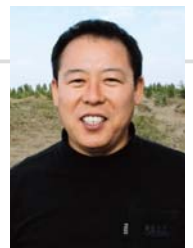
Our unique biodegradable pots used in the experiment



## High hopes for Mitsui Chemicals' greening efforts

Desertification in Inner Mongolia is due to the degradation of the plains. Loss of the ability to graze is directly impacting the lives of the herders. This also causes air pollution, as typified by the yellow sand that blows to Japan, creating issues on a global scale. We have been planting trees since the 1980s, but the deserts keep getting bigger; we have not been able to halt the desertification. One major factor has been that we have not acquired the technologies for greening or forestation.

We have high hopes that Mitsui Chemicals' experiments will lead to dramatic advances in greening technologies to combat desertification in Inner Mongolia, and gradually guide the local peoples toward soil improvement.



**Borjigin Sergelen**  
Representative,  
Association for  
Inner Mongolia  
Anti-desertification  
Forestation



Stakeholder Dialog – Topic: Preventing Global Warming

# Our Commitment to Harmony with the Global Environment

At Mitsui Chemicals, we have defined our Corporate Target as “Chemistry, Innovation, and Dreams” – The Mitsui Chemicals Group is constantly pursuing innovation and materializing dreams with the wonder of chemistry. Here we report a dialog on our efforts to prevent global warming, coordinated by Yuko Sakita, journalist and environmental counselor, and with Yoichi Kaya, Director-General of the Research Institute of Innovation Technology for the Earth (RITE) serving as advisor.

## Chemistry

### Finding Effective New Ways to Reduce Greenhouse Gas Emissions

**Sakita** I’d like to structure this discussion around the three key concepts of chemistry, innovation, and dreams. Let’s start with chemistry. Mr. Ueyama, you are the chief coordinator for measures against global warming at Mitsui Chemicals. Please tell us about your current initiatives.

**Ueyama** Most of the CO<sub>2</sub> emissions from Mitsui Chemicals are due to energy use. For this reason, we have recently begun to track GHG intensity and energy intensity for each plant. Since the oil shocks, however, we have implemented a series of initiatives related to energy consumption. I believe that we have taken initiatives in this area as far as they will go; it feels like no matter how much more we wring this towel, not

another drop will come out.

**Sakita** What would you need to achieve a breakthrough?

**Ueyama** There are two possibilities. The first would be a fairly major program of capital investment. We would make active use of NEDO\* and government subsidies for this. The other possibility would be to actively seek out and implement proposals from worksite personnel, even if they are still at the conceptual level and lack sufficient technical grounding.

**Kaya** Since the oil shocks, Japan has focused very intensely on conserving energy. In particular, by 1985 it reduced its energy intensity as a proportion of GNP by 2.8% per year on average. You would be hard-pressed to find another developed country that has reduced its energy intensity by this much over such a long period – a decade, in fact. I believe that this is why people today say that there is no more fat to trim off of our energy consumption.

In fact, however, I believe that there is still room for further energy savings. Although it may not be economical by conventional standards, people are starting to believe that we should take additional measures even if it may take a bit longer to recover the costs. It is also possible to achieve major energy savings by introducing new processes; I thus believe it is vital to continue these types of initiatives. In this sense, while I empathize with the difficulty of the task that Mr. Ueyama faces, I also hope that he will continue his efforts.

**Habutani** I work in my plant's planning section, and I can say that uneconomical ideas rarely come out. Finding a way to extract these ideas and turn them into something we can use has become a vital task. I feel that it's important to collaborate on this with the engineering division and the head office. Moreover it's important to use the corporate budget for environmental measures instead of having the business division bear the costs, and find innovative ways to keep ideas from getting mothballed at the worksite. High oil prices have made steam very expensive, so we are focusing on ways to reduce the amount of steam we use.

**Ueyama** We're exchanging information and ideas using our intranet, and conducting a number of initiatives, such as research support for innovative new technologies to chemically sequester CO<sub>2</sub>, but at Osaka where Mr. Habutani works, their collaboration with the local community is also very interesting.

**Habutani** Osaka Gas plant is next door to us, so we're advancing an initiative to make effective use of the low temperature of liquefied natural gas. We applied to NEDO with this initiative, and they accepted it.

**Ueyama** Our plant is located in an industrial complex, and there are a number of ideas, such as a joint boiler project within the complex.

**Kaya** Inter-industry "heat complex" to share energy are full of potential. I think that energy partnerships are vital not only between different industries, but between industry and consumers as well – and especially with homes. Europe has already advanced considerably in this area. One example is chemical plants using waste heat to heat water and supply it to homes as a heating source. Although there are a number of issues in terms of cost, I definitely think that we should pursue such initiatives.

\*NEDO: Acronym for New Energy and Industrial Technology Development Organization.

## Innovation

### Innovative New Technologies Are the Key to the Next Generation of Products

**Sakita** Let's shift the topic to innovation. Achieving a sustainable society will require the technical capabilities and untapped potential of private companies. I think that in the future, a company's potential will become a vital matter.

**Miyata** Mitsui Chemicals Polyurethanes has developed a technology for manufacturing polyurethane from inedible castor oil. We first developed a type of soft polyurethane foam used for car seats, low-resilience foam pillows, and so on. Our next challenge is to find more uses for the products we have developed. For example, the paints and the insulation used in refrigerators are also made from petroleum derived polyurethane. If we can expand the uses of our product to these types of products, it will become viable on the economic axis as well.

**Yagi** We also offer a plant-derived plastic called Polylactic acid. Although it is made from 100% biomass, from the knowledge we have gained in market development, I believe that we should expand our use of inedible raw materials. To do this, we must invest in technologies to create non-fossil, inedible products. Could you tell me about your thoughts on products with an "environmental premium?"

**Kaya** There are two trends in biomass. One is using biomass as fuel. The other is shifting from oil to biomass as a raw material, which was discussed earlier. Efforts are being made around the world to replace various raw materials with carbon-neutral biomass. I think that an environmental premium for this is natural. But the market also has a say in prices. For example, in emissions trading a ton of CO<sub>2</sub> is currently traded for 2,000 to 3,000 yen. An environmental premium will be accepted if it is equivalent to that level.

**Miyata** Right now it's still a very high and thick barrier. It would be wonderful if we could find effective uses for cellulose and wood chips, and I'd like to take on that challenge.

**Kaya** In the 1990s, converting CO<sub>2</sub> to methanol created the concept of global CO<sub>2</sub> recycling. The idea was to make hydrogen in developing countries, which have a wealth of natural energy, ship liquefied CO<sub>2</sub> to these countries, and have them convert it to methanol

and ship it back. Although it is possible in principle, it was never implemented because the equipment costs were too high. Has Mitsui Chemicals also focused on methanol conversion?

**Ueyama** Hydrogen is really the key. Although it's still at the conceptual stage, we estimate that we can convert half of the CO<sub>2</sub> emissions sequestered from our plants into methanol.

**Dreams**  
**Turning Vision into Reality**

**Sakita** Let's turn to the third key concept: dreams. I've heard that Mitsui Chemicals has a program called Global Environmental Supporters. Could you tell me about this program?

**Fujishiro** We have a number of projects in which people who would like to help both the environment and the company organize and work together of their own volition. One of these is the Global Environmental Supporters program. Incidentally, we have a number of other programs in addition to the Global Environmental Supporters. One interesting program is the One-Coin Club. Club members have one coin deducted from their paychecks and donated to a foundation that contributes to society. Although it's a small amount for each individual, for Mitsui Chemicals as a whole it's a

large sum.

**Sakita** I see, thank you. Mr. Natsuji, you're involved in the desert greening in Inner Mongolia as a Global Environmental Supporter, aren't you?

**Natsuji** This isn't just a volunteer program. We're conducting on-site testing with the goal of leveraging Mitsui Chemicals technologies and products.

**Kaya** One topic of support for forestation is selecting types of plants suited to the environment. What kind of technology is Mitsui Chemicals trying?

**Natsuji** Our main focus is on tree-planting technologies using Mitsui Chemicals plastics. One example is using pots that decompose naturally in the soil. Another example is a foundation bed we are testing. It's made from tree and brush trimmings, ground into a powder and solidified with adhesive. This bed has excellent water retention, and supplies nutrients as well.

**Kaya** I see. You aren't focused on the plants themselves, but rather the behind-the-scenes portion.

**Natsuji** That's right. Since we're a chemical company, we have ideas about soil improvement and improving plants, and we want to launch initiatives in these areas.

**Sakita** I also plan and conduct environmental learning. Listening to you now, I got the feeling that just getting people together to volunteer or analyze the meaning of global warming isn't enough; it's also vital to get a firm understanding of basic technologies. Ms. Fujishiro, I understand that you're also involved in the Global

**Outside experts**



**Yoichi Kaya**  
 Advisor  
 Director-General  
 Research Institute of Innovation  
 Technology for the Earth (RITE)



**Yuko Sakita**  
 Coordinator  
 Journalist and environmental  
 counselor

**The Mitsui Chemicals Group**



**Masaki Ueyama**  
 Energy & Utility Unit  
 Planning & Coordination Div.  
 Ueyama is in charge of creating and enforcing measures to reduce greenhouse gases at Mitsui Chemicals. He is also a member of an industry working group.



**Kazumasa Habutani**  
 Planning Sect.  
 Planning & Cost Management Dept.  
 Osaka Works  
 Habutani coordinates energy conservation and utilities at his plant. He is responsible for promoting energy-conservation efforts.

Environmental Supporters initiative, but that you're involved in proposing standards for environmentally friendly products.

**Fujishiro** This is an initiative that the head office is advancing. In fact, we call many of our products "environmentally friendly." We continue to work to classify these products a bit more strictly. Whether they use non-fossil resources; whether they follow the three R's of reduce, reuse, and recycle; whether they're energy efficient; whether they prevent pollution – those kinds of things.

**Sakita** Why did you begin these efforts?

**Fujishiro** There are many different ways to be environmentally friendly, and there are no uniform standards in the industry. So I wondered if we couldn't communicate solid standards. But it turned out to be harder than I expected.

**Sakita** In what way?

**Fujishiro** The problems are whether our current categories are appropriate, and whether the public can understand them. Our products are often used as a raw material or intermediate material for other products, so we aren't able to get direct feedback from end consumers.

**Sakita** I see. I essentially think that good standards can be achieved by talking together about what kinds of lives we want to live, what kinds of communities we want, and our vision for the future, and thinking about how to link our capabilities and technologies to achieve these.



**Fujishiro** Certainly, we lacked the perspective of a vision for the future.

**Sakita** Movements to create uniform industry standards truly start with efforts like yours, Ms. Fujishiro. It's also vital to adjust these to international standards, and that effort is one of the most important roles of improving visibility and transparency. We've heard everyone speak today on the topics of chemistry, innovation, and dreams; in closing, I'd like to ask Mr. Kaya for a comment.

**Kaya** Our biggest challenge today is preventing global warming. It's said that the concentration of CO<sub>2</sub> in the atmosphere won't stabilize unless we reduce our CO<sub>2</sub> emissions by at least an order of magnitude. This won't be possible without fundamental changes to our fossil fuel-based lifestyles. In order to accomplish, we've got to get deeper into the topics we discussed today, while at the same time searching for paradigm-breaking ideas. I feel that innovation is needed now more than ever before.



**Atsushi Miyata**

New Materials Development Dept.  
Technology Development Center Div.  
Mitsui Chemicals Polyurethanes, Inc.

Miyata researches plant-derived polyurethanes using inedible castor oil. He is a Global Environmental Supporter.



**Tadashi Yagi**

New Polymers Development Lab  
Business Planning & Development Div.  
Performance Materials Business Sector

Yagi does market development for plastics made from non-fossil resources, especially biomass.



**Tomoyuki Natsuji**

Biocatalysis Unit  
Catalysis Science Laboratory

Natsuji researches the production of materials from biomass resources. He is a Global Environmental Supporter with the goal of greening the deserts of Inner Mongolia.



**Naoko Fujishiro**




Environmental safety officer  
Safety & Environment Div.


























Fujishiro works on soil measures. She researches the creation of standards for environmentally friendly products as a Global Environmental Supporter.

# Goals and Results

The Mitsui Chemicals Group has a number of social and environmental initiatives aimed at achieving the sustainable development of society and our company. Here, we report our challenges and results for fiscal 2008, as well as our future initiatives.

Category		Pages detailing	FY 2008
			Goal
CSR promotion system	General	7-8	<ul style="list-style-type: none"> <li>Align the 2008 Mid-term Business Plan and fiscal 2009 budget to long-term management targets (three axes)</li> <li>Trial evaluation of performance along the three axes</li> </ul>
		9-10	<ul style="list-style-type: none"> <li>Promotion and permeation of Action Guidelines through "Discussion about the Action Guidelines" sessions to discuss the gap between the Action Guidelines and the actual workplace</li> <li>Expansion and enhancement of CSR Supporters System</li> </ul>
	Corporate governance	49-50	<ul style="list-style-type: none"> <li>Enhance capabilities to audit compliance with laws and regulations</li> <li>Compliance with Financial Commodities Trading Law (submission of internal control reports)</li> </ul>
			<ul style="list-style-type: none"> <li>Periodic review of and training for the BCP</li> </ul>
	Risk management	51-52	<ul style="list-style-type: none"> <li>Periodic review of and training for the BCP</li> </ul>
	Compliance	52	<ul style="list-style-type: none"> <li>Strengthening of education on Antitrust Law and monitoring</li> <li>Continued performance of compliance education</li> </ul>
RC management	53-54	<ul style="list-style-type: none"> <li>Enhance legal compliance</li> </ul>	
Social contribution	Customers	23-25	<ul style="list-style-type: none"> <li>Institutionalize and further strengthen the quality assurance system that ensures customer satisfaction</li> </ul>
			<ul style="list-style-type: none"> <li>Enhance chemical safety control to accurately follow changes in internal and external environments</li> </ul>
	Suppliers	26	<ul style="list-style-type: none"> <li>Periodically carry out CSR procurement survey</li> <li>Achieve 100% response rate to CSR procurement survey</li> </ul>
	Shareholders and investors	27	<ul style="list-style-type: none"> <li>Hold general meeting of shareholders two days or more earlier than the day for which many companies schedule their general meeting of shareholders</li> <li>Send out invitations for shareholder meetings sooner (3 weeks or more in advance)</li> <li>Continue to have product and panel displays at the venue of general meetings of shareholders</li> </ul>
	Local communities	28	<ul style="list-style-type: none"> <li>Enhance environmental communication through opinion exchange meetings held with residents living near each Works</li> </ul>
		37-38	<ul style="list-style-type: none"> <li>Support implementation of the "Proposals to the President" Project</li> </ul>
	Industry and academia	30	<ul style="list-style-type: none"> <li>Interaction between industry and academia through academic activities</li> </ul>
	Employees	31-34	<ul style="list-style-type: none"> <li>Establish retiree re-employment system</li> <li>Support employees' efforts to balance work and family</li> </ul>
		35	<ul style="list-style-type: none"> <li>Strengthen combined initiatives of the Mitsui Chemicals Group to eliminate labor accidents</li> </ul>
		35-36	<ul style="list-style-type: none"> <li>Continue efforts to prevent mental health disorders and lifestyle-related diseases and to reduce hygiene risks</li> </ul>
Environmental protection	Preventing global warming	11-20 39-40	<ul style="list-style-type: none"> <li>Timely creation and execution of GHG emissions reduction plan [FY 2016 target] GHG Intensity Index at or below 90 (FY 1991 = 100) (Mitsui Chemicals, Inc., and its consolidated subsidiaries)</li> </ul>
	Environmental impact reduction	43-46	<ul style="list-style-type: none"> <li>Promote voluntary initiatives to reduce environmental impact [FY 2011 target] Industrial waste minimization (all Mitsui Chemicals, Inc. production sites) [FY 2011 target] Cut VOC to approx. 65% of fiscal 2001 level [FY 2016 target] Industrial waste minimization (all Mitsui Chemicals, Inc., and consolidated subsidiaries' production sites)</li> </ul>
	Accident and disaster prevention	47	<ul style="list-style-type: none"> <li>Develop a company-wide accident prevention and safety education system</li> </ul>
		48	<ul style="list-style-type: none"> <li>Strengthen initiatives aimed at eliminating "logistics problems"</li> </ul>

Achievement scores (determined through self-evaluation) –  : 95% or more;  : 70% or more, less than 95%;  : less than 70%

Results	Score	Future initiatives
<ul style="list-style-type: none"> <li>Used management targets along three axes in response to Grand Design to create the 2008 Mid-term Business Plan and fiscal 2009 budget</li> <li>Created performance targets according to three axes and completed trial performance evaluations</li> </ul>		<ul style="list-style-type: none"> <li>Operations balanced along three axes of economy, environment, and society</li> </ul>
<ul style="list-style-type: none"> <li>Began discussions about the Action Guidelines at Mitsui Chemicals and its affiliates located at Mitsui Chemicals sites</li> </ul>		<ul style="list-style-type: none"> <li>Continue discussions about the Action Guidelines, provide education to firmly root the guidelines, and enhance corporate communications</li> </ul>
<ul style="list-style-type: none"> <li>Decided to promote CSR and introduced the CSR Supporters System at subsidiaries and affiliates in Japan, as well as major overseas sites, as a unified effort of the Mitsui Chemicals Group. Selected a total of 334 CSR Supporters group-wide.</li> </ul>		<ul style="list-style-type: none"> <li>Vitalize and achieve wider internal recognition of CSR Supporters activities</li> </ul>
<ul style="list-style-type: none"> <li>Introduced audits at affiliates in Japan including a self-assessment process relating to compliance with laws and regulations</li> </ul>		<ul style="list-style-type: none"> <li>Expand audits to business divisions, plants, and other sites</li> </ul>
<ul style="list-style-type: none"> <li>Created a system to assess the status of internal control with relation to financial reporting</li> </ul>		<ul style="list-style-type: none"> <li>Assess the effectiveness of internal control of the first year in preparation for submission of internal control reports</li> </ul>
<ul style="list-style-type: none"> <li>Revised BCP to prepare for large-scale earthquake in Tokyo metropolitan region</li> <li>Provided training in confirming employee safety and emergency contact between divisions and head office (twice a year, respectively)</li> </ul>		<ul style="list-style-type: none"> <li>Create BCPs in preparation for outbreaks of new strains of influenza and large-scale plant accidents</li> </ul>
<ul style="list-style-type: none"> <li>Provided education on Antitrust Law to all personnel performing or responsible for sales</li> <li>Audited all business sectors in relation to Antitrust Law</li> <li>Provided education on compliance with laws and regulations (provided to approx. 17,000 people; includes repeat participants)</li> <li>Provided compliance-awareness education (provided to approx. 1,000 people)</li> </ul>		<ul style="list-style-type: none"> <li>Strengthening of education on Antitrust Law and monitoring</li> <li>Continued performance of compliance education</li> </ul>
<ul style="list-style-type: none"> <li>Performed legal compliance audits related to safety and the environment; 0 violations (target no.: 0)</li> </ul>		<ul style="list-style-type: none"> <li>Ensure thorough compliance with environmental and safety laws</li> </ul>
<ul style="list-style-type: none"> <li>Inspected and revised delivery specifications (identified deviation of recycled resin utilization rate by an affiliate)</li> </ul>		<ul style="list-style-type: none"> <li>Provide lessons on compliance (quality assurance)</li> </ul>
<ul style="list-style-type: none"> <li>Ensured compliance with new chemical regulations (REACH, GHS)</li> </ul>		<ul style="list-style-type: none"> <li>Further enhance chemical quality controls appropriate to changes in environment</li> </ul>
<ul style="list-style-type: none"> <li>Enhanced control of product safety information</li> </ul>		
<ul style="list-style-type: none"> <li>Achieved 100% response rate for surveys to 779 suppliers of raw materials</li> </ul>		<ul style="list-style-type: none"> <li>Provide feedback on results of responses to 779 suppliers of raw materials</li> <li>Survey the status of suppliers of parts, materials, and indirect materials</li> <li>Begin green purchasing of office supplies and equipment</li> </ul>
<ul style="list-style-type: none"> <li>Held general meeting of shareholders two days or more earlier than the day for which many companies schedule their general meeting of shareholders (held on June 26, 2007)</li> <li>Sent out invitations for shareholder meetings sooner (3 weeks or more in advance)</li> <li>Continued to have product and panel displays at general meetings of shareholders</li> </ul>		<ul style="list-style-type: none"> <li>Hold general meeting of shareholders two days or more earlier than the day for which many companies schedule their general meeting of shareholders</li> <li>Sent out invitations for shareholder meetings sooner (3 weeks or more in advance)</li> <li>Continue to have product and panel displays and provide supplementary explanation by officers at the venue of general meetings of shareholders</li> </ul>
<ul style="list-style-type: none"> <li>Held community meetings with local residents in vicinities of all Works</li> </ul>		<ul style="list-style-type: none"> <li>Expand environmental communication through community meetings at all Works</li> </ul>
<ul style="list-style-type: none"> <li>Adventure Class in Wonder-Chemistry: 18 times combined at all operation sites</li> <li>Cleanup Activities: Held in three districts</li> <li>Global Environmental Supporters: two topics at execution stage (desert greening and CO<sub>2</sub> diet)</li> <li>One-Coin Club: Began soliciting donations in November</li> <li>Disaster Relief Team: Sent Polyurethane mattresses and other items to victims of Niigata Chuetsu Earthquake (July)</li> </ul>		<ul style="list-style-type: none"> <li>Adventure Class in Wonder-Chemistry: Support holding classes at Works of affiliates</li> <li>Cleanup Activities: Enhance collaboration with local communities</li> <li>Global Environmental Supporters: Advance topics at execution stage and continue to address study-group topics</li> <li>One-Coin Club: Provide donations to foundations active in social programs</li> <li>Disaster Relief Team: Continue activities</li> </ul>
<ul style="list-style-type: none"> <li>Held Second Hokkaido University/Mitsui Chemicals Joint Symposium (November 15, 2007)</li> <li>Sent foreign researchers to and promoted joint research with research institutes in Japan and abroad</li> <li>Accepted internships</li> </ul>		<ul style="list-style-type: none"> <li>Hold the Professor Jean-Marie Lehn Symposium on Advanced Materials (October 15, 2008)</li> <li>Hold the Fourth Mitsui Chemicals International Symposium on Catalysis Science (MICS2009) (March 11 &amp; 12, 2009)</li> <li>Solicit submissions for the 2009 Mitsui Chemicals Catalysis Science Award (May 1–July 31, 2008) and present the award (March 12, 2009)</li> </ul>
<ul style="list-style-type: none"> <li>70% of retired employees from Mitsui Chemicals and its affiliates wished to be rehired. 85% of these were rehired.</li> </ul>		<ul style="list-style-type: none"> <li>Promote initiatives to balance work and life as a model enterprise in the Work-Life Balance Project of the Ministry of Health, Labor, and Welfare</li> </ul>
<ul style="list-style-type: none"> <li>Occupational injury frequency rate: DAFWC + RWTC: 1.5 (target: 0.3); DAFWC: 0.3 (target: 0.15)</li> <li>Thorough measures to prevent people being caught on or being caught between machinery</li> </ul>		<ul style="list-style-type: none"> <li>Further enhance 3S (sort, organize, clean) and risk prediction (<i>Kiken-Yochi</i>; KY) activities, and eliminate occupational injuries</li> <li>Carry out comprehensive preventive measures against illness and planned improvements to local ventilation systems</li> </ul>
<ul style="list-style-type: none"> <li>Further enhanced prevention of mental health issues and lifestyle diseases</li> </ul>		
<ul style="list-style-type: none"> <li>Continued to reduce hygiene risks</li> </ul>		
<ul style="list-style-type: none"> <li>Supported occupational safety and health measures at affiliates</li> </ul>		
<ul style="list-style-type: none"> <li>GHG Intensity Index was 88. Changed target to no more than 85 by fiscal 2012.</li> </ul>		<ul style="list-style-type: none"> <li>Further improve GHG Intensity Index through investment in energy efficiency and the development of innovative processes that greatly reduce GHG</li> </ul>
<ul style="list-style-type: none"> <li>Minimized environmental impact according to plan</li> <li>Progress toward minimizing industrial waste at production sites: Average landfill disposal rate: 13.6% (Mitsui Chemicals, Inc.); 15.6% (domestic and overseas consolidated subsidiaries, and targets of RC support)</li> <li>Reduction of VOC (from fiscal 2001 levels): 68% (achieved fiscal 2011 target)</li> </ul>		<ul style="list-style-type: none"> <li>Ensure execution of plan to minimize industrial waste, and carry out environmental communication with local communities</li> </ul>
<ul style="list-style-type: none"> <li>Completed preparation of educational materials for operators for each stage of safety and accident prevention</li> <li>Began safety and accident prevention education for researchers</li> <li>Completed training of worksite safety engineers (SE)</li> </ul>		<ul style="list-style-type: none"> <li>Enhance safety assurance technical capabilities</li> </ul>
<ul style="list-style-type: none"> <li>Serious logistics accidents: 0</li> <li>Product liability (PL) incidents: 0</li> </ul>		<ul style="list-style-type: none"> <li>Further improve safety and quality of logistics</li> </ul>

