

# KAITEKI Report 2012

Corporate Social Responsibility





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## Editor's Comments

To assist as many stakeholders as possible in understanding the Mitsubishi Chemical Holdings Group's approach to CSR and the CSR activities pursued by the four operational companies (Mitsubishi Chemical Corporation, Mitsubishi Tanabe Pharma Corporation, Mitsubishi Plastics, Inc. and Mitsubishi Rayon Co., Ltd.), the Group posts this information on its website and updates it annually