# The Mitsui Chemicals Group and Society

At the Mitsui Chemicals Group, we take our relationships with our stakeholders into consideration when conducting business activities.

In this section, we report our stakeholder initiatives aimed at achieving the sustainable development of society and our company.



## Apology for Deviation of Recycled Resin Utilization Rate by Mitsui Chemicals Fabro, Inc.

On February 12, 2008, it was discovered that our wholly owned subsidiary, Mitsui Chemicals Fabro, Inc., was producing and selling its product ECO HAPPOTO\* with a configuration of raw materials that did not meet the standards of the Eco Mark certification acquired by its customer for end products or of the Green Purchasing Law.

As the parent company of Mitsui Chemicals Fabro, we deeply apologize for the great inconvenience we have caused our customer and consumers, and for the damage this has caused to trust in environmental-protection programs.

This situation was due to placing excessive priority on the process of complying with a customer request to maintain surface smoothness, coloring, and other quality characteristics; as a result, the company lost sight of the need to comply with standards, and greatly reduced the proportion of recycled resin used in the product. Additionally, the company was not sufficiently aware of how socially critical compliance is (particularly in environmental matters), because of its naïve belief that by using normal, non-recycled resin, it was supplying a higher-quality product.

We are committed to ensuring that this can never occur again by revising and improving our internal-audit control system (including at affiliates and subsidiaries), and making doubly sure that all employees are thoroughly educated on compliance.

\*ECO HAPPOTO: It is delivered to customers as sheets formed by adding a foaming agent to polypropylene. It is used to make covers for office binders and stationary products.



# Together with Our Customers

At the Mitsui Chemicals Group, we are committed to maintaining a dialog with our customers, and enhancing our quality assurance and product-safety management systems, in order to offer products and services that satisfy our customers.

## Product Quality Assurance

### Quality Management System

We have established Quality Assurance Division at the head office of Mitsui Chemicals, in order to focus on customer satisfaction and enhance our internal-control capabilities.

The Quality Assurance Division at our head office works for quality assurance independently of our sales and development divisions. We have also established Quality Assurance Groups at our Works, which contribute to quality assurance independently of our manufacturing divisions.

At the same time, we are working to improve our quality management system through audits and guidance at each company in our worldwide group. We have also created a new quality-education program incorporating compliance, and have begun to roll out this new curriculum throughout the Mitsui Chemicals Group.

#### Staff Comment

##### Business Division Coordinators, Quality Assurance Division

Business Division coordinators at the Quality Assurance Division provide product-related quality assurance for each business division.

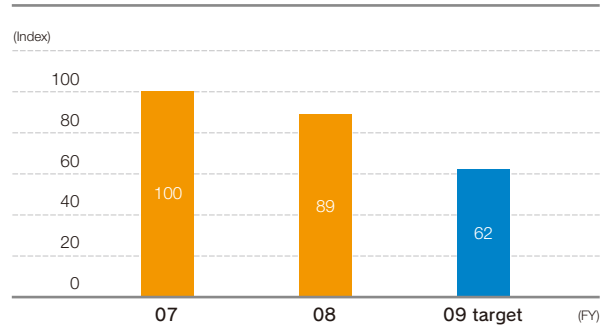
Their duties are varied, including determining quality standards and agreeing on delivery specifications; responding to customer complaints; preventing quality issues from occurring and preventing their re-occurrence; approving shipments; managing changes; and responding to customers' green procurement surveys.



### Responding to Customer Complaints

Our Quality Assurance Division plays a central role in our system of collaboration between relevant divisions at the head office and our plants. We are committed to handling complaints swiftly and appropriately by speeding up the complaint-handling process, accurately ascertaining the causes of complaints, and laterally deploying countermeasures to each company in the Mitsui Chemicals Group.

Trend of complaint rate (Index for fiscal 2007 is set at 100)



### Efforts at the Nagoya Works

Our Nagoya Works is located in the southern area of downtown Nagoya. It manufactures not only chemical raw materials but also processed resin products and materials for electronic and information technology products in its clean room.

Based on the principle that quality issues occur at a manufacturing site, the plant's quality-control officers work closely with the production lines, holding daily meetings and striving to share and swiftly communicate information about quality. Workers also carry out activities relating to 3S (*seiri*: sort; *seiton*: organize; and *seiso*: clean) create practical manuals, and provide education on quality, based on small-group projects with the theme of quality. These efforts have significantly improved workers' consciousness of quality, resulting in the company-wide presentations and Directors' Awards.

By getting all personnel involved in quality activities, the plant is aiming to focus its production on materials for electronic and information technology products.

## Together with Our Customers

### Ensuring the Safety of Chemicals and Chemical Products

The 2002 World Summit on Sustainable Development (WSSD) adopted targets for minimizing the risk of chemicals to humans and the environment by 2020.

As a company handling chemicals, Mitsui Chemicals is committed to ensuring the safety of chemicals and chemical products in preparation for achieving the WSSD targets.

### New Chemical Management Initiatives Compliant with New Chemical Regulations

Before marketing a new product, we assess the risk to the workers who handle it, to the environment, and to consumers, and implement safety measures based on the level of the risk determined.

We provide a Material Safety Data Sheet (MSDS)<sup>\*1</sup> not only for products required by law but for all products, and affix precautionary labels to the containers. We are now revising our MSDS and precautionary labels in accordance with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) recommended by the UN in 2003.

In 2007, the European Union enacted REACH<sup>\*2</sup>, a

new regulation concerning chemicals management. The regulation went into effect in 2008. REACH obligates registration of existing chemicals as well as new ones, and requires safety management throughout supply chains, from raw materials to the final products.

We are building a cross-functional internal readiness to create a new chemical quality control system compliant with REACH. Specifically, we are revising our internal regulations and rebuilding our product-information management system in order to enable us to control chemical quality throughout the product life cycle, while proceeding with registration under REACH.

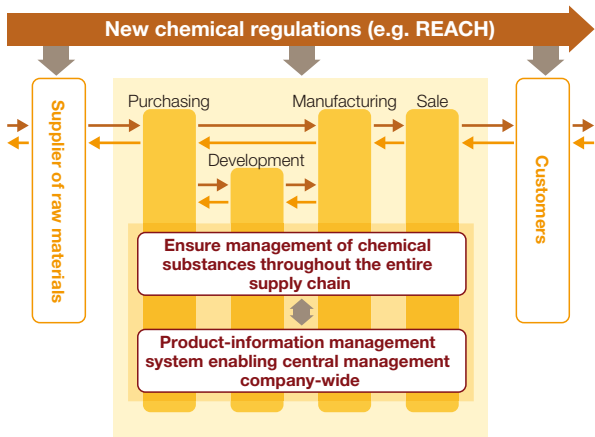


Product Safety Department Laboratory Wing

<sup>\*1</sup> Material Safety Data Sheet (MSDS): A document attached to shipments of chemical substances and products in order to provide necessary safety information relating to those chemicals and products.

<sup>\*2</sup> Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): A new regulation of chemical substances in EU.

#### Mitsui Chemicals initiatives relating to chemical safety



#### Staff Comment

My assignment is to prepare MSDS for our products, which are then provided to our customers. I make special efforts to make the MSDS clear and easy to understand, by investigating laws, regulations, and safety information, and anticipating the situations in which the product will be handled. The MSDS is a tool for communicating about safety that links Mitsui Chemicals with its customers. I am proud to contribute to dream-inspiring innovation through MSDS.



**Mami Nagai**  
Product Safety Dept.  
Safety & Environment Div.

# Together with Our Suppliers

At the Mitsui Chemicals Group, we consider all our suppliers to be valued partners. We are committed to fair and honest purchasing activities with our suppliers, with the aim of mutually sustainable growth.

## Purchasing Policy

The Mitsui Chemicals Group considers all our suppliers to be valued partners. As such, we created the Mitsui Chemicals Group Purchasing Policy in April 2006, in order to build excellent partnerships with our suppliers in purchasing activities in accordance with our CSR promotion. The aims of the policy are legal compliance, as well as fair and honest trading, being open to trading with a wide range of suppliers, providing equal opportunities, and achieving harmony with the global environment. We inform our suppliers of our selection criteria explicitly within this perspective of CSR.

### Mitsui Chemicals Group Purchasing Policy

The purchasing sectors of the Mitsui Chemicals Group consider every supplier to be a good partner for the Mitsui Chemicals Group in conducting purchasing activities that contribute to increasing the corporate value of our member companies. We understand the importance of fair competition and we trade in good faith seeking mutual sustainable development of corporate activities. We conduct purchasing following the Purchasing Policy stipulated below.

#### 1. Legal Compliance

We will strictly observe laws and social norms in conducting purchasing.

#### 2. Equal Opportunity and Transparency

We will be open to suppliers, both domestic and abroad, and provide equal opportunities for fair trade in good faith.

#### 3. Harmony with the Global Environment

We will endeavor to purchase goods and materials with less impact on the global environment.

#### 4. Choosing Suppliers from the Viewpoint of CSR

Seeking to build better partnerships, we will preferentially choose those companies that satisfy the following requirements:

- ① Strictly observe laws and social norms.
- ② Respect human rights and emphasize considerations for the labor environment.
- ③ Be proactive in environmental preservation and safety assurance.
- ④ Practice sound management.
- ⑤ Provide appropriate quality, prices, delivery deadlines, etc. and strive to maintain and improve them.

## CSR Procurement

As of fiscal 2008, we have conducted the following surveys relating to CSR procurement, in accordance with our purchasing policy.

#### 1. Survey contents: 20 items

- Compliance with laws and social norms (5 items)
- Respect for human rights and considerations for the labor environment (3 items)
- Environmental preservation and safety assurance (6 items)
- Sound management (4 items)
- Appropriate levels for quality, prices, and delivery deadlines, etc. (2 items)

#### 2. Companies surveyed: 779 (Trading companies and manufacturers supplying raw materials)

#### 3. Survey method: Request response via email

#### 4. Number of responses: 779 (Response rate as of end-May 2008: 100%)

#### 5. Results of scoring: Average 16.0 points (out of 20 points possible)

In the future, we will conduct this survey periodically, while providing feedback on the results, and provide support for making improvements to suppliers who consult with us individually.

Starting in fiscal 2009, we will also survey the status of suppliers of parts, materials, and indirect materials.

## Start of Green Purchasing

In fiscal 2009, we will begin green purchasing of office supplies and equipment. Specifically, we are preparing to begin operating a procurement system\* company-wide in fiscal 2009, which will promote purchasing eco-friendly products from a catalog defined in the Green Purchasing Law.

Additionally, starting from fiscal 2010, we will adopt company-wide specifications of eco-friendly products defined in the Green Purchasing Law for our uniforms and safety equipment as well.

\*Procurement system: Adoption of new digital authorization system instead of conventional method using paper documents for procurement. This helps us to reduce environmental impact by eliminating papers.

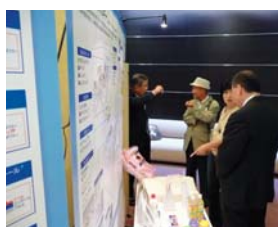
# Together with Our Shareholders

At the Mitsui Chemicals Group, we are committed to living up to the trust of our shareholders and investors by increasing the transparency of our management through measures to enhance corporate governance, and publishing appropriate information in a timely manner, in order to continuously improve our corporate value.

## Dialog with Our Shareholders

We look at our general meetings of shareholders as opportunities for frank dialogs between shareholders and management. We are thus committed to responding to questions from our shareholders frankly, clearly, and concisely, in order to deepen understanding of Mitsui Chemicals.

At our general meeting of shareholders held on June 25, 2008, we stationed presenters at the lobby of the venue, who displayed and presented information on the group's products and CSR activities. Following the meeting, company directors joined in the presentations, holding a dialog with shareholders.



## Basic Policy on Profit Sharing

In our 2008 Mid-term Business Plan, we changed our basic policy on profit sharing. The new policy ranks returning profits to our shareholders as a key management challenge on a par with improving our corporate value by growing our businesses.

We distribute profits with a holistic view of such matters as returning profits to our shareholders, and expanding our internal reserves to prepare for future growth strategies. We strive to return profits in accordance with our consolidated performance from a medium to long-term viewpoint, and continually pay consistent dividends, in light of our consolidated dividend payout ratio and consolidated dividends on equity (DOE).

Specifically, our targets are to provide a consolidated dividend payout ratio of at least 25%, and a DOE of at least 2%. We use our internal reserve to improve our performance, using it to invest actively to accelerate the creation of business portfolios that will enable growth and expansion, and for research and development for the creation of innovative new technologies.

## Information Disclosure

### Holding Regular Briefing Sessions for Analysts and Investors

After our annual settlement of accounts (May) and intermediate settlement (November), we hold briefing sessions for analysts and institutional investors, where the president outlines the state of our business. We also hold conference calls for analysts and institutional investors at the time of our annual settlement of accounts, intermediate settlements, and quarterly settlements. We publish the handouts and audio for these briefings on the IR section of our website.

### Publishing IR Information

Summaries of financial statements, timely disclosure information, security reports, annual reports (in both English and Japanese), materials for analysts and institutional investors, status of corporate governance and convocation notices for the shareholders' meetings are posted on our website immediately after disclosing relevant information via press releases.

The IR section of our website was selected by Daiwa Investor Relations Co., Ltd. as one of the top 402 corporate IR internet sites in 2008.



IR internet site

### Staff Comment

I publish information for shareholders in order to ensure that general meetings of shareholders are held appropriately and in compliance with the law. I strive to place myself in our shareholders' perspective when preparing materials by visualizing company profiles and report items provided at general meetings of shareholders, and writing clear and concise "To Our Shareholders" reports.



**Megumi Matsumoto**  
Corporate Administration Div.

# Together with Local Communities

At the Mitsui Chemicals Group, we are committed to coexistence with our local communities, with the goal of creating open operating sites, with close dialog between each operating site and the community, and conducting a variety of initiatives relating to children and the environment.

## Dialog with Local Communities

### Community Dialogs

The residents near our plants are vital stakeholders. We hold dialogs with them regarding our environmental-protection initiatives.

On March 26, 2008, our Nagoya Works held a dialog with six local school board members, and members of the urban planning promotion department of the Minami ward office. That day, the Nagoya Works described its recent situation and disaster preparedness training conducted at the chemical plant, additionally outlining examples of outside environmental awards and the Mitsui Chemicals CSR Report. During the active discussions, we received valuable feedback on the challenges for the plant.



### Public Relations Newsletters

Each plant publishes at least two public relations newsletters per year for the local community, in order to deepen the community's understanding of the plant. These newsletters describe the products produced at each plant, and the status of our environmental-protection initiatives. They also carry on a dialog in written form, including responses to feedback and questions from the local community.



Public Relations Newsletters of each Works (from left: Ichihara, Nagoya, Osaka, Iwakuni-Ohtake, Omuta)

### Site Tours for Elementary Students

Our Iwakuni-Ohtake Works held a plant tour for 41 fourth graders from Tsuda Public Elementary School in the city of Hatsukaichi, in Hiroshima Prefecture. The school is located near the source of the Oze River, and the children received a social studies lesson on the relationship between the Oze River and the chemical plant. After a bus tour of Iwakuni Port and the plant's wastewater outlet, the children toured a PTA (a raw material for PET) plant. Many voiced their amazement at the huge size of the chemical plant.



### Grand Siam Composites Wins Thailand 5S Award 2007

On November 30, 2007, Grand Siam Composites Co., Ltd. won a gold award in the Thailand 5S Award 2007. The award was in recognition of the company's full-scale commitment to TMP\*<sup>1</sup> and 5S\*<sup>2</sup>, as well as its results in these areas. The high motivation of GSC national staff was also mentioned.



\*1 Total Productive Maintenance (TPM): A production management system aimed at greater efficiency, in which all personnel participate to prevent accidents, defects, and disasters.

\*2 5S: Stands for sorting, systematizing, sweeping, sanitizing, and self-discipline.

### Mitsui Chemicals Group Social Activities Policy

The Mitsui Chemicals Group will make constant efforts to:

1. Contribute to society at large by using and innovating chemical technology;
2. Coexist with local communities through active communication with the public;
3. Conduct activities that help foster the next generation who are responsible for ensuring the wellbeing of the future of the earth;
4. Conduct activities for protecting the global environment;
5. Proactively act to promote international exchange and cooperation; and
6. Create a corporate environment that enables each employee to actively participate in social activities.

## Together with Local Communities

### Exchange with Local Communities

#### Donating Computers to Elementary School in Zhongshan, China

Children are the future of society; seeing that the goal of the government of Guangdong Province to give children access to computers matched with the social activities policy of the Mitsui Chemicals Group, Mitsui Advanced Composites (Zhongshan) Co., Ltd. donated 30 computers to No. 2 Elementary School in the local development district.



#### Selling Products at Spring Gardening Market

On April 19 and 20, 2008, a spring gardening market was organized in the Sunpu Gardens, which are noted in connection to the Shogun Tokugawa Ieyasu. Japan Composite Co., Ltd. sold planters at the market which were manufactured using FRP materials. Thanks to good weather, all 200 of the planters brought to the market were quickly sold.



#### Participating in Mobara Dance

On July 28, 2007, we participated in the *Mobara Dance* – the main event of the Mobara Tanabata Festival organized by the city of Mobara – as the group Mitsui Chemicals Ren. 2007 marked the 50th anniversary of our Mobara Branch Factory, and the 10th anniversary of Mitsui Chemicals, and we performed an authentic dance to highlight the strides being made by Mitsui Chemicals.



### Relay for Life (United States)

Ohio-based Advanced Composites, Inc. participates in Relay for Life, an event organized by the American Cancer Society – America's largest charitable organization – in support of cancer prevention and cancer patients. The company donates weekly collections and the proceeds from an event held on the first Friday of August.



### Environmental Protection

#### Cleanup Activities

We are committed to beautifying the local environment. Mitsui Chemicals and many of our affiliates participate in cleanups around their Works, as well as community cleanup efforts. On September 15, 2007, Thai Pet Resin Co., Ltd. participated in an international beach cleanup held at Pla Beach Rayong in Thailand.



#### Support for Cultivation of Healthy Forests

Two thirds of Japan's land area is forest, about 40% of which is artificial forest cultivated by people. Thinning and other tending is necessary to cultivate a healthy forest. We participate in programs run by Morino Chonai-Kai (Forest Neighborhood Association) as part of our efforts to contribute to the environment. By using Forest Thinning Support Paper, we promote thinning and support the cultivation of healthy forests.

# Together with Industry and Academia

We are committed to building a global science network, enhancing collaboration between industry and academia through international symposiums and other events, in order to contribute to the sustainable development of chemistry and the chemical industry.

## Hokkaido University/Mitsui Chemicals Joint Symposium

In November 2007, we held a joint symposium with the Hokkaido University Catalysis Research Center (CRC) with the goal of creating synergy in catalysis technology, which is one of our core technologies. Professors from all seven departments of the CRC and Mitsui Chemicals researchers gave presentations and posters, engendering lively discussions.



Presentation by Professor Ueda, Center Executive, Hokkaido University CRC

## Opening of Mitsui Chemicals Asia Pacific Technical Centre

In October 2006, we opened our first-ever research center outside Japan, in Singapore. Singapore is growing rapidly, and attracts top researchers from around the world. The center is now developing next-generation technologies. The center is also accelerating joint research in the fields of catalysis and advanced materials with Singapore's Agency for Science, Technology and Research (A\*STAR) and the National University of Singapore.



Opening ceremony (third person from the left: Keith Carpenter, executive director of the A\*STAR Institute for Chemical and Engineering Sciences; fourth from left: Kenji Fujiyoshi, president of Mitsui Chemicals)

### Staff Comment

We are jointly developing catalysts to be used as a raw material for medical and agricultural chemicals with the A\*STAR Institute for Chemical and Engineering Sciences (ICES). We work hard on our research every day to speed up the commercialization of technologies originating in Singapore.

**Kazuhiko Yoshinaga**  
Mitsui Chemicals Asia Pacific  
Technical Centre



## Accepting Internships

Each year, we accept interns with the goal of promoting human exchange and developing human resources. In fiscal 2008 we accepted slightly over 20 university and postgraduate students as interns, the majority of whom were exchange students from overseas. The interns worked together with our employees at our head office and our plants and research centers in Japan. Our group continues to actively offer internships in order to communicate the attractiveness of the chemical industry and chemical manufacturers.



### Internship history

Region of origin	Major	Location of internship	Number of interns
Europe	Management	Head office business division	1
	Applied chemistry, etc.	Head office business divisions	3
	Biotechnology	Research center	1
North America	Business administration, etc.	Head office business divisions/research centers	4
Asia	International relations (MBA)	Head office business divisions	2
		Head office business division	1
		Head office corporate division	1
	Chemical engineering, etc.	Works/research centers	8
Total			21

### Guest Comment

I have been on a planned one-year internship with the Engineering Plastic Department of the Information & Electronics Materials Division since August 2007. The product I work on is ARLEN. I am studying production management and sales, combined with trips to plants and customers. Although I was a little nervous before coming to Japan, everyone at Mitsui Chemicals has been very kind, and I hope to stay in touch with everyone after my internship ends.



**J-Baptiste Noe**  
EMLYON Business School

# Together with Our Employees

**At the Mitsui Chemicals Group, we are committed to giving our employees a sense of personal and professional motivation, with the goal of helping them find happiness and self-fulfillment. We encourage our employees to be proactive about their health. We strive to create an appropriate working environment, giving top priority to ensuring occupational safety and health.**

## Human Resources Management Policy

We created a human resources management policy in order to indicate our attitude toward our employees and the labor market. Our fundamental value is that it is vital to treat our people well, to enable the company and its employees to stimulate each other and each help the other

to improve.

At every group company worldwide, our fundamental human-resources practices is to achieve two goals: the sustainable growth of the Mitsui Chemicals Group, and the happiness and self-fulfillment of our employees.

### Human Resources Management Policy of Mitsui Chemicals Group

The Mitsui Chemicals Group (MCI), based on the “Action Guidelines,” will restructure its organization and engage in recruiting, assignment, training, evaluation and compensation towards the realization of the “Corporate Mission” and “Corporate Target” stipulated in the Corporate Vision.

#### 1. “Always in Good Faith”

- ① MCI will require employees to “act in good faith” as stipulated in the “Action Guidelines,” highly appreciate such employees and offer an appropriate environment for them to give full rein to their strengths.
- ② MCI will comply with all labor and employment laws wherever it operates.
- ③ MCI will disclose its rules and operate fairly and justly according to the rules regarding recruiting, assignment, training, evaluation and compensation of employees without any discrimination against gender, race, nationality, age, religion or disability.

#### 2. “For People and Society”

- ① MCI will expect employees to “have a high regard for people and society” as stipulated in the “Action Guidelines,” highly appreciate such employees and offer an appropriate environment for them to give full rein to their strengths.
- ② MCI will protect employees’ safety and health in the workplace.
- ③ MCI will not tolerate any form of harassment, and will support and respect the protection of human rights.

#### 3. “Dream-Inspiring Innovation”

- ① MCI will expect employees to undertake the following actions stipulated in the “Action Guidelines,” highly appreciate such employees and offer an appropriate environment for them to give full rein to their strengths:
  - To challenge unflinchingly with full trust in one’s own potential and with no fear of failure.
  - To create novel values by enhancing one’s sensitivity.
  - To consider and act proactively based on the actual data and facts at the workplace.
  - To aim to be a world-class professional with a global view.
  - To cultivate the next generation by passing on one’s experience and technologies.
  - To integrate individual strengths into the organization through active communication.

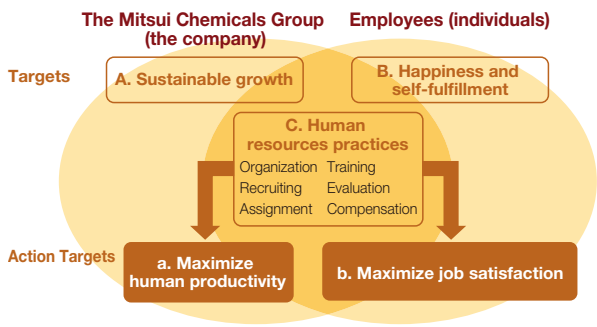
#### 4. Human Resources Practices

MCI, based on the above, will conduct Human Resources Practices under the following policies:

	A. Toward sustainable growth of the company	B. Toward happiness and self fulfillment of employees
<b>Organization</b>	To create an organization based on the corporate strategy and implement job allocation suited for realization of the strategy	To implement job allocation in consideration of each employee’s personal motivation and capability
<b>Recruiting</b>	To carefully recruit human resources that contribute to the organization’s growth	To give opportunities for employment equally to motivated and capable human resources
<b>Assignment</b>	To promote proactively human resources that yield fruitful results	To allocate suitable jobs for employees so that they can exercise their motivation and capabilities
<b>Training</b>	To foster world-class professionals from a long-term perspective	To assist employees in making self-reliant efforts to become world-class employees
<b>Evaluation</b>	To evaluate achievement appropriately	To conduct fair evaluation that leads to enhancement of motivation and capability
<b>Compensation</b>	To implement a compensation system that is competitive in terms of cost	To implement a compensation system that is competitive in securing motivated and capable human resources



**Perspective on human-resource management: relations between companies and individuals**

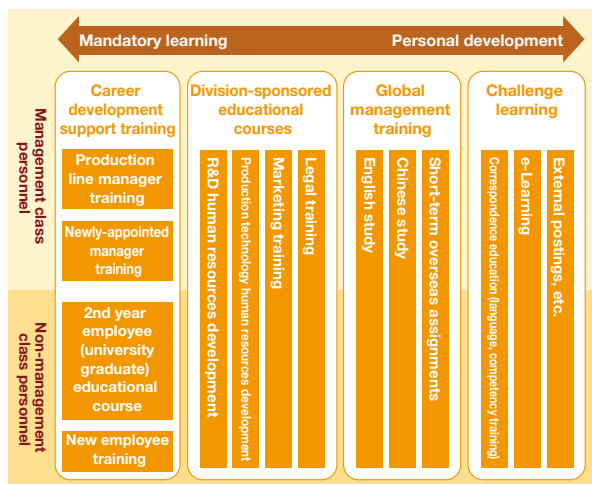


**Fostering Human Resources**

**Our Approach to Human Resource Development**

We believe that the cornerstone of human resources development is to provide the best possible environment to our human resources who continually improve themselves through dialog with others, with the goal of the happiness and self-fulfillment of our employees, as we maintain our commitment to constantly pursuing innovation and materializing dreams with the wonder of chemistry. At Mitsui Chemicals, we foster world-class professionals from a long-term perspective. We create a wide range of internal and external programs to support our employees' efforts at professional self improvement.

**Diagram of companywide education system**



**Training and Hiring Global Human Resources**

In 2007, we created a new cross-cultural management training program in response to the rapid globalization of the group. Other efforts include providing short-term Global Managers Training to local managers at overseas affiliates, and increasing the numbers of key local personnel who are brought to Japan for one-year practical training courses. We have also made the hire of new graduates with foreign nationalities a permanent program. In April 2008, we hired seven foreign employees, and expect to increase this number in the future.

The Mitsui Chemicals Group is thus focused on developing human resources from a global perspective at all levels.



**Transmitting Skills and Knowledge (Plant Operation Technology Training Center)**

We have a Plant Operation Technology Training Center in the city of Mobarra, in Chiba Prefecture, aiming to develop operators for our manufacturing sites who are experts at operations, safety, and equipment. In the summer of 2007, we completed a training plant of methanol distillation for full-scale training. The ability to provide practical training through computer control allows our employees to experience and learn the basic skills for the safe operation of a chemical plant.



# Together with Our Employees

## Balancing Life with Work

### Promoting Work-Life Balance

Mitsui Chemicals regards our employees as vital stakeholders for achieving our corporate mission. We are committed to realizing both the sustainable growth of our corporate group, and the happiness and self-fulfillment of our employees. Our aim is to create a relationship in which the company and employees stimulate each other as they work toward their respective goals.

We have built an employee-friendly working environment, with various programs ranging from childcare and family care, such as shorter working hours, leave to care for sick or elderly relatives at home, and subsidies for using babysitting and home-care services, to housing and leisure support.

The work-life balance of our employees is vital for our business infrastructure, and we are committed to creating innovative value by enhancing and improving this infrastructure.

We believe that the importance of childcare and family care will continue to increase, and we will continue to improve our programs in these areas.

We also believe that it is vital to give employees time to relax and refresh themselves physically and mentally. To accomplish this, with ideas from all our employees, we will improve work styles and support employees to create and take advantage of time to relax.

#### Support programs

Time off and leave	<ul style="list-style-type: none"> <li>● Nursing care leave</li> <li>● Special leave</li> </ul>	<ul style="list-style-type: none"> <li>● Childcare leave</li> <li>● Family care leave</li> </ul>
Working hours	<ul style="list-style-type: none"> <li>● Shorter work hours for those taking infants to nurseries</li> <li>● Shorter work hours for caregivers</li> <li>● Limitation of overtime work (childcare and family care)</li> <li>● Limitation of late night work (childcare and family care)</li> </ul>	
Income	<ul style="list-style-type: none"> <li>● Maternity pay</li> <li>● Childcare assistance</li> <li>● Family care assistance</li> <li>● Subsidies for using home-care services</li> <li>● Subsidies for using babysitting</li> </ul>	

### We Participate in the Work-Life Balance Project of the MHLW

We are a model company in the Ministry of Health, Labor, and Welfare's (MHLW) Work-Life Balance Project, on the recommendation of the Nippon Keidanren (Japan Business Federation).



The goal of this project is to foster a social movement to balance work and private lives. Under this project, 10 corporations with influence on society are selected, and those companies carry out pioneering initiatives for work-life balance, and communicate their results widely to the public.

As part of this national project, in July 2008 we published a Declaration by Top Management and Key Action Items relating to work-life balance for fiscal 2009. The document was published internally and externally, and can also be found on the Ministry of Health, Labor, and Welfare Website at <http://www.mhlw.go.jp/bunya/roudoukijun/sigoto-seikatu/index.html> (Japanese only). These initiatives will be described broadly in the future, through such means as PR pamphlets about the project.

Our group will continue to expand and enhance related initiatives as well.

#### Key Action Items for Fiscal 2009

##### 1. Create a working environment that facilitates a balance between childcare/ family care and work

- (1) Childcare and family care
  - Introduce a program to request work transfers due to child or family-care needs
  - Create a company childcare center (opening planned for spring of 2009)



Conceptual view of company childcare center

##### 2. Support efforts to create a time for relaxation

- (1) Creating free time
  - Create and implement rules for efficiency such as streamlining meetings
  - Roll out programs to eliminate overtime
- (2) Expand and enhance leave program
  - Create a new leave program for social activities

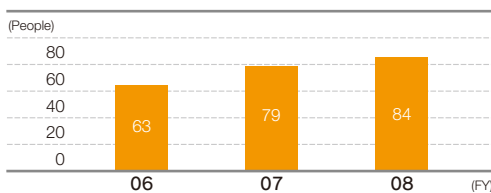
## Respect for Diversity and Originality

### Promotion and Development of Women Team

In 2006, the company president ordered the creation of a Promotion and Development of Women Team. As a first step toward promoting diversity, this team promoted higher visibility for female employees.

We have continued these efforts since fiscal 2007, based on four key areas: (1) foment a corporate culture that actively leverages the diversity of employees; (2) support the career development of women; (3) support the creation of face-to-face networks (both internal and external); and (4) support a work-life balance.

Number of female managers



### Promoting Employment of Persons with Disabilities

For the past four years straight (since fiscal 2005), we have maintained the legally required rate of disabled employees (1.8%). We will continue to promote the employment of persons with disabilities, as we work to create a disabled-friendly workplace.

Shift in employment rate of persons with disabilities

FY2006	FY2007	FY2008
1.93%	1.98%	1.93%

### Post Retirement Second Careers

We introduced a second-career program in April 2006. We support diverse life planning, providing a broad range of work opportunities to older employees with high levels of skill and knowledge after mandatory retirement age.

## Promoting Internal Communication

### Nagomi Salon

We opened the Nagomi Salon at our head office in June 2007. *Nagomi* means “relaxation” in Japanese, and we created this salon with the hope of providing our employees with a place to relax with their friends.

The salon is used for internal meetings, receptions, and other events.



## Labor Relations Based on Frank Dialog and Mutual Understanding

We are committed to building uniform and stable labor relations, with the philosophy of frank dialog and mutual understanding. In April 2008 we revised our labor agreement, clearly stating our commitment

to improve productivity, achieve the Grand Design, and develop human resources through a partnership between labor and management. We remain committed to two-way communication, and creating a foundation for employees to increase motivation in their work and private lives.



### Staff Comment

When my third son was born, I took the second childcare leave of my life, receiving 50 days' leave. I was most worried about telling my boss and coworkers, but when I told them they just said, “OK, no problem.” I am grateful to have such understanding boss and coworkers. I recommend to all men that you should take childcare leave, and tackle the challenge of being a full-time dad.



**Satoru Kudo**  
Team Leader, Services,  
Manufacturing 1, Ichihara Works

# Together with Our Employees

## Creating a Safe Workplace

Mitsui Chemicals strives to prevent labor accidents through activities to create a safe workplace, and raise employees' safety awareness based on the Occupational Health and Safety Assessment Series (OHSAS 18001). In fiscal 2008, we implemented policies which sought to address the key issue of "enhancing united group-wide initiatives to eliminate occupational injuries," and together with our subsidiaries, affiliates and contractors in Japan and abroad, we promoted the thorough implementation of measures to prevent workers from "Being caught on" and "Being caught between" accidents of motive machines, and safety programs supporting bottom-up efforts.

## Status of Occupational Injuries

In fiscal 2008, our occupational injury frequency rate (DAFWC + RWTC, including on-site subsidiaries and affiliates\* as well as subcontractors) was 1.5, and our occupational injury frequency rate for days away from work cases (DAFWC) alone was 0.3, which represented an increase from the previous year. Analysis showed that about 80% of occupational injuries were due to human error, and that equipment was almost never the cause. We are currently working to eliminate occupational injuries by reinforcing our 3S (*seiri*: sort; *seiton*: organize; and *seiso*: clean) and hazard prediction (KY: *Kiken-Yochi* in Japanese) programs, as safety programs with a focus on human behavior.

\*On-site subsidiaries and affiliates: Subsidiaries and affiliates which are located on the premises of Mitsui Chemicals' Works and are under the supervision of Mitsui Chemicals with regard to environmental and safety initiatives.

## Commitment to Eliminating Occupational Injuries

In fiscal 2008, we further enhanced the support organizations of our business divisions and Safety & Environment Division for safety programs at our Works and worldwide affiliates. The actions included supporting safety programs run by on-site managers, providing education on legal compliance through e-learning, and assigning area staff to instruct overseas affiliates. We are striving to implement safety guarding measures, with an emphasis on preventing workers from "Being caught on" and "Being caught between" accidents of motive machines, and to raise safety awareness.

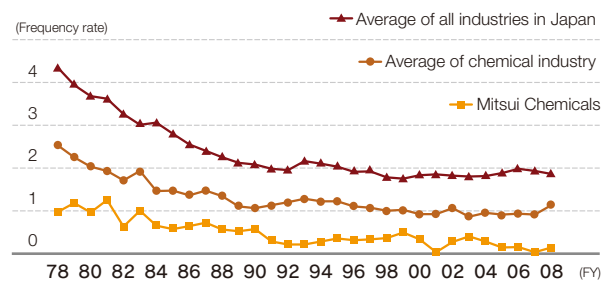
## Safety Guidance for Overseas Affiliates

We have assigned area staff in Singapore, Thailand, and the United States in order to enhance our safety and environmental support system at our affiliates in Southeast Asia and the

US. We also held the four-day First Asia Global Safety and Environment Conference in Japan from January 30th to February 2nd, 2008, with a focus on creating a network of our overseas responsible care (RC) support affiliates. Twelve RC coordinators from affiliates in Southeast Asia attended the conference, actively exchanging ideas on safety and the environment.

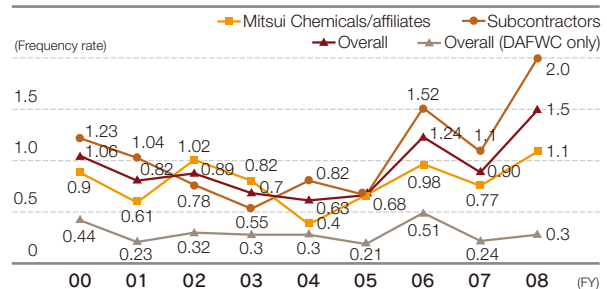
### Trend in occupational injury frequency rate (DAFWC) (All industries/chemical industry/Mitsui Chemicals)

$$\text{Occupational injury frequency rate} = \frac{\text{Number of DAFWC}}{\text{Total working hours (per 1 million hours)}}$$



### Trend in occupational injury frequency rate (DAFWC + RWTC)

$$\text{Occupational injury frequency rate} = \frac{\text{Number of DAFWC + RWTC}}{\text{Total working hours (per 1 million hours)}}$$



### Staff Comment

We work to improve the level of occupational safety at our affiliates in the Asia Pacific region, by directly communicating the strong stance of Mitsui Chemicals toward occupational safety to worksites at companies in these countries, and improving awareness of our stance. Our goal is to achieve workplace safety on a par with Mitsui Chemicals plants in Japan.



**Bundit.Pattawekongka (Left)**  
**Takashi Yamamoto (Right)**  
 Safety & Environment Div.  
 Mitsui Chemicals Asia Pacific, Ltd.

## Employee Health

Our philosophy is that employee health is linked directly to corporate soundness. We have health care sections at our head office, Sodegaura Center, and all five Works, where fulltime industrial physicians, healthcare nurses, and healthcare managers are assigned. We are also committed to promoting the health of all group employees, and assign industrial physicians and healthcare nurses to our affiliates' main plants.

In fiscal 2008, we continued to prevent mental-health and lifestyle ailments, and to reduce hygiene risks.

### Reducing Occupational Health Risks

We are committed to reducing occupational health risks and improving the working environment through the use of the Occupational Health and Safety Assessment Series (OHSAS 18001), and worksite visits by industrial physicians and healthcare managers. In fiscal 2008, we once again got back to the basics throughout the company by re-evaluating the performance of 1,507 local ventilation systems. The results of this re-evaluation showed that improvements of some local ventilation systems were necessary, and we performed these improvements. Starting in fiscal 2009, we are further investigating to improve our local ventilation systems as well as air-conditioning systems according to a plan.

### Health Management

Our industrial physicians, healthcare nurses, and other healthcare professionals promote the health of employees through health examinations and health guidance. In fiscal 2008, we made a number of improvements, including revitalizing our health classes, creating an autonomous health-promotion program using information technology, and improving our cafeterias for employees.



Training in CPR

There has been an increase in DAFWC due to cancer-related illness and we responded by considering ways to combine periodic medical check-ups with cancer testing in order to increase the rate of cancer testing. We have also completed the installation of automated

external defibrillators (AED), and are providing training in cardiopulmonary resuscitation (CPR).

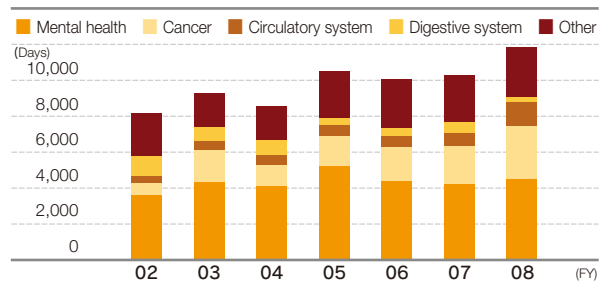
In fiscal 2009, we are conducting comprehensive medical check-ups throughout the company combining periodic medical check-ups, special medical check-ups, and cancer testing. We are also actively providing special health guidance in order to reduce the risk of metabolic syndrome.

### Measures for Mental Health

In fiscal 2008, we continued our mental-health efforts, including training (e.g. for new employees, managers, and line managers), counseling, and e-learning. Additionally, we conducted an occupational stress questionnaire surveys and implemented a communication improvement plan company-wide as part of mental-health measures on an organizational level.

As a result of these efforts, statistics for lost time due to illness show that DAFWC due to mental-health issues are declining from the peak in fiscal 2005.

#### Breakdown of lost time due to illness



#### Staff Comment

As nurses, our goal is for the employees to be healthy with active social lives both while they are working, and after they have retired. We support employee health, sometimes gently, and sometimes strictly.



Miyuki Ishibashi (Left)  
Yumi Sato (Right)

Health Management Office  
Ichihara Works

# Activities Contributing to Society

We carry out a number of activities in accordance with the Mitsui Chemicals Group Action Guidelines.

A wide range of these activities involve chemical technologies and products, from nurturing the next generation to environmental protection and disaster relief.

## Nurturing the Next Generation

### Adventure Class in Wonder-Chemistry

In 2006, we have begun laboratory classes for elementary and junior-high school students near all operating sites, with the goal of showing children the wonder and fun of chemistry through experiments.

In 2007, in addition to the regular classes at local schools and exhibitions at events, we broadened these activities, including laboratory classes to children in the region of the Chuetsu Earthquake in Niigata, at the request of an NPO in Niigata. Over 100 employees staffed the classes, some of whom received requests from other operating sites as highly experienced instructors of the class. In the future, we plan to expand this program to the areas around our affiliates' plants.



### Adventure Class in Wonder-Chemistry in Fiscal 2008

Dates	Location	Event
8 Jul.	Omuta Works	Chikugo Children's Campus Event
1-2 Aug.	Sodegaura Center	Fourth Adventure Class in Wonder-Chemistry
4 Aug.	Osaka District	Second MCI Sports Festival in Osaka
24-25 Aug.	Kanto District	Dreams and Chemistry 21: Kids' Summer Vacation Chemistry Laboratory Show
19 Sep.	Iwakuni-Ohtake Works	Invited Hiroshima Nishi Special Needs School
23 Sep	Ichihara Works	Autumn Festival
14 Oct.	Iwakuni-Ohtake Works	Autumn Festival
	All operating sites	Niigata Science Caravan
21 Oct.	Osaka Works	Takaishi Commerce Festival
27 Oct.	Omuta Works	Autumn Festival
	Nagoya Works	Autumn Festival
28 Oct.	All operating sites	Niigata Science Caravan
1 Nov.	Mobara Branch Factory	Visiting classrooms organized by Rotary Club
11 Nov.	All operating sites	Niigata Science Caravan
18 Nov.	Head Office	Shiodome City Center Family Day
9 Dec.	All operating sites	Niigata Science Caravan
23 Dec.	Osaka Branch	At OSTECH Exhibition Hall
28 Feb.	Omuta Works	Taught classes at Meiji Elementary School

## Internships (Occupational Experience and Study Program)

We actively provide internships to high-school, technical college, and university students in order to teach the next generation about chemical products, chemical plants, and chemical manufacturers, and get them interested in these topics. In 2007, we accepted roughly 70 interns. We hope that our interns will consider the chemical industry as an option when they choose their future career paths.



### ●Mobara Branch Factory

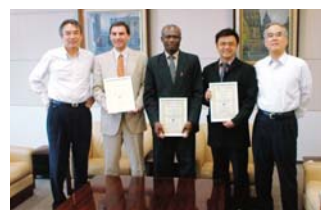
The Mobara Branch Factory accepted four interns from two nearby high schools between November 19th and 21st, 2007. During the internship period, the interns all showed great interest in the chemical plants because most of the interns never got the chance to see before.



## Safety Training Program for Engineers in Developing Countries

The objective of the IUPAC-UNESCO-UNIDO Safety Training Program is to educate engineers in developing countries through practical experience, and disseminate and improve safety and environmental technologies.

Supporting the aims of this organization, we accepted three trainees from Ghana, Uruguay, and Singapore. They had approximately three weeks of training at our Iwakuni-Ohtake Works and Sodegaura Center. (This was the second training following the first time in fiscal 2005.) The trainees told us that the training they received was extremely useful, and that they planned to spread what they had learned in their home countries. IUPAC also sent us a letter of appreciation regarding this safety training program.



## Environmental Protection

### Cleanup Activities

We began the Cleanup Campaign in 2006 in order to think about the global environment through local cleanup activities.



In 2007, we held a seminar at our Mobarra Branch Factory inviting local biologists before an event at Kujukuri Beach. The seminar allowed the participants including the planning staff to deepen their knowledge of local nature. We sorted out the trash picked up during our September Cleanup Campaign into 30 categories, and recognized the large amount of plastic trash (plastics being one of Mitsui Chemicals' products) discarded. We also conducted a seashell handcraft class for the children, giving them a sense of the importance of nature through contact with natural materials. We will continue such activities that enhance harmony with our local communities.

### Global Environmental Supporters

CP 15

In order to better utilize our products and technologies and raise the awareness of our employees with regards to global environmental protection, we are conducting our activities under four themes. We organize a team of about 10 to 15 volunteers to conduct initiatives for four themes such as "desert greening," "CO<sub>2</sub> diet," "sound sustainable society and coexistence with local communities," and "what are environmentally friendly products?"



Seminar at Osaka Works

Two of these themes have already reached the execution stage, and their teams are discussing how to implement with coordinators from the departments who will be carrying them out. The remaining two teams, still in discussion stage, are actively learning knowledge from both internal and external sources and working to make feasible proposals to the company.

## Disaster Recovery Support

### Disaster Relief Team

This effort began with the desire to send victims of disasters what they need when they need, and make a contribution by offering the final products that use our products as raw materials. We received advice from disaster relief NPOs and others, and collaborated with our customers who manufacture these products.

In July 2007, the Chuetsu Earthquake struck Niigata Prefecture, just as we finished preparing a system for sending relief materials. We immediately sent the Polyurethane mattresses, Polyurethane rolls, and food wrapping films to victims through local volunteer centers.

We also responded to the requests from local NPOs to hold laboratory classes for children in the disaster area, giving four Adventure Class in Wonder-Chemistry between October and December 2007.



Disaster Relief Team leader (right) and people from Toyo Quality One who collaborated in the effort



Polyurethane mattresses used at an evacuation center

### MCI Disaster Relief Team Action Flowchart



# The Mitsui Chemicals Group and the Environment

The Mitsui Chemicals Group strives to stay in harmony with the global environment while developing its business activities. In this section we report on the Group's environmental protection efforts and results in dealing with the environmental impact caused by our business activities.



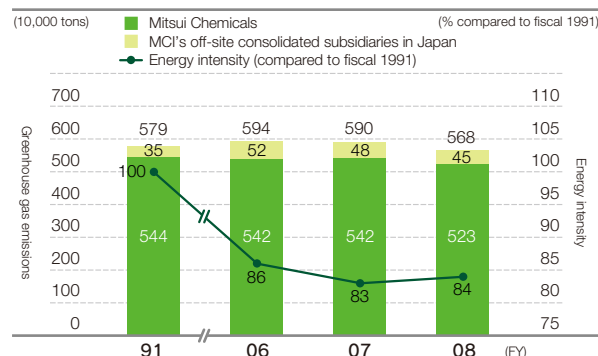
## Greenhouse Gas Emission Reduction

The Mitsui Chemicals Group is making efforts to reduce GHG emissions at the five Works of Mitsui Chemicals, Inc. and its consolidated subsidiaries (20 companies) outside MCI Works in Japan. In fiscal 2008, our GHG emissions\* were 5.68 million tons, 0.22 million tons reduction from the previous year. This reduction was achieved from energy conservation and switching to different fuels at our plants, and shifting to commercially purchased electricity, as well as a reduction in production due to the annual shutdown maintenance and halt of production facilities. In our 2008 Mid-term Business Plan, we set as a management target the reduction of our GHG Intensity Index (GHG emissions per predefined production volume) to 85 or less of the fiscal 1991 level by fiscal 2012. The plan calls for investment in energy efficiency and the development of innovative processes that will help us reduce greatly our levels of GHG emissions. As of fiscal 2008, our GHG Intensity Index was 88.

Meanwhile, our Energy Intensity Index (a target of the chemical industry) was 84 due to the annual shutdown maintenance, a one-percent increase from the previous year (until fiscal 2008, the chemical-industry target was 90 or less, but in fiscal 2008 this was changed to a voluntary target of an average of 80 over the five-year period from fiscal 2009 to 2013).

In March 2008, we began our CO<sub>2</sub> Diet Campaign, which aims at energy saving in offices such as individual efforts to turn off computers often and turn off the lights during the lunch break.

### Changes in greenhouse gas emissions and energy intensity



\*GHG emissions:

(1) In fiscal 2007, our GHG emissions under the System for Reporting of Carbon Dioxide Equivalent Greenhouse Gas Emissions were 2.37 million tons. This was in accordance with a system of not calculating the CO<sub>2</sub> emissions from by-products of manufacturing processes as when they are used as fuel.

(2) This fiscal year, the CO<sub>2</sub> emission index of gas by-products was revised, and the emissions were re-calculated from past data.



# Commitment to Global Warming Prevention

The Mitsui Chemicals Group emphasizes harmony with the environment in our corporate mission. In accordance with this attitude, we are striving to reduce GHG emissions to prevent global warming through various approaches, including energy conservation at production sites and air-conditioning temperature adjustment at offices.

## Energy Conservation Initiatives

We have nearly reached the limit of our ability to conserve energy at our production sites. We are currently planning a new effort to conserve energy in partnership with other adjacent companies' Works.

### Ichihara Works

Ichihara Works is planning to install a high-efficiency gas turbine fueled by liquid natural gas (LNG), with a roll-out target of October 2009. This Energy Service Company (ESCO) project is jointly promoted with JSR Corporation and Toden Kogyo Co., Ltd., and in fiscal 2007 was selected by the New Energy and Industrial Technology Development Organization (NEDO) as a support project for industries for increasing the efficient use of energy.

The gas turbine uses energy more efficiently by producing both electricity and steam. By halting the operation of the existing low-efficiency condensing turbine, we expect to reduce our energy use by 20,000 kl oil equivalent, and reduce our GHG emissions by 90,000 tons.

### Osaka Works

Osaka Works is planning an energy-conservation measure in partnership with Osaka Gas Co., Ltd. Osaka Gas is a gas supplier that gasifies LNG and supplies it to the city as city gas. Under this plan, we will utilize the extremely low-temperature energy of the LNG (-160°C) by building an LNG pipeline between Osaka Gas and the Osaka Works. After it has been used as a refrigerant (necessary for the manufacture of petrochemical raw materials), it will be converted into gas and returned to Osaka Gas.

We expect this measure to reduce our energy consumption by 10,000 kl oil equivalent, and our GHG emissions by 30,000 tons. This plan has also been selected by NEDO as a fiscal 2008 support project for industries for increasing the effective use of energy.

## Introduction of New Distillation System

In June 2007, Mitsui Chemicals Polyurethanes Inc. introduced a new distillation system in the refining process of raw materials for urethane, achieving a huge 30% reduction in energy usage. This resulted in a reduction in energy use by 500 kl oil equivalent, and a reduction of GHG emissions by 1,000 tons.

The conventional system separates three constituents in two distillation towers, while the new system can separate these in a single distillation tower vertically subdivided in the interior of the tower. The amount of heating and cooling energy required can be reduced by introducing this process.

We are currently considering the application of this technology to other product-refining processes.



New distillation system

## Energy Conservation Measures for Logistics in Fiscal 2008

In response to the measures in the Revised Energy Conservation Law pertaining to shipping companies, in fiscal 2008 Mitsui Chemicals' logistics division advanced several measures to conserve energy, including reduction of the number of shipments by increasing shipping lot sizes; a modal shift from trucks to trains or marine transport; and improving truck loading efficiency.

We also assigned responsible persons for energy conservation at each of our business divisions and affiliates, as a policy for achieving a united group-wide commitment.



Modal shift to marine transport

# Business Activities and Environmental Impact

The Mitsui Chemicals Group uses eco-efficiency to evaluate the relationship between its economic activities and the environmental impact arising from corporate activities, striving for sustainable development of society and business. We have also introduced environmental accounting and are investing proactively in environmental protection.

## Assessment of Environmental Impact

### Assessing Environmental Impact of Production Activities Using Eco-efficiency

At the Earth Summit (1992), improvement of eco-efficiency was declared important from the standpoint of sustainable development. Eco-efficiency is an index for measuring how much of an environmental burden accompanies the provision of a product or service. Mitsui Chemicals continues to test the use of eco-efficiency to evaluate the relationship between its overall corporate economic activities and environmental protection. To find the environmental load points necessary to calculate eco-efficiency, we are using coefficients to assign appropriate weights to the chemical industry and Japan's environment, referring to the Panel Method developed by Professor Katsuya Nagata at Waseda University.

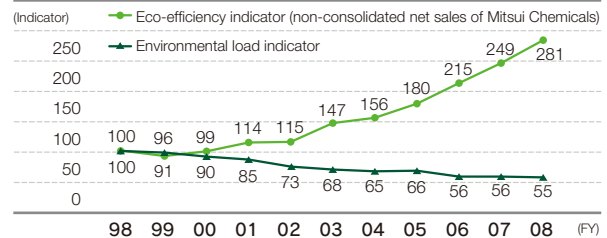
$$\text{Eco-efficiency} = \frac{\text{net sales}}{\text{environmental load points}}$$

### Eco-efficiency Evaluation for the Business Activities of Mitsui Chemicals as a Whole

The eco-efficiency of the business activities of Mitsui Chemicals as a whole is calculated by dividing non-consolidated net sales by the environmental load points. In fiscal 2008, the difficult business climate continued, with already high prices for raw materials and fuel further skyrocketing. Nevertheless, we greatly improved our eco-efficiency indicator to 281, from 100 in the base year of fiscal 1998, by continuing to reduce our environmental impact.

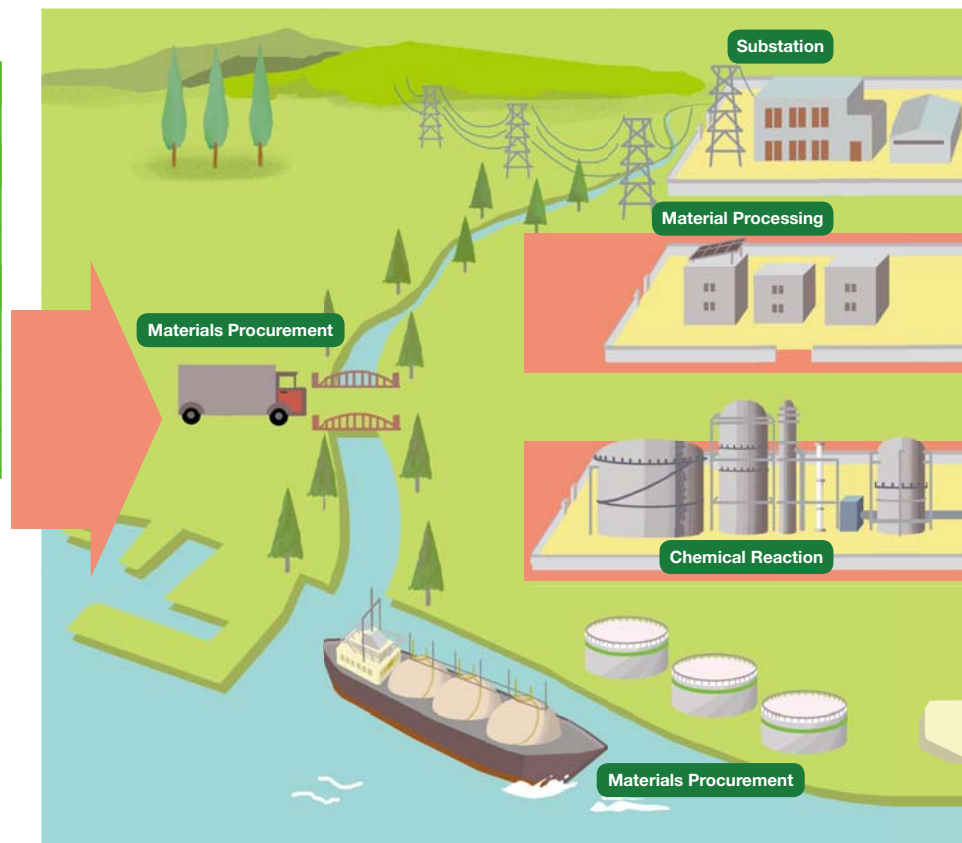
#### WEB Assessment of Environmental Impacts

#### Changes in eco-efficiency indicator and environmental load indicator (FY 1998 level = 100)



## INPUT

Energy	
Total fuel heat (thousand GJ)	89,216
Purchased materials	
Purchased raw materials (thousand tons)	7,153
Other purchased materials (thousand tons)	29
Water resources	
Tap water (million m <sup>3</sup> )	0.7
Underground water (million m <sup>3</sup> )	0.7
Industrial water (million m <sup>3</sup> )	103
Seawater (million m <sup>3</sup> )	457



#### WEB Site Data

\*The data on Mitsui Chemicals in the environmental report includes those of on-site subsidiaries and affiliates.

## Environmental Accounting

### Fiscal 2008 Results

Mitsui Chemicals invested approximately 1.8 billion yen in environmental protection and spent a further 21.1 billion yen to protect the environment in fiscal 2008. The investments were made for facilities and equipment to reduce atmospheric emissions of GHGs and VOCs, measures to protect water quality and other protective steps. Economic benefits accompanying environmental protection totaled about 4.0 billion yen, and included savings in resources and energy.

Investments concerning occupational health and safety, and disaster prevention amounted to approximately 4.3 billion yen, including 500 million yen for special measures for occupational safety implemented since fiscal 2008, specifically the enhancement of facilities related to prevention of fires, explosion and occupational injuries.

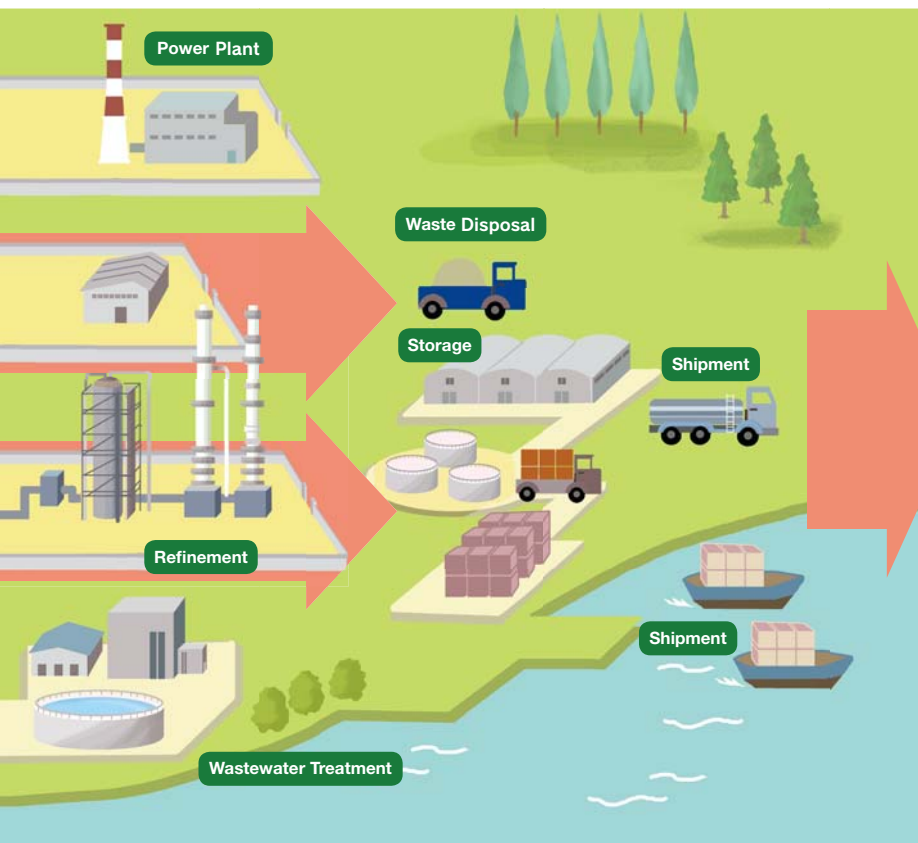
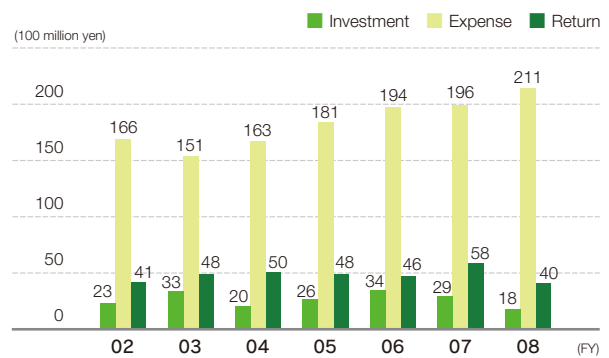
**WEB Environmental Accounting**

## Major Environmental Enhancement Plans

Mitsui Chemicals has been implementing environmental protection plans for further reduction of GHGs and VOCs emissions, and sludge generation.

**WEB Major Environmental Improvement Projects**

### Trends in environmental accounting



## OUTPUT

### Products, etc.

Products shipped (thousand tons) 6,747

### Atmospheric emissions

CO<sub>2</sub> (thousand tons) 5,230

Fluorocarbons (tons)\* 12

NO<sub>x</sub> (tons) 3,556

SO<sub>x</sub> (tons) 853

Hazardous air pollutants (tons) 55

Non-methane VOCs (tons) 2,692

Soot and dust (tons) 208

### Industrial waste

External recycling (tons) 79,518

External landfill (tons) 28,103

### Water discharged

COD (tons) 1,217

Total nitrogen (tons) 1,298

Total phosphorus (tons) 31

Effluent (million m<sup>3</sup>) 528

\*Fluorocarbons: Subject to the Law Concerning the Recovery and Destruction of Fluorocarbons.

# Commitment to Environmental Impact Reduction

The Mitsui Chemicals Group is working to protect the environment in two ways: reduction of the environmental impact of our business activities, and appropriate management of chemical substances. We will continue to monitor our environmental load and make proactive efforts to protect the global environment.

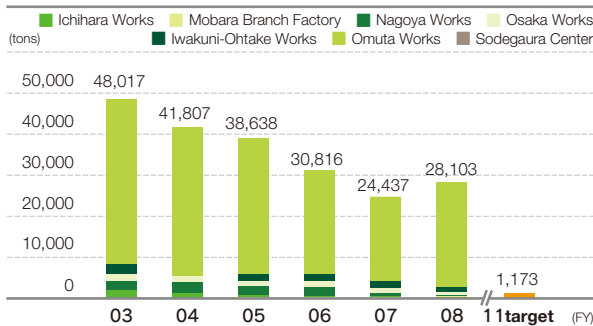
## Industrial Waste Reduction

The Mitsui Chemicals Group has set as a Grand Design target the minimization of industrial waste\*1 at all production sites of Mitsui Chemicals and all domestic and overseas consolidated subsidiaries by around 2015. Our 2008 Mid-term Business Plan has also set the target of minimizing industrial waste at all production sites of consolidated subsidiaries in Japan, and reducing the average landfill rate of production sites of consolidated subsidiaries outside Japan to no more than 5%, by fiscal 2012.

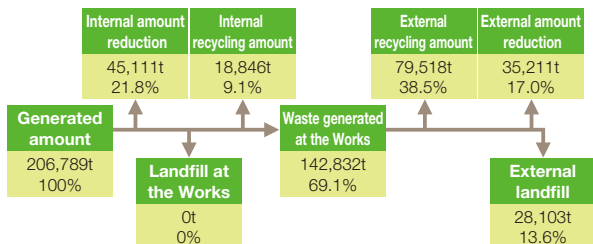
Mitsui Chemicals' Works are advancing plans to reduce landfill disposal in order to minimize their industrial waste by the end of fiscal 2011. As of fiscal 2008, the landfill rates of our various Works were as follows: 0.2% for Ichihara Works; 1.1% for Mobara Branch Factory; 2.6% for Nagoya Works; 2.6% for Osaka Works; 4.4% for Iwakuni-Ohtake Works; and 28.7% for Omuta Works. In fiscal 2008, the landfill rate of Omuta Works increased by about 5% from the previous year due to such factors as treating sludge accumulated in its wastewater feed tanks, but the Works is currently advancing measures steadily to achieve minimization by fiscal 2011.

\*1 Minimization of industrial waste: Maintaining a landfill disposal rate of 1% or less of industrial waste generated.

### Changes in final disposal amount of industrial waste



### Waste treatment by destination



\*Internal amount reduction: Amount reduced as a result of waste plastic incineration and waste acid neutralization  
 \*Internal and external recycling amount: Value including waste plastic recycling and the fuel use of waste oil  
 \*Generated amount: Sum of sludge, waste plastics, soot and dust, etc. (the figures for sludge are based on dry weight)

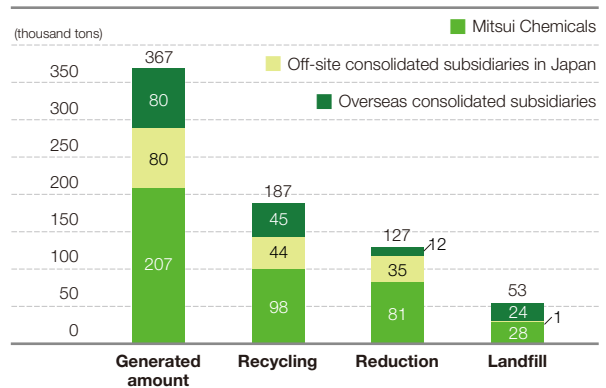
## Mitsui Chemicals Group's Initiatives

Many of our off-site subsidiaries in Japan have the role of processing and adding value to our products, while most of our overseas subsidiaries produce commodity chemicals. Because regulations on waste treatment and industrial structure differ from country to country, there are many challenges for advancing minimization outside Japan. Nevertheless, our group is united in its commitment to reduce landfill disposal by actively reducing and recycling waste.

In fiscal 2008, the average landfill rate of industrial waste for our worldwide subsidiaries\*2 was 1.5% in Japan, and 29.6% outside Japan. Most of landfill waste at our overseas subsidiaries is sludge, and we plan to reduce their landfill rate to no more than 5% on average by fiscal 2012 through such means as recycling into raw materials for cement.

\*2 Scope of worldwide subsidiaries for statistics: Production sites of consolidated subsidiaries and target companies of RC support (27 in Japan, 19 overseas)

### Steps in reducing industrial waste disposal



### Staff Comment

The Mitsui Chemicals Group is working actively to reduce the environmental impact of its business activities. We are committed to being an eco-friendly corporate group, with management targets of reducing GHG emissions and minimizing our industrial waste.



**Atsushi Nakamura**  
Safety & Environment Div.

## The 3Rs at the Mitsui Chemicals Group

### The WARM Project (Shimonoseki Mitsui Chemicals)

Shimonoseki Mitsui Chemicals Inc. conducts a program called WARM, which recycles waste acid (including such difficult-to-recover substances as hydrofluoric acid, sulfuric acid, phosphoric acid, sodium sulfate, calcium fluoride, and calcium phosphate), waste alkalis, and sludge. These waste materials are used effectively as resources, safely treated and used in fluorine products, refined phosphoric acid, and as raw

materials for gypsum. This recycling program won the Clean Japan Center Director's Award in 2005, in recognition of its great contribution toward achieving a sound sustainable society.



WARM project recycling equipment

### Indonesian Ministry of Environment Grants Green Rating to Amoco Mitsui PTA Indonesia

P.T. Amoco Mitsui PTA Indonesia was granted the "Green" rating in the 2004–2005 and 2006–2007 PROPER PROKASIH\*.

This company has minimized its industrial waste through the "3Rs" (reduce, reuse, and recycle), as in treating wastewater using anaerobic processes to inhibit the formation of excess sludge.

\*PROPER PROKASIH is a corporate rating program implemented by the Indonesian Ministry of Environment. It has a five-rank rating in different colors consisting of gold (highest), followed by green, blue, red, and black, and uses it to score companies' performance based on their prevention of water pollution, prevention of air pollution, toxic waste, and performing environmental impact assessments, and their ability to manage energy efficiency. 466 companies were evaluated in 2004–2005, with 23 companies (the top 5%) receiving the second-highest rank of "green" (no company has yet received the top rank of "gold").



PROPER certificate with rank of "green"

## Reduce

### •Mitsui Chemicals Inc. (Osaka, Ichihara)

Mitsui Chemicals executes plans in accordance with the Law for the Promotion of Effective Utilities of Resources, with measures including reduction of the generation of by-products (sludge). The generation of excess activated sludge from wastewater treatment is reduced by applying sludge micro-solubilization treatment (Osaka Works) and ozone treatment (Ichihara Works).



Sludge micro-solubilization treatment (Osaka Works)

## Reuse/Recycle

### •Mitsui Chemicals Polyurethanes Inc. (Kashima)

Mitsui Chemicals Polyurethanes' Kashima Works manufactures TDI, which is a raw material of Polyurethane. The plant uses supercritical water technology to efficiently recover raw materials from the residue.



TDI raw material recovery plant

### •Siam Mitsui PTA Co., Ltd. (Thailand)

Most of the landfill waste is excess activated sludge generated through wastewater treatment. This company started recycling this sludge with the collaboration of a cement company in the Siam corporate group, achieving a landfill minimization milestone.



### •Advanced Composites Mexicana S.A. DE C.V. (Mexico)

This company provides recyclable trash (e.g. waste resin and paper) to a fund for elderly persons as a CSR activity. The fund sells the trash and uses the money gained as a part of operating capital.



Collection site for trash donated to the fund for elderly persons

# Commitment to Environmental Impact Reduction

## Reduction of Releases of Chemical Substances

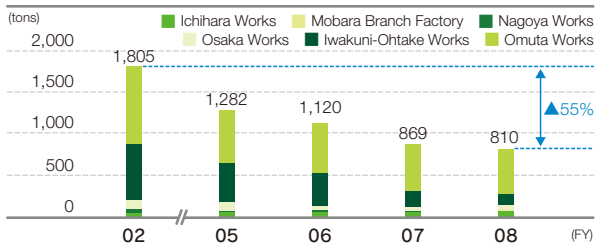
### Substances Subject to PRTR Law

In accordance with the "Law Concerning Reporting etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management (PRTR<sup>\*1</sup> Law)," Mitsui Chemicals reports to the Japanese government each year the amounts of the specific substances it produced or used which were released into the environment or transferred elsewhere. Releases of substances subject to the PRTR Law have been steadily reduced over the last six years, with the total amount released in fiscal 2008 reduced by 55% from that released in fiscal 2002.

\*1 PRTR: Acronym for Pollutant Release and Transfer Register.

**WEB** PRTR Data by Works

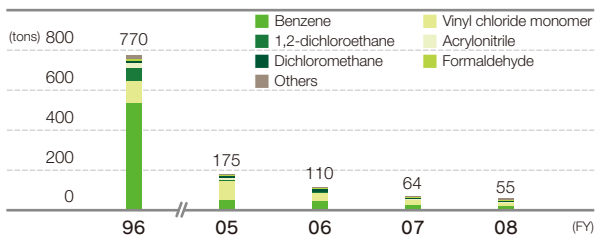
#### Trend in amounts released of substances subject to the PRTR Law



### Harmful Atmospheric Pollutants

Mitsui Chemicals is currently making proactive attempts to reduce releases of the atmospheric pollutants considered to pose a certain degree of health risk (priority substances) as specified under the Air Pollution Prevention Law, in accordance with our own voluntary guidelines. In fiscal 2008, our total company-wide releases of these substances were 55 tons. Omuta Works has reduced its releases of vinyl chloride monomers by 95% from the previous year, from detoxification measures started in fiscal 2007.

#### Trend in amounts released of harmful atmospheric pollutants

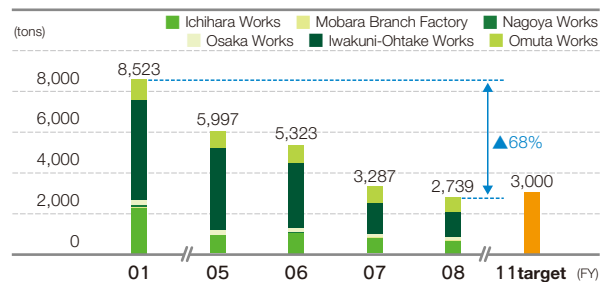


## Volatile Organic Compounds (VOC)

Under the Air Pollution Prevention Law as amended in May 2004, release of volatile organic compounds (VOC) is regulated. The government has set a goal of 30% reduction in amounts of VOC released from non-mobile sources by fiscal 2011 in comparison with fiscal 2001.

In fiscal 2008, our overall VOC emissions were 2,739 tons, an approximately 68% reduction from the level in fiscal 2001. We have thus achieved our voluntary target of 3,000 tons by fiscal 2011 three years early. We remain united in our company-wide commitment to further reducing VOC emissions.

#### Trend in amounts of VOC released



## Atmospheric Pollutant Risk Control

Mitsui Chemicals is controlling the atmospheric concentration of each potentially harmful chemical substance, based on the level of toxicity and estimated concentrations at the boundaries of its Works, so as to maintain levels that would not impact human health.

The concentration of a chemical substance at which effects appear is evaluated using the MOS<sup>\*2</sup> as an indicator. Since fiscal 2004, Mitsui Chemicals has taken countermeasures to ensure the MOS of its chemical substances is 1.0 or less.

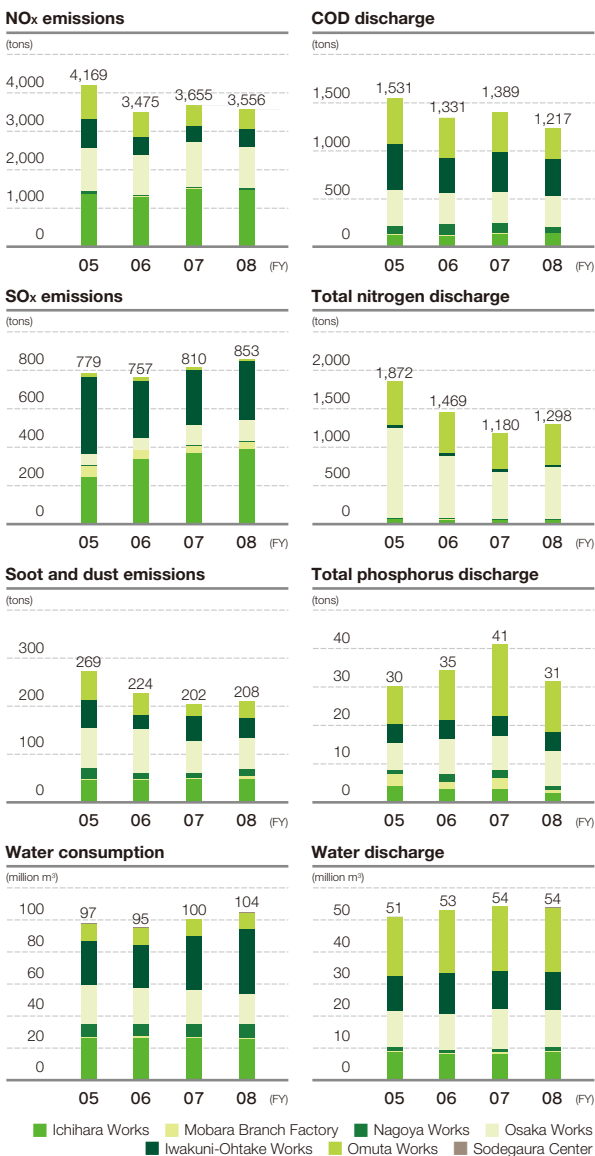
\*2 MOS (Margin of Safety): (estimated concentration of a chemical substance at the boundary of Works)/(maximum allowable environmental concentration or voluntary control concentration of a substance).

**WEB** Example of atmospheric dispersion calculations  
Prioritizing countermeasures through risk assessment

## Reduction of Air and Water Pollutants

Mitsui Chemicals is striving to reduce the load of atmospheric pollutants (NO<sub>x</sub>, SO<sub>x</sub>, soot, etc.) and substances that degrade water quality (COD, nitrogen, phosphorus, etc.), and currently in each case, the load is far lower than the standards set by relevant laws or ordinances. In addition, efforts are being made to reduce the load of water usage in our production activities through measures such as recycling 1,898 million cubic meters of water in our cooling towers each year.

### Changes in environmental load on the atmosphere and water



## Measures against Soil Pollution

Mitsui Chemicals takes appropriate measures against soil and underground water pollution.

In September 2007, dioxins and agricultural chemicals were detected in the soil of the Kyushu Shinkansen (Bullet Train) construction yard (inside Araki Station on JR Kyushu's Kagoshima Honsen Line). This construction yard is located adjacent to the old plant grounds (located in the city of Kurume, in Fukuoka prefecture) of our affiliate company Sansei Chemical Industry, which used to manufacture agrochemicals and halted operations in 1983. We responded by conducting a soil survey at the old plant grounds and taking appropriate measures, jointly with Sansei Chemical Industry and under the guidance of the prefecture of Fukuoka and the city of Kurume. We are currently taking appropriate action, including cooperation in soil surveys of the area around the site, and implementing countermeasures. The results of our soil and other surveys are published on an ongoing basis.

## Environment-related Complaints

Mitsui Chemicals received three environment-related complaints and took immediate, appropriate measures to deal with them.

### Complaints in fiscal 2008 and steps to respond to them

Works	Description of complaint	Response
Osaka	High flames and loud combustion noise from flare stacks	We reduced nighttime releases and increased daytime releases.
Omuta	Scattered dust from installation of conduit tubes	We enhanced our countermeasures, including blocking the gaps between the dust-screening sheets.
	Foul odors from containers broken during storage in warehouse	We moved the contents to new containers, and enhanced our management of items in storage.

### Staff Comment

We treat our industrial waste with constant awareness of economy and legal compliance. Our task is to find recycling subcontractors that match our budget in order to minimize industrial waste landfill. We promote recycling in partnership with our various departments by changing our treatment methods and sorting industrial waste.



**Yoshinobu Maki (Right)**  
Safety & Environment Sect., Safety & Environment Dept., Osaka Works

**Kenji Ito (Left)**  
Safety & Quality Dept., Osaka Office, MC Operation Support, Ltd.

# Commitment to Accident and Disaster Prevention

The Mitsui Chemicals Group is making proactive efforts to eliminate accidents, placing its highest priority on ensuring safety. Putting accident prevention first, Mitsui Chemicals is constructing a system that does not allow accidents to happen.

## Prevention of Accidents and Disasters during Production

### Ensuring Safety

The "Process Safety & Disaster Prevention Department," established by the Safety & Environment Division, acts as the nucleus for safety technology, with the aim of strengthening and enhancing the level of safety technology of the worldwide Mitsui Chemicals Group through support of safety evaluations and provision of safety and disaster prevention education.

*Functions of the Process Safety & Disaster Prevention Department*

- Consulting with regard to safety evaluation
- Checking safety at each stage of development
- Conducting safety evaluation testing and scoring
- Conducting safety and disaster prevention education
- Providing support and inquiring into causes in the event of accidents or other trouble
- Expanding and maintaining a safety information database

Each plant also has a plant safety engineer\*, and each worksite has a worksite safety engineer, who play leading roles in resolving safety issues specific to each plant. In fiscal 2008 in particular, safety engineers performed a comprehensive inspection to prevent gas explosions, made findings of risks, and implemented remedies.

\*Safety engineer (SE): Coordinates the resolution of safety issues.

### Evaluating safety at each stage (from research to installation and modification)

**Details of safety evaluation** Data collection, material risk evaluations (collect data on toxicity, fire, explosion, and danger of chemical reactions), process safety evaluations, equipment safety evaluations, safety measure evaluations, environmental impact, etc.

	Research					Installation/Modification			
	I	II	III	IV	V	Decision	Purchase order	Filing of forms	Work
Research environment safety conferences	←→								
Product safety conference					←→				
Safety evaluation meetings						←→	←→	←→	

### Staff Comment

Our plant safety engineers play a vital role in increasing awareness and understanding of safety technologies at each worksite in the plant, and ensuring the safety of processes, equipment, and work.

They collaborate with the plant's worksite safety engineers to eliminate accidents and disasters at the plant.



**Kazusada Sasatani**  
Safety & Environment Sect.  
Safety & Environment Dept.  
Osaka Works

## Plans and Drills for Local Safety and Disaster Prevention

To ensure safety in the case of emergencies, the Mitsui Chemicals Group conducts disaster training, including fire fighting, contacting the appropriate persons in charge in the event of emergencies and notification to the appropriate authorities. Annual plans are drawn up for each workplace and are implemented in accordance with the type of work being engaged in at each site. General disaster prevention drills involving entire Works are planned regularly and conducted together with the local public fire service and volunteer fire fighting units. Joint disaster prevention drills are conducted as training for mutual assistance among companies and involve exchanges with the local public fire service and neighboring companies.

We invite members from local community associations to observe the general disaster prevention drills involving entire Works, where they deepen their understanding of our disaster prevention and safety efforts.



General disaster prevention drill at the Iwakuni-Ohtake Works



Disaster prevention drill at Amoco Mitsui PTA Indonesia

## Safety and Disaster Prevention Education

We also focus on safety and disaster prevention education as a way to prevent accidents. Operators, production engineers, and researchers all receive training in a curriculum required for their jobs.

We plan to launch safety and disaster prevention education initiatives at our worldwide subsidiaries and affiliates as well.

### Safety and disaster prevention education

Target	Year 1	Years 2 to 7
<b>Operators</b>	Upon hire, after six months, after first year <i>Details of training</i> • Safety overview (experimental training for fire and explosion) • Basic knowledge of occupational injury and fire prevention • Refresh knowledge of prevention technologies and action items	• Upon promotion: group discussions, etc. • Five-stage safety training at plants via on-the-job training (safety stages 4 and 5 are for 8+ years of seniority)
<b>Production engineers</b>	Upon hire • Safety and environmental safety overview • Safety training (KYT)	• Safety evaluations (DOW/HAZOP) • Material safety evaluation (e.g. MSDS) • Safety engineering and accident information
<b>Researchers</b>	Upon hire • Safety and environmental safety overview • Safety training (KYT)	• Training in risks from materials and reactions, mixing hazard, and safety engineering (e.g. MSDS)



## Safe Logistics of Products

### Dialog with Logistics Contractors

The Mitsui Chemicals Group is teaming up with its logistics contractors to conduct safety activities.

About once a month, the department at each plant responsible for logistics and our logistics contractors hold Logistics Conferences, where we share information on logistics accidents and other matters, examine near-miss case studies, conduct site patrols and education, and work to enhance communication. We are also committed to preventing logistics accidents through RC audits of our logistics contractors and maintaining a safety dialog with on-site operators, based on a workplace-oriented approach.

### Safety Measures Using MSDS and Yellow Cards

Since we handle high-pressure gas, and many hazardous, toxic and deleterious substances designated by law, we practice great caution to ensure safety during product transportation.

In order to provide the logistics contractors with information about cautions they must take when handling and storing our products (e.g. danger or toxicity of products), we supply them with a material safety data sheet (MSDS). We also make it obligatory for the drivers or crewmen to carry a yellow card containing information on measures to take and information to be reported in the event of an accident when transporting our products.



Yellow Card

#### Staff Comment

As a logistics provider handling high-pressure gas, hazardous, toxic and deleterious substances on a daily basis, ensuring safety is a key challenge for us. We thus work in partnership with many other subcontractors to further enhance our RC activities, while continuing our safety patrols and practice of visual confirmation.



**Nobuyuki Shima**  
MCI Logistics (West), Inc.

## Efforts to Eliminate Logistics and Labor Accidents

Working in logistics involves many tasks that must be performed in high places. As an example, filling tanker trucks requires working at a height of at least three meters from the ground. As a crew safety measure, workers wear safety harnesses to keep them from falling. They are also required to wear protective gear to prevent heat and chemical burns.

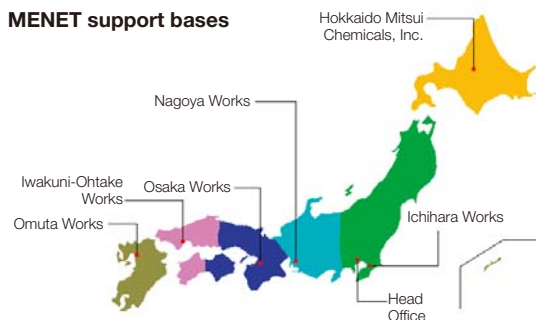


Filling a tanker truck

## Minimizing Damage in the Event of an Accident

The Mitsui Chemicals Group Logistics Emergency Network (MENET) is a group network for taking emergency action to minimize damage in the event of an accident while carrying a product. The network divides the country into six districts, each having a 24-hour mobilization readiness. We also conduct emergency contact and mobilization training twice per year.

#### MENET support bases



#### Director Comment

One of our safety and quality targets relating to logistics for fiscal 2009 is to completely eliminate tanker truck incidents, and the logistics department is united in its commitment to achieving this target. In order to accomplish this, we will revise our tanker truck operating manual, and ensure that all drivers follow it to the letter.

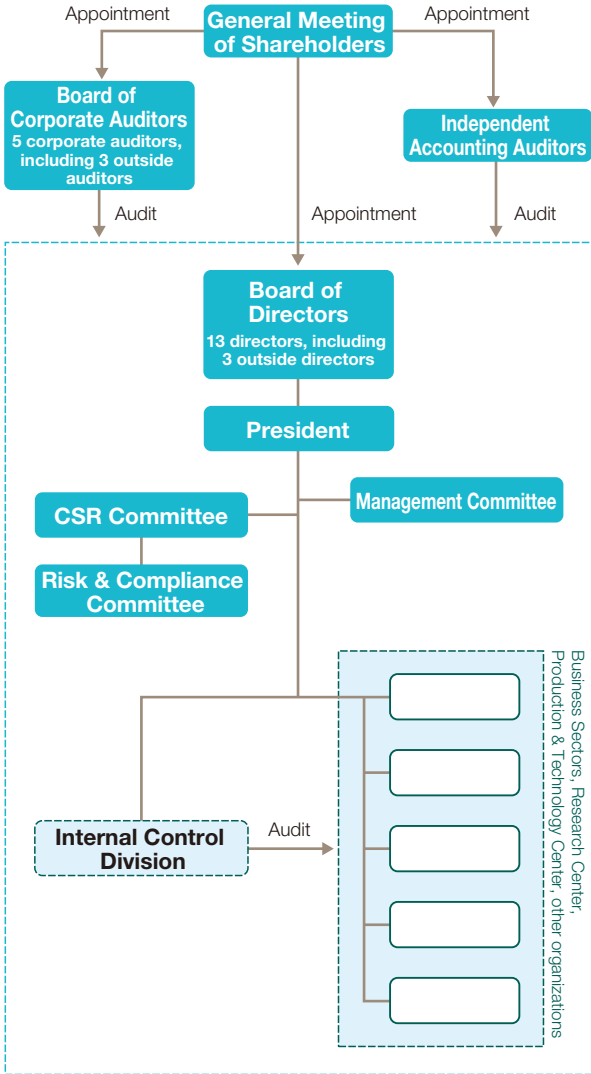


**Toshio Terasaki**  
General Manager  
Logistics Div.

# The Systems Supporting Our CSR Initiatives

At the Mitsui Chemicals Group, we are actively committed to the activities forming the foundation of CSR. Here, we report on our initiatives to win the trust of our stakeholders and fulfill our responsibilities to society.

## Corporate Governance Structure



# Corporate Governance

**We believe that enhancing corporate governance is a key management challenge for earning the trust of our shareholders, customers, local communities, and other stakeholders, and for fulfilling our corporate responsibilities to society.**

## Our Approach to Corporate Governance

To earn the trust of society and fulfill our corporate responsibilities to society, we are committed to continually improving the transparency of management. We have established a system for broad discussions through conferences created in accordance with company regulations when making key decisions. We have also built an internal control system through the selection of outside directors, and an emphasis on the roles of corporate auditors.

We are actively committed to external IR and public relations activities, and we ensure the validity of our corporate governance by disclosing information to our shareholders, the media, and others in an appropriate and timely manner.

## Status of Corporate Governance Measures

### Board of Directors

Our board of directors generally meets once per month, making decisions regarding key management issues. The board members receive reports about the status of operations, financial status, and business performance from each director, and supervise the executions of operations assigned to him or her.

### Executive Officer System

We have introduced an executive officer system in order to clearly delineate the roles of supervising operations and executing business processes. Through this system we are working to further strengthen and enhance our business readiness by speeding up management decisions and facilitating and accelerating the operations of each division.

## Corporate Audits and Internal Audits

Our corporate auditors attend key internal meetings, periodically exchange views with the company president and others, and receive and check approval forms from the executive officers and the minutes from key meetings. The corporate auditors also perform audits in collaboration with other organizations, exchanging views with independent accounting auditors and our internal control division regarding their respective annual audit plans and the results of audits.

## Management Committee

We established the Management Committee to discuss issues to be referred to the Board of Directors requiring prior discussion, as well as key issues concerning business management, thus enabling proper and efficient decision making. The corporate auditors attend meetings of the committee, and offer their views as necessary.

## Audits by Internal Control Division

We created our Internal Control Division in April 2007. This division audits the status and operation of internal control within the whole group in accordance with an annual audit plan, in order to comply with the Company Law and the Financial Commodities Trading Law.

Below are the specific items that the division focuses on.

- **Enhance capabilities to audit compliance with laws and regulations**

In fiscal 2008, we introduced audits at affiliates in Japan, including a self-assessment process relating to compliance with laws and regulations. In fiscal 2009, we will expand these audits to our business divisions, plants, and other sites.

- **Compliance with Financial Commodities Trading Law (submission of internal control reports)**

In fiscal 2008, we created a system for evaluating the status of internal control relating to financial reporting, in compliance with the Financial Commodities Trading Law. In fiscal 2009, we will assess the effectiveness of internal control of the first year in preparation for submission of internal control reports.

# Risk & Compliance Management

At the Mitsui Chemicals Group, we are committed to thoroughly managing all risks that threaten our business activities, in order to earn the trust of our shareholders, customers, local communities, and other stakeholders, and fulfill our corporate responsibilities to society.

## Risk Management System

### Risk & Compliance Committee

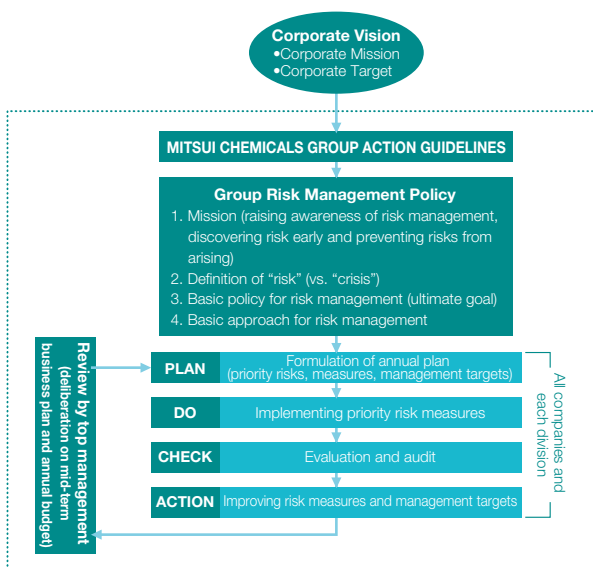
We have established a Risk & Compliance Committee headed by the board director in charge of risk management. The committee reviews our risk management policy and maintains and operates our risk management system, in accordance with our regulations for risk management.

### Group Risk Management System

We introduced the Mitsui Chemicals Group Risk Management System in order to discover risks early and prevent risks before they materialize. The figure below illustrates how this system manages risks.

The system also ensures the implementation of a PDCA cycle for the risk management of line operations, for which the company president has ultimate accountability. It has boosted our readiness to prevent risks to the entire group on a day-to-day basis, including our subsidiaries and affiliates.

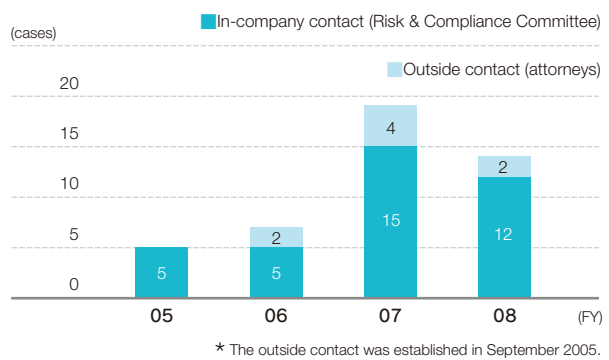
#### Scheme of the Group Risk Management System



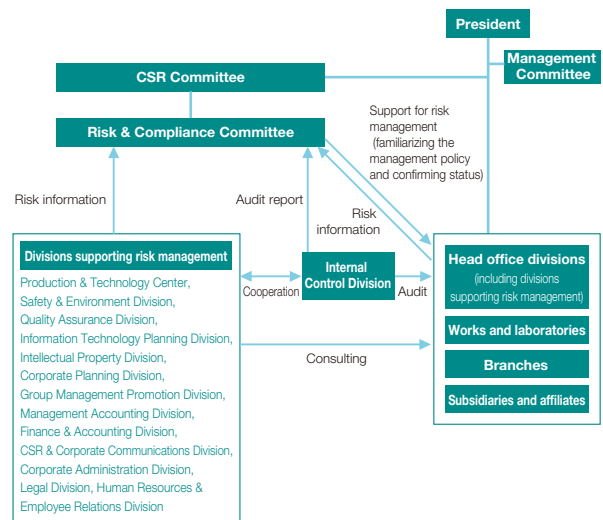
## Risk Hotline

Our risk hotline enables a group employee who has obtained information about risk (for example, illegal activities going on within the company) to report the information and consult directly with the Risk & Compliance Committee, or an outside attorney. Our company regulations clearly state that any employee utilizing this hotline to report or seek advice about an incident must not receive unfavorable treatment.

#### Trends in risk hotline use



#### Organization of the Group Risk Management System



## Business Continuity Plan

We have created a business continuity plan (BCP)\* in preparation for a major earthquake in the Tokyo metropolitan region. The plan calls for the creation of an emergency headquarters to quickly establish a command and control structure if the functioning of the head office becomes paralyzed, and emergency customer response centers to provide prompt and appropriate support to our customers. We have also created BCPs for outbreaks of new strains of influenza and for large-scale accidents at our plants.

\*Business Continuity Plan (BCP): A plan that minimizes the decrease in business activity levels in the event of disasters or accidents causing damage in order to recover as early as possible.

## Compliance Training

It is necessary and essential for compliance that each employee be completely aware of the need for compliance, and have full knowledge of the laws and regulations that must be observed. Our group thoroughly practices three different methods to promote this: awareness-raising training to increase awareness of compliance; training on observance of laws and regulations to advance knowledge of compliance; and a compliance guidebook, which employees can refer to at any time.

### Compliance Manuals

In 2003, our group created a compliance guidebook with important information for carrying out observations, in order to ensure thorough awareness and knowledge of compliance by all employees. The 2006 edition was distributed to all group employees. We place special emphasis on this need, because in the past we have been fined and ordered to take corrective measures for violation of the Antitrust Law.

As a measure to prevent recurrence, we revised our manual for compliance with the Antitrust Law and distributed it to all group employees.

We use these manuals to promote compliance on a continual basis.



Left: Antitrust Law Compliance Manual (Japanese version only)  
Right: Compliance Guidebook

## Awareness-raising Training

The most important requirement for thorough compliance is the awareness of each officer and employee. Meanwhile, however, the necessary awareness differs depending on each individual's position in the company. We thus provide awareness-raising training for compliance tailored to every level from executive management to new hires. Executive management and the heads of divisions receive education from attorneys with practical experience in compliance, and university professors.



Our goal is for each level in the hierarchy to take the initiative and set an example for others, thus spreading awareness of compliance throughout the group and creating an open corporate culture.

## Training and E-learning on Observance of Laws & Regulations

Our group provides training on observance of laws and regulations in order to improve knowledge of compliance matters. The training course is currently divided into 15 subjects, each dealing with a specific law that is vital for our employees to know.

The training courses generally take the form of group classes held two or three times a year, but we introduced an e-learning system in fiscal 2006 in order to eliminate limitations of time and location, and make taking the training more convenient. E-learning classes have been created for 12 subjects.

The subjects that each employee must take are determined by his or her duties. We have also made it mandatory for employees to take each course again three years later, to ensure that they have the latest knowledge on necessary items. As of fiscal 2008, a cumulative total of about 17,000 people have undergone training.

In fiscal 2008, we started providing more advanced e-learning to employees working at manufacturing sites regarding the High-Pressure Gas Safety Law and Fire Service Law.

# Responsible Care Management

The Mitsui Chemicals Group is promoting responsible care (RC)\* initiatives to harmonize our operations with the environment as stated in our Corporate Mission, as well as to ensure employees' safety and health, facility and product safety and to reduce our environmental impact.

## Basic Policy Regarding the Environment, Safety, Occupational Health, and Quality

The Mitsui Chemicals Group is developing business activities based on a corporate mission which states: "Contribute broadly to society by providing high-quality products and services to customers through innovations and creation of materials and products while keeping in harmony with the global environment." We conduct our business and manufacturing activities within the spirit of the Mitsui Chemicals Group Action Guidelines, with a high regard for customers recognizing that complying with laws and regulations and securing environmental preservation and safety are fundamental to corporate management.

We are implementing this basic policy in relation to the environment, safety (disaster prevention, product safety, occupational safety), occupational health and product quality.

### 1. The Environment

- Contribute to environmental preservation by developing new products and technologies.
- Assess and reduce the environmental impact of products through their entire life cycles, from product research and development to final disposal.

### 2. Safety and Occupational Health

- Give priority to securing safety, and aim for accident-free and injury-free operations.
- Promote the formation of an appropriate work environment and support for health enhancement of employees.
- Implement safety measures and procedures in handling chemical substances to prevent injury or harm to people connected with our activities, i.e., customers, employees and others involved in construction and logistics.

### 3. Quality

- Supply high-quality products and services that earn the trust and satisfaction of customers so that customers feel confident when using products for their intended applications.

### 4. Promoting Self-management

- Strive for continuous improvement in measures by way of self-management related to the environment, safety, occupational health and product quality, beginning with compliance with all applicable laws and regulations based on the principles of RC.

Established October 1, 1997  
Revised April 1, 2006

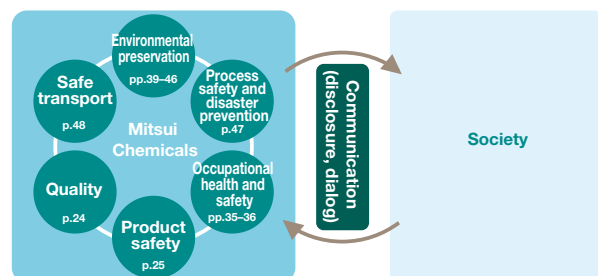
\*Responsible Care: RC encompasses all those activities implemented by manufacturers of chemical substances, of their own accord and out of a sense of responsibility, in order to avoid pollution of the environment through the entire product life cycle with self-management and responsibility. These activities include improvements to methods and processes undertaken in order to preserve the environment or to protect the health of the general public, to protect employees' health, and to prevent damage to facilities. For further details, please visit the website of the Japan Responsible Care Council (JRCC).  
[http://www.nikkakyo.org/organizations/jrcc/top\\_e.html](http://www.nikkakyo.org/organizations/jrcc/top_e.html)



## RC Management System

Mitsui Chemicals positions RC as a pillar of our business management philosophy and is promoting it in all areas, from environmental preservation, safety and disaster prevention to occupational safety and health, product safety, quality, logistics safety and social communications. In concrete terms, we are working proactively to comply with legal regulations and to minimize potential risks, disclosing information in relation to these, and building a management system integrating an environmental management system (ISO 14001, year 2004 version), a quality management system (ISO 9001, year 2000 version) and the Occupational Health and Safety Assessment Series (OHSAS 18001). We are introducing similar systems at our subsidiaries and affiliates so as to promote RC activities throughout the Mitsui Chemicals Group.

### Relationship between Mitsui Chemicals' RC Management System and society

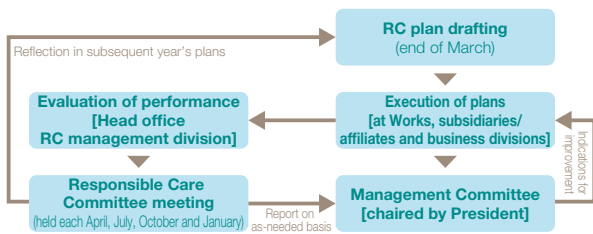


## RC Promotion System

The Responsible Care Committee (RC Committee), chaired by senior managing director of the environment, safety and quality and including the executive director of occupational health, all general managers of Works, all general managers of administration divisions, the manager of the Safety & Environment Division and the manager of the Quality Assurance Division, takes the lead in drafting policies, strategies and plans, evaluating RC performance and reviewing the RC promotion system four times a year. In addition, by reporting the minutes of each of these discussions to Management Committee, we enhance the involvement of executive management in the RC promotion system and create a transparent management system.

A specific example of an RC activity is having people responsible for RC promotion (business sector presidents) in each division take the lead in promoting RC at each Works, subsidiary/affiliate or division.

**Responsible care activities scheme**



**Acquiring International Standard Certifications**

Mitsui Chemicals has acquired certifications under international standards for quality, environmental preservation and occupational safety and health. All Works have been certified under ISO 9001: 2000, ISO 14001: 2004, and OHSAS 18001.

Mitsui Chemicals Group promotes certification by ISO 9001: 2000 and ISO 14001: 2004 international standards at domestic and overseas subsidiaries and affiliates.

**WEB** [Status of international certifications and RC audit results at group companies](#)

**RC Audits**

**Audits of the Environment, Safety, Occupational Health and Quality at Manufacturing Sites**

The internal audits of environment, safety, occupational health and quality for MCI's Works and Research Center laboratories are conducted at the end of each fiscal year and focus on the degree of accomplishment of the respective annual goals. The panel of auditors consists of the RC executive director, the RC managers of the relevant departments and other internal RC specialists. They not only hear reports but also conduct on-site field audits and hold meetings with site managers to exchange information in order to conduct audits suited to each site.

The fiscal 2008 audit was conducted with a focus on confirming the status of safety initiatives implemented by manufacturing section managers, and communication with worksite operators regarding the environment, safety, occupational health, and quality.

**Legal Compliance Audits at Manufacturing Sites**

Legal compliance efforts are a key part of the Mitsui Chemicals Group Action Guidelines, which all managers and employees are obliged to observe at all times. We are making a group-wide concerted effort toward compliance as a point of major emphasis. In addition to legal compliance audits (performed by the Safety

Audit Department of Works and the Safety & Environment Department, Audit Sections of Works) and autonomous audits for safety certifications (performed by the Safety Audit Sections of Works) necessary to achieve thorough legal compliance, a double-check audit is being performed by the Audit Department of Safety & Environment Division at the Head Office.

In fiscal 2008, we conducted legal compliance audits two times each at five of our domestic Works with regard to seven laws, including the High-Pressure Gas Safety Law, Fire Services Law, Water Pollution Control Law and Air Pollution Prevention Law. Our four Works that have obtained voluntary safety certification according to the High-Pressure Gas Safety Law were also audited concerning safety certification practice inspection and completion of certification inspection one to three times at each Works.

**Environment, Safety, Occupational Health and Quality Audits for Subsidiaries and Affiliates**

At Mitsui Chemicals, extensive audits of our subsidiaries and affiliates concerning RC activities are conducted by the relevant divisions in charge of respective subsidiaries and affiliates, and the Safety & Environment Division and the Quality Assurance Division. These units conduct investigations and evaluations of RC management based on reports from individual companies and inspection at sites. They also provide advice and guidance concerning remedial measures for the efforts at each company and they facilitate exchange of RC-related information. Additionally, these audits ensure that the excellent work of individual companies spreads to other companies.

In fiscal 2008, environmental and safety audits were conducted for 24 domestic and overseas subsidiaries or affiliates (29 Works) and quality audits for 30 domestic and overseas subsidiaries or affiliates (35 Works).

**Staff Comment**

Last year, ADC achieved RC 14001\* and ISO 14001 certifications encompassing environmental, health, safety, and security (EHS&S). RC 14001 combines ACC's Responsible Care® initiative with ISO 14001. Led by a cross functional team, with strong management support, we attained certification in 10 months. Our integrated management system, incorporating ISO 9001, promotes EHS&S improvement and assures quality products and services.



**Christopher A. Goeloe**  
Environmental & Quality Manager  
Anderson Development Company

\*RC 14001: A technical specification for the environment, health, safety, and security incorporating ISO 14001 into the American Chemistry Council's RC standard.

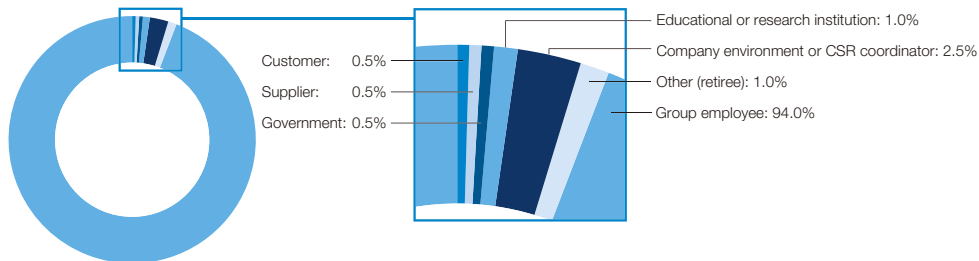
# We Use Feedback from Inside and Outside the Company to Improve Our CSR Activities and Reports

## Results of CSR Report 2007 Survey

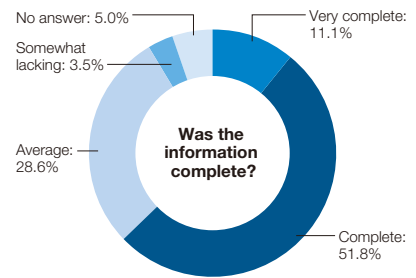
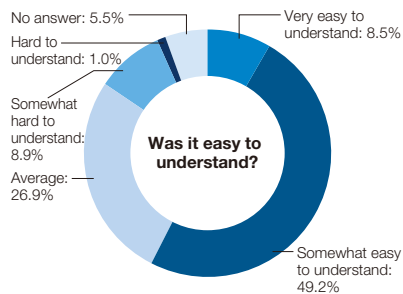
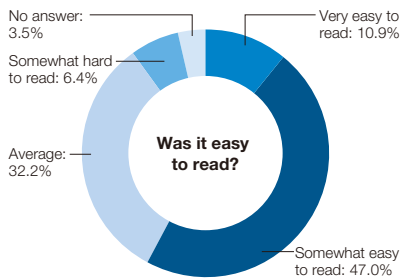
We conduct a survey to gain feedback from a wide range of people—both from inside and outside the company—in order to improve our future CSR activities and reports.

As of May 30th, 2008, we have received 202 responses (12 from stakeholders outside the company). Thank you for your valuable feedback. See below for the results of the survey.

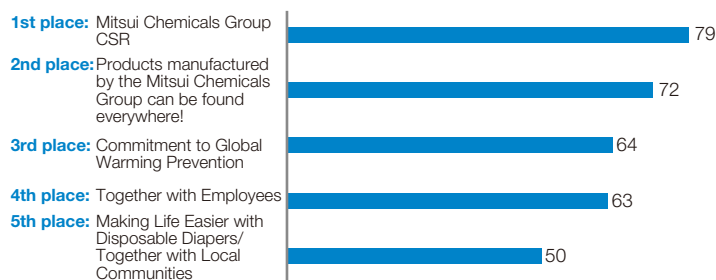
### Q1 What is your relationship to Mitsui Chemicals?



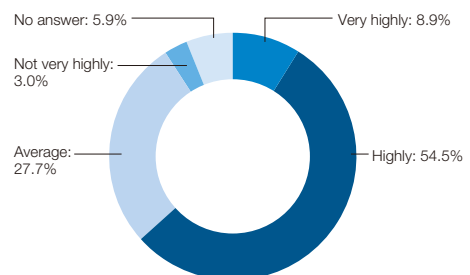
### Q2 What did you think of the report?



### Q3 What sections interested you? (Multiple response)



### Q4 How would you rate the CSR activities of the Mitsui Chemicals Group?





## Views from Outside the Company

### Feedback from the survey

- It was a good report. It communicated the company's sincere attitude. (Supplier)
- I liked the fact that there were both top-down and bottom-up initiatives. (Customer)
- The initiatives in "Together with Employees" were better than those of other companies. (Educational or research institution)
- The system for evaluating performance along the three axes of economy, environment, and society, and the activities of the CSR supporters were wonderful. (Company environment or CSR coordinator)
- I hope you will aim to make an inspiring CSR report. (Company environment or CSR coordinator)
- As a leader in the field of chemistry, you should emphasize areas that Mitsui Chemicals is focusing on in particular. (Company environment or CSR coordinator)

### Third-party Comments on CSR Report 2007

#### By Scott Davis (Professor, Rikkyo University)

- There were a number of examples of activities run top-down and bottom-up, but Mitsui Chemicals' [CSR] promotion system is a particularly outstanding example, and I am looking forward to future reports of its accomplishments.
- I was impressed by the Grand Design, which is organized in an easy-to-understand way. Although GHG emissions are a major topic of the report, I hope you will set more numerical targets.
- The policy for reporting by each stakeholder group was easy to understand. Explaining the process for holding a dialog with each stakeholder group was also outstanding. More specific targets and disclosing results should further improve the quality of the report.

#### By Masaru Masuda (Professor, Ochanomizu University)

- I can understand how you define CSR as contributing to your stakeholders through your main business. Although many of your efforts are probably praiseworthy, such as your CSR programs, there are several areas that could be improved, such as the fact that your steady efforts through your main business are not communicated sufficiently.
- Although you emphasize legal compliance throughout the report, I feel that you should express frankly your attitude of taking on challenges of your own volition.
- I hope that rather than try to implement and report on CSR activities that will please everyone, you will create a CSR report that will stimulate the reader's mind, comprehensively describing the activities of your main business with a wealth of primary data.



### Main Improvements Incorporated into CSR Report 2008

Below are some of the improvements we made to CSR Report 2008 based on the third-party feedback and results of our survey.

- (1) We disclosed more numerical targets for GHG emissions.
- (2) We continue to publish information about our supporters system, which are a cornerstone of our CSR activities.
- (3) We added content that would express the innovation and energy at our many manufacturing sites, and our initiatives to creating excitement and inspiration through our main business.
- (4) Global warming was a major topic of the G8 Summit in Toyako, Hokkaido and elsewhere, and we took particular pains to comprehensively describe our efforts to prevent global warming through our main business.
- (5) We put even more effort into making the report readable, focused on key points, and ranking of topics. For example, we made the report more readable by investigating the most readable text colors and sizes. We also added more articles about preventing global warming to show a focus on key points and ranking of topics.
- (6) We introduced new activities contributing to society.
- (7) We made improvements to enhance understanding of our key initiatives by increasing the number of pages devoted to features and dialogs, and communicating more details about them.

# Third-party Comments on CSR Report 2008



**Prof. Scott Davis**

Professor  
College of Business  
Rikkyo University

**Strategic integration** A corporation which is serious about fulfilling its social responsibilities and contributing to the increased wellbeing of society as a business, sets social and environmental performance goals as an integral part of its corporate strategy. Mitsui Chemicals clearly integrates its business, social and environmental goals by means of its 10-year Grand Design released in 2007 and explained on pages 7 and 8. This years report presents a set of concrete goals to be achieved during the 2008 Mid-term Business Plan in order to reach the Grand Design's final targets. These mid-term goals have been expanded for 2008 to include a wide and balanced range of quantitatively defined targets for financial (profit, ROA), workplace (accidents and injury rates) and environmental performance (greenhouse gas emissions and waste disposal) and therefore represent a vast improvement over those set for 2007 and a serious commitment to realizing the mission of contributing to society as a manufacturer of chemicals and plastics as set out in the President's message.

**Objective self-evaluation** The quality of a CSR initiative is reflected in the extent to which a corporation is willing to see itself from an objective-external perspective and critically review its achievements. This years report provides an excellent review of the progress made in achieving the strategic goals for governance, social and environmental performance using the table on pages 21-22. Particularly impressive is the severe evaluation criterion that Mitsui Chemicals applies to itself with achievement rates of anything less than 70% being considered an unsatisfactory performance level. Negative information rarely finds its way into the CSR Reports of Japanese corporations. It is even more rare for a parent company of a large corporate group in Japan to report on the misdeeds of a subsidiary company, give a structural analysis of the factors contributing to the misdeed, and explain the actions to be taken by the parent to prevent its recurrence. By giving just such an account of the misdeeds of the Mitsui Chemicals Fabro Corporation on page 23, Mitsui Chemicals clearly shows the extent of its commitment to responsibility.

**Employee-driven initiative** Mitsui Chemicals claims – as do many other corporations – that its CSR initiative is driven by the input and involvement of its employees. For Mitsui Chemicals this claim is clearly true. The close involvement and critical role played by employees is shown in the CSR Supporter System, the role of employees in the three initiatives showcased on pages 11 to 15, and the employee dialog on pages 17 to 20. Most importantly, however, is the fact that Mitsui Chemicals designs its human resources management system in a way that enables and also promotes this form of involvement. The Mitsui Chemicals Group HRM Policy presented on page 31 is excellent. Not only does it concretely explain the corporation's requirements of its employees, but also the role that HRM must fulfill in order to ensure the wellbeing and growth of the employees.

Mitsui Chemicals has presented an excellent report. I look forward to seeing more objective self-evaluation, innovation and employee initiative in 2009.



**Prof. Karl-Heinz Feuerherd**

Visiting Professor  
Department of Environmental and  
Cultural Studies, Faculty of Humanities  
Kobe Yamate University

Mitsui Chemicals is a major manufacturer of chemical products with a proven record of performance. As such, it was extremely challenging to write a third-party opinion on its CSR Report 2008. The reason is because as an outsider, it is extremely difficult to obtain accurate information about the company down to fine detail.

It is easy for stakeholders to understand that Mitsui Chemicals is using its "Grand Design" (whose purpose is to balance revenue targets with environmental targets) as a management compass. For example, the report clearly states two of its environmental targets: reducing its greenhouse gas (GHG) intensity index, and the volume of landfilled industrial waste. The company's decision to focus on developing technologies utilizing non-fossil resources in order to achieve these targets is also worthy of note, because switching to carbohydrate raw materials by taking advantage of production-process technologies that make efficient use of hydrocarbon raw materials is no simple task. I believe that in its actual initiatives, Mitsui Chemicals' expertise in catalysis technology will facilitate this switch. If the company can achieve this, it will stimulate the entire chemical industry, and should lead to dramatic progress. I hope to see many examples of success.

Publishing data about business activities and environmental impact in a consistent format is essential for judging the effectiveness of newly developed technologies and reductions in GHG emissions. "Eco-efficiency" captured the attention of industry, and the company had already introduced its own unique yardstick based on this approach in the late 1990s. The trends in the eco-efficiency indicator and environmental load indicator show continuous improvement since then. I look forward to reading about the continuation of this trend in future CSR reports.

Mitsui Chemicals' focus on creating an environment that enables each employee to act on his or her own initiative is noteworthy. What cannot be ignored is the fact that the company places a huge emphasis on internal communication at each stage. Also worthy of note is the fact that the group has selected roughly 460 CSR supporters from each workplace in its group, including subsidiaries and affiliates; and these supporters form the core of the group's CSR efforts, each working actively from his or her situation and vantage point. The company also considers communication with its stakeholders vital for earning the trust of society. There is much we can learn from its methods for maintaining a dialog with its stakeholders, especially with the residents of the communities around its plants. I hope that the company will continue these types of efforts.

In addition to the analysis above, I believe that by taking an actual plant tour, I was able to get a sense that the thinking of the people in charge of these efforts has gained fairly substantial traction within the company, including their thoughts on safety, the environment, and communication with local communities.

## Thank You for Your Feedback

Hiroshi Tokumaru, Managing Director

Thank you for your valuable feedback regarding the group's CSR activities. At the Mitsui Chemicals Group, we are actively committed to CSR aiming at earning the trust of society. We will continue to enhance these activities, placing a premium on active two-way communication. It is essential to both "receive"

– listen to what our stakeholders have to say – and "transmit" – actively provide information about our corporate activities in order to win the trust of society. We will use your feedback to help us further improve our CSR activities.

## Commendations from Society

Recipient	Award name	Reason for award	Sponsor
Ichiyama Works, Mitsui Chemicals, Inc.	Fire and Disaster Management Agency Director's Award	Operating site with outstanding hazard management	Fire and Disaster Management Agency
	JCIA/JRCC Safety Award	Outstanding safety operations	Japan Chemical Industry Association (JCIA)
Mobara Branch Factory, Ichiyama Works, Mitsui Chemicals, Inc.	Silver Certificate (letter of appreciation)	Support for blood donation programs for over 15 years	Japan Red Cross Society
Nagoya Works, Mitsui Chemicals, Inc.	Promoting community beautification and protection	Contribution to beautification to Route 23 roadside and environs for many years	Chubu Regional Bureau, Ministry of Land, Infrastructure, Transport and Tourism
	Energy efficiency in clean rooms	For reduction of 442 tons CO <sub>2</sub> equivalent through energy savings from dispersion control at large 2,000 m <sup>2</sup> clean room	Japan Association of Refrigeration and Air-Conditioning Contractors
Omuta Works, Mitsui Chemicals, Inc.	Long-term Zero Accidents Award	No accidents (days away from work cases) for two years	Omuta Labour Standards Association
Shimonoseki Mitsui Chemicals, Inc.	Governor's Award for Excellent Business Establishment in Preventing Global Warming	Measures to prevent global warming	Yamaguchi Prefecture
Ohio Plant, Advanced Composites, Inc.	Special Award	No days away from work cases between March 23rd, 2006 and April 3rd, 2007 (658,812 hours)	Ohio State (selected for and presented with award by Shelby County) (United States)
Mitsui Advanced Composites (Zhongshan) Co., Ltd.	Spiritual Civilization Construction Top Firm Award	Excellence in activities that promote the creation and development of spiritual civilization	Totchi Development District Council, City of Zhongshan (China)
Mitsui Phenols Singapore Pte Ltd.	Annual Health & Safety Performance Award 2007 (Gold Award)	Excellence in safety performance and environmental safety and health management system	Ministry of Manpower (MOM) (Singapore)
Thai Pet Resin Co., Ltd.	2007 EIA Monitoring Award	Excellence in management of environmental response	Ministry of Natural Resources and Environment (Thailand)
Siam Mitsui PTA Co., Ltd.	Plant Safety Award	Excellence in safety performance and environmental safety and health management system	Ministry of Industry (Thailand)
Grand Siam Composites Co., Ltd.	Thailand 5S Award (Gold Award)	Excellent TPM and 5S activities	Technology Promotion Association (Thailand/ Japan)

## History of Activities for Sustainable Growth

	Initiatives of the Mitsui Chemicals Group	Trends in Japan	World trends
2000s	2008 Jan. Participation in the UN Global Compact 2007 Mar. 3rd Mitsui Chemicals International Symposium on Catalysis Science Feb. Grand Design formulated	2007 Prime minister Shinzo Abe announces "Cool Earth 50" integrated strategy for reducing greenhouse gases	2007 Discussion of reductions in GHG emissions by half by 2050 (G8 Summit 2007 Heiligendamm, Germany) European REACH came into effect
	2006 Apr. Human Resources Management Policy, Purchasing Policy and Social Activities Policy formulated Singapore International Symposium held (Singapore) Feb. Mitsui Chemicals Group Action Guidelines established	2006 Financial Commodities Trading Law announced New Company Law enacted Act on Asbestos Health Damage Relief enacted	2006 3rd edition of the Sustainability Reporting Guidelines of the GRI published WEEE, RoHS Directive came into effect
	2005 Nov. 1st assembly of the CSR Committee Sep. First issue of CSR Report published (Japanese version) Jun. CSR Committee, Social Activities Committee and CSR Division established Mar. 2nd Mitsui Chemicals International Symposium on Catalysis Science	2005 Act on the Protection of Personal Information enacted	2005 Kyoto Protocol enacted
	2004 Aug. ISO 9001, 14001 and OHSAS 18001 certifications acquired at all Works Nov. Mitsui Chemicals Symposium at ISIS-ULP (France)		2004 ISO decision to standardize CSR Stockholm Convention on Persistent Organic Pollutants enacted Globally Harmonized System of Classification and Labeling of Chemicals (GHS) published
	2003 Oct. New human resources system introduced Mar. 1st Mitsui Chemicals International Symposium on Catalysis Science	2003 Japan Business Federation established Social Responsibility Management Committee Japan Association of Corporate Executives published Corporate White Paper <i>Market Evolution and CSR Management: Toward Building Integrity and Creating Stakeholder Value</i> Law Concerning the Examination and Regulation of Manufacture, etc. of Chemical Substances amended International Conference on Green and Sustainable Chemistry held	2003 3rd World Water Forum held (Japan)
	2002 Oct. Framework for environment-related business established Jun. OHSAS 18001 certification acquired (Nagoya Works) Apr. Risk Management Committee established Mar. ISO 14001 certification acquired (Omuta Works, Osaka Works, Shimonoseki Mitsui Chemicals, Inc.)	2002 Soil Pollution Prevention Law enacted Kyoto Protocol ratified Cabinet Order of the Waste Management and Public Cleansing Law amended	2002 The Johannesburg Summit held Report of the OECD Environmental Performance Review on Japan published Guidelines for Waste Plastics (Basel Convention WG) adopted Sustainability Reporting Guidelines 2002 of the GRI published
	2001 Jun. Eco-efficiency, environmental accounting introduced Mar. ISO 14001 certification acquired (Ichiyama Works) 2000 Oct. Company-wide Mental Health Promotion Project formulated Jan. First issue of the Responsible Care Report published	2001 Law Concerning Special Measures for Promotion of Proper Treatment of PCB Wastes enacted 2000 Law Regarding the Promotion of the Use of Recycled Resources amended Green Purchasing Law enacted Basic Law for Establishing the Recycle-based Society enacted	2001 COP7 (Marrakesh Conference) held International Freshwater Conference held (Germany) 2000 2nd World Water Forum held (Netherlands) COP6 (Hague Conference) held Sustainability Reporting Guidelines of the GRI published
	1999 Oct. Voluntary guidelines for the reduction of atmospheric emissions (by 2005) formulated	1999 PRTR Law enacted Law Concerning Special Measures Against Dioxins enacted	1999 United Nations proposal for the Global Compact COP5 (Bonn Conference) held
	1998 Apr. 1st assembly of the Responsible Care Committee Sludge decomposition process using ozone introduced (zero emissions)	1998 Law Concerning the Promotion of the Measures to Cope with Global Warming enacted	1998 COP4 (Buenos Aires Conference) held
	1997 Oct. Corporate Vision and basic policies on the environment, safety and quality formulated Mitsui Chemicals, Inc. founded through a merger of Mitsui Petrochemical Industries, Ltd. and Mitsui Toatsu Chemicals, Inc.	1995 The Japan Responsible Care Council founded	1997 COP3 (Kyoto Conference) held Kyoto Protocol adopted 1st World Water Forum held (Morocco) 1992 United Nations Conference on Environment and Development (Earth Summit) held (Rio de Janeiro, Brazil) Rio Declaration on Environment and Development adopted Agenda 21 adopted

### Editor's Notes

The CSR Report Working Group (see below) edited this report to expand the information in the report and make it more understandable, using feedback from our stakeholders as a reference. It is our hope that this report will broaden our dialog with our stakeholders.

**Yuka Kawai** (Business Planning & Development Div., Performance Materials Business Sector)  
**Yukihito Yukimune** (Administration & Accounting Div., Advanced Chemicals Business Sector)  
**Toshihiro Komoto** (Administration & Accounting Div., Basic Chemicals Business Sector)

**Atsushi Nakamura** (Safety & Environment Div.)  
**Akio Matsunaga** (Quality Assurance Div.)  
**Yutaka Watanabe** (Purchasing Div.)  
**Takako Kawabata** (Logistics Div.)  
**Reiko Abe** (Research Center, Planning & Coordination Div.)  
**Shigeru Hirata** (Corporate Planning Div.)

**Yoshinori Takatama** (Group Management Promotion Div.)  
**Yusuke Katayose** (Human Resources & Employee Relations Div.)  
**Sachiko Saito** (Corporate Administration Div.)  
**Jiyu Fukakura** (Legal Div.)  
**Takao Ouchi, Jun-ichi Imuta, Takeshi Nonaka, Tomoko Mihashi, Ritsuko Fukuda** (CSR & Corporate Communications Div.)

# CSR Supporters for the Third Term

## 1 Hokkaido Mitsui Chemicals, Inc.

Kasumi Ebina Yoshifumi Jumonji Masahisa Yamane

## 2 Tohoku Uloid Industry Co., Ltd.

Jun Ikeda

## 3 Sankyo Agro Co., Ltd. Sendai Branch/Funaoka Works

Shingo Saida Hiroyuki Suzuki

## 4 Mitsui Chemicals Fabro, Inc. Katsuta Works

Kimitake Iino Masahiro Suzuki

## 5 Mitsui Chemicals Polyurethanes, Inc. Kashima Works

Haruhiko Noguchi Junichi Nonaka Nobuyuki Miyauchi

## 6 Ichihara Works

Shinji Ai	Taeko Sakashita	Susumu Fujii
Kazuaki Ishii	Hiroyuki Sakayama	Yasuhiro Hongo
Minoru Ida	Masami Sakuma	Junichi Matsui
Tomonori Ito	Mitsuhiro Sato	Yoichi Matsubara
Jun Iwaya	Hidetomi Suzuki	Takeshi Mimura
Hitoshi Unozawa	Yoshihiro Suzuki	Katsumi Miyata
Ken Omori	Takashi Terada	Kenji Mutsuzaki
Yuji Okazaki	Hideaki Dobashi	Mikio Mori
Harumi Okamoto	Shigenori Nagase	Yoshihiro Mori
Shingo Obara	Koichi Nakoso	Kaai Yashiro
Hiroaki Kaneko	Tadashi Nishimura	Naohiro Yamada
Tatsuya Gawa	Yoshio Nozaki	Jun Yamamoto
Hikonoru Kan	Koji Noda	Kenji Yamamoto
Toru Kikuya	Koji Hatakenaka	Hiroaki Yoneji
Kensuke Kobayashi	Naomitsu Harada	Keiji Watanabe
Atsushi Sakai	Tomoharu Hirota	

## 6 Mobar Branch Factory

Yoshiaki Ai	Hisao Kokubo	Yuki Nakae
Tadashi Araki	Yumi Kobayashi	Kazuki Nakamura
Toshio Ando	Noriko Saito	Tatsuya Noguchi
Miwa Ikeda	Shingo Sakurai	Yoshihiro Fujita
Akio Ito	Takashi Shimada	Hirokazu Mitsuhashi
Hisashi Ezawa	Kiyoshi Takahashi	Kanemitsu Miyama
Masakatsu Kono	Tsuyoshi Tsuruoka	Yoshiyuki Yarimizu
Daisuke Kawamura	Tatsuya Todo	Haruo Yoshino
Hiroyuki Kuroki	Mami Nagai	

## 7 Mitsui Chemical Analysis & Consulting Service, Inc. Shonan Analysis Division

Hirokazu Matsuki

## 8 Head Office

Satoshi Ishikawa	Satoko Komatsu	Yuri Nakamura
Toshifumi Ishibashi	Yasumi Sasaki	Atsushi Nishioka
Yukiko Itsukaichi	Junsuke Sasakura	Natsuko Noguchi
Kenji Ito	Akira Sato	Hiroko Haga
Hiromi Inada	Kenichi Sarashino	Hironobu Hashimoto
Yuko Ibuki	Mariko Shibata	Keiko Fujimoto
Hideto Irie	Nobuhiro Shimoura	Masanao Fujiyoshi
Takashi Ueda	Minenori Jono	Reiko Horioka
Yukinobu Uchimura	Masaji Shimpo	Koichiro Makita
Yoji Ebe	Jun Sugihara	Yoshifumi Matsui
Kumiko Ohari	Keiji Suzuki	Masae Matsuda
Yoshihiro Okamoto	Yukihiko Sekine	Yumi Misono
Yusuke Katayose	Shusaku Takagi	Tomotaka Miyashita
Yuka Kawai	Ayumu Takizawa	Woody Muire
Masayoshi Kawakita	Naoko Takeuchi	Takeshi Morioka
Takashi Kawamoto	Atsushi Tachiri	Akitoshi Yamamoto
Takashi Kishimoto	Kazumi Tsurugaya	Tetsuya Yamamoto
Takao Kimura	Tamon Tomizawa	Tomohiko Yuri
Tomoko Kubota	Hiroaki Tomimoto	Chiaki Yokota
Harumi Kumagai	Hirofumi Nakao	Satoru Yoshida
Toshihiro Komoto	Jun Nakacka	Hiroyuki Yoshino
Aya Koshinaka	Noriyuki Nakashima	

## 9 Sodegaura Center

Kazuhiro Ando	Mari Kusumoto	Haruhiko Fukumoto
Kenji Iida	Osamu Sakawaki	Haruyuki Makio
Mitsuharu Ikeuchi	Masahiro Sakurai	Shingo Matsuo
Junichi Ishikawa	Satoru Suda	Midori Mizuno
Rihoko Imai	Hiroyuki Sekino	Manabu Yaegashi
Takashi Unezaki	Yuji Takahashi	Hiroshi Yamanaka
Hiroshi Okumura	Masafumi Tanaka	Takumi Yamanoue
Shingo Kajiyama	Noriko Tan	Daisuke Yamamoto
Satoshi Kaneko	Kazuoki Nakai	Emi Yoshimoto
Hisashi Kawanabe	Mitsuko Nagai	
Yasuyo Kanmoto	Hidehobu Nogi	

## 9 Sun Alloys Co., Ltd.

Koji Maeda

## 10 Mitsui Chemicals Polyurethanes, Inc. Shimizu Works

Tokiko Abe	Kazuo Funakawa	Teruko Yamamoto
Akio Kitamura	Mikio Matsufuji	

## 11 Sankyo Agro Co., Ltd. Shinshiro Works

Tomihiei Inaguma Katsuaki Kidokoro

## 12 Mitsui Chemicals Fabro, Inc. Anjo Works

Shunji Goto Nobuyuki Hirata

## 13 Sunrex Industry Co., Ltd.

Noriaki Shimoda Kenji Matsuoka

## 14 Nagoya Works

Hiroki Ikenuma	Masaki Kitahara	Atsuko Nakano
Akira Ito	Takashi Kinomura	Tatsuhiko Fukunaga
Shoichi Ito	Joji Goto	Masahiro Honda
Yoshihide Ito	Yasuhiro Shibata	Takeo Matsuzaki
Koichi Uchiki	Toshimiki Shimizu	Isamu Miura
Yutaka Ogasawara	Naoko Shinkai	Yosuke Miyamoto
Hiroaki Ogawa	Sakio Takeuchi	Shinji Meno
Akihiko Kato	Masamichi Tokutake	Shuichi Yamaguchi
Toshihiko Kawano	Tomoyuki Nagai	Hirota Yoshida

## 14 Nagoya Branch

Teruyuki Gozu Takami Nakashima Yasuyo Hikosaka

## 15 Sankyo Agro Co., Ltd. R&D Center

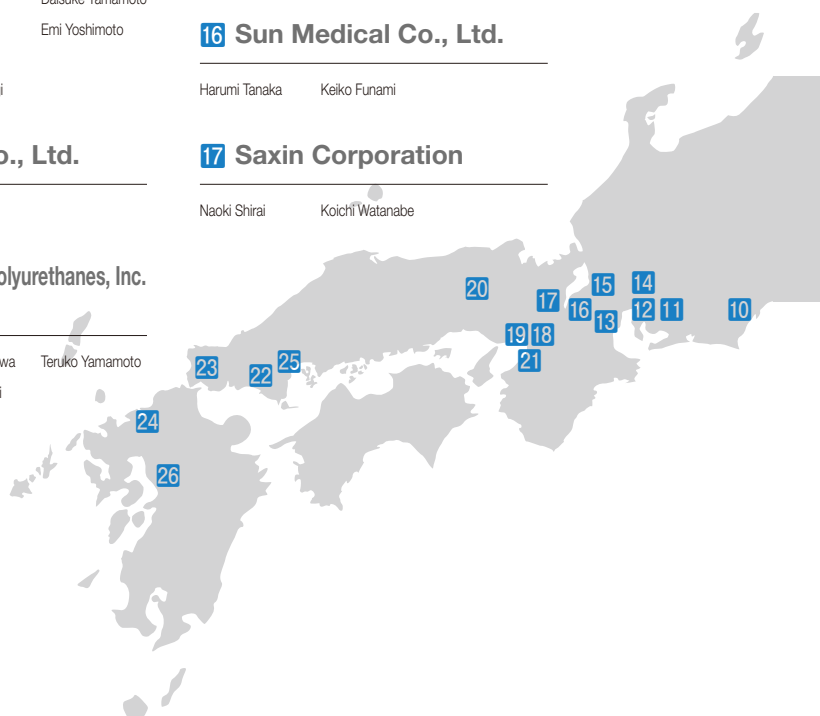
Toshiaki Ohara	Takeshi Kashima	Hidetaka Hattori
Fumie Kajino	Setsubo Katsurada	Kosuke Yoshino

## 16 Sun Medical Co., Ltd.

Harumi Tanaka Keiko Funami

## 17 Saxin Corporation

Naoki Shirai Koichi Watanabe



## 18 Yamamoto Chemicals Inc.

Shigeyoshi Takeshima

## 19 Osaka Branch

Hiroimi Imoto	Osamu Kurokawa	Atsushi Matsuoka
Kiyoe Oka	Sachio Higashi	Kenichi Yamada
Masao Okamura	Mutsuo Fujisawa	
Kai Kinoshita	Junko Matsuishi	

## 20 MC Industries, Ltd.

Takeshi Toyoshima

## 21 Osaka Works

Mototsugu Akasaka	Takahiro Kimura	Masaharu Nakamura
Yoko Asano	Suguru Koba	Takayuki Nakayama
Takashi Amimoto	Chikahiro Kobayashi	Hiroshi Naya
Tomosada Izutani	Toshihiko Sakamoto	Hidetoshi Matsuo
Junji Ichikawa	Hidetoshi Sakamoto	Yasuhiro Matsuoka
Mitsuhiro Ino	Isao Shiota	Keiichi Matsufuji
Tatsuo Inoue	Kazumi Shimotamari	Koji Matsumoto
Shinichiro Ueda	Ayako Shazuki	Yoshihiro Matsumoto
Yukari Enzan	Kazuhide Sumida	Koji Miyamoto
Yukio Onishi	Yasunao Seo	Makoto Muta
Masanori Okutani	Daisuke Sekiguchi	Akihito Morita
Kazuya Katayama	Teruaki Takaoka	Taketomo Yabusu
Junji Kamitsuru	Yoko Tanaka	Yuichi Yoshikawa
Masanobu Kayano	Kozo Taniguchi	Hirokazu Yoshizumi
Norie Kikuchi	Yukio Tsuchihashi	Shigeki Yoshimoto
Yasuyo Kitamichi	Rie Tsutsumi	
Hisakazu Kitamura	Kuniaki Tokuda	

## 22 Mitsui Chemicals Polyurethanes, Inc. Tokuyama Works

Hideo Kanekiyo    Takashi Nakamura    Harumi Hatano

## 23 Shimonoseki Mitsui Chemicals, Inc.

Ryozo Aizawa	Takashi Kuroda	Yoshiaki Hara
Mika Aoki	Masashi Kobe	Kazuto Fujii
Iwao Oishi	Takanobu Koshimizu	Goichi Matsunaga
Miyuki Kumai	Nobuhiko Koto	Megumi Yamada

## 24 Fukuoka Branch

Noriko Sakagami    Kenichiro Seki

## 25 Iwakuni-Ohtake Works

Kazuya Atsumi	Hirohiko Kochiyama	Shigeo Nakamoto
Kyoji Arita	Nobuaki Sako	Hiroshi Nishioka
Toshiki Ikki	Yoshio Shinagawa	Mitsutaka Nishida
Akio Ikeda	Ryuhei Shiba	Hiromi Hatakenaka
Masakatsu Imada	Takahiro Shiraki	Masashi Hamamura
Ayako Iwamoto	Mitsuharu Shiraki	Hironobu Haramoto
Iwao Ueo	Emiko Shiromoto	Masahiro Hirata
Shuichi Uchimura	Shu Suehiro	Kazuyoshi Hirota
Kenji Ohara	Hiroyasu Sumi	Koji Honjyo
Kiyofumi Okada	Katsuhiko Sumigawa	Tomonori Matsumura
Iwao Ochi	Masayuki Takagi	Makoto Murabayashi
Takaaki Kanemori	Shigeru Takahashi	Mayumi Muramoto
Atsuhiko Kamitani	Kenji Takekiyo	Katsuyuki Morita
Sachiko Kawano	Toru Tateda	Shizuo Yanai
Ryo Kawano	Kazuo Tanaka	Nobukazu Yamahira
Yukiyo Kidani	Takeo Tanikado	Aki Yamamoto
Hiroko Kifune	Kazuyoshi Chikawa	Kyoko Yamamoto
Yutaka Kimura	Nobukazu Tsuda	Terumi Yoshida
Akiko Kudo	Yukie Nakamura	Akira Watanabe
Kengo Kuwagai	Satoko Nakamura	Kenichi Watanabe

## 26 Omuta Works

Shiro Akaboshi	Hironori Sumikura	Osamu Furui
Kayo Abe	Masazumi Takaoka	Chikara Matsui
Masataka Ikeda	Ryoichi Takaoka	Jun Matsui
Shinji Isonaga	Hirotohi Takata	Yasuhiro Matsuki
Mutsunori Inoue	Junya Tanaka	Osamu Matsuzaki
Masanori Iwazumi	Motohiro Tominaga	Hiroaki Matsuno
Takeshi Ura	Tadashi Torii	Kensei Mayumi
Kazutaka Eguchi	Yutaka Nakagawara	Mikiko Mayumi
Shigeru Okuzono	Tomohiro Nagata	Toshihiro Maruyama
Masami Osabe	Seiya Nakahama	Shinji Murakami
Kazuo Kasama	Takayuki Nagamatsu	Sadachika Murakami
Tomio Kaji	Satoshi Nishida	Kazuhiro Murayama
Mitsuteru Kabayama	Yasunori Noda	Tomoaki Yakabe
Kuninori Kamae	Yoshiaki Noda	Takeshi Yasuda
Tokiyoshi Kawano	Isao Baba	Kunihiro Yamada
Shuji Kugizaki	Eiichi Harao	Taisuke Yamane
Emiko Koga	Kiyomi Higuchi	Takeshi Yamamoto
Kensuke Sakaguchi	Takayuki Hirai	Shinri Yoshida
Toshinori Sakaguchi	Norihiko Fukatsu	Asuka Yoshimura
Kiyotaka Sakurai	Yoshiyuki Fukuyama	Masafumi Yoshimura
Kiyoshi Sato	Michiyuki Fujiyoshi	Yukhiro Yonemura

## Mitsui Chemicals (Shanghai) Co., Ltd.

Chen Luyi	Hao Guang	Li Shan
Deng Wenyi	Jin Renzi	Yu Ying

## Singapore

Andrew Tan  
Anif Ngahtemin  
Binte Ahmad Masdalefah  
Braian Kheong  
Bruce Goh  
Carol Tham  
Chaow Shiong Fei  
Dan Tan  
David Tan  
Edlin Chan  
Eric Goh  
Eric Teo  
G Jayaraman  
Gan Wei Lee  
Gay Swee Hai  
Janice Koh  
Jerry Ng  
Jonathan Ngiam  
K Ganesh  
Kuppusamy Ganesan  
Law Lee Chai  
Manabu Wadamoto  
Mohd Ariffin  
Serene Tan  
Tan Bee Peng  
Tay Sim Leong  
V A Sudhagar  
Yow Hong Gong

For inquiries, please contact:

CSR &amp; Corporate Communications Division

Tel.: +81-3-6253-2100


Fax: +81-3-6253-4245

<http://www.mitsuichem.com/index.htm>

## Editorial Policy

The purpose of this report is to maintain a dialog with our stakeholders. There are three aspects to CSR: financial (economic), environmental, and social. This report focuses primarily on the environmental and social aspects of the CSR initiatives of the Mitsui Chemicals Group. Our Annual Report addresses the economic aspect.

This report consists of three main parts: the Mitsui Chemicals Group and society; the Mitsui Chemicals Group and the environment; and the systems supporting our CSR initiatives. The first section reports our social initiatives by stakeholder group. This report also contains several special features, which highlight the group's initiatives to prevent global warming.

 More details about information marked with the WEB symbol can be found on our website.

URL: <http://www.mitsuichem.com/index.htm>

## Scope of the Report

Period:

This report is for fiscal 2008 (April 1, 2007 to March 31, 2008).

Note, however, that some data includes activities subsequent to April 2008.

Data:

The data in this report is generally for Mitsui Chemicals, Inc.

When data pertains to affiliates or subsidiaries, it is noted in the body of the text.

## Guidelines Referred to in Preparing the Report

Global Reporting Initiative (GRI)

Sustainability Reporting Guidelines 2002

Environmental Reporting Guideline 2003 of Japan's Ministry of the Environment

Environmental Accounting Guideline 2005 of Japan's Ministry of the Environment

 Sustainability Reporting Guidelines 2002 cross-reference list

## Date of Issue

November 2008

(next issue scheduled to be released October 2009)

This report was prepared and printed in an environmentally friendly manner.



This report was printed on FSC certified paper containing wood produced in an appropriately managed forest.



Pages 2 to 59 of this report were printed on Morino Chonai-Kai (Forest Neighborhood Association) Forest Thinning Support Paper, created in collaboration with Office Chonai-Kai (an organization dedicated to recycling paper) and the town of Iwaizumi, Iwate Prefecture (which is committed to forest restoration).



This report was printed with 100% soy ink, which does not contain any petroleum derived volatile organic compound (VOC) solvents.



This report was printed using waterless printing, which does not produce toxic waste fluids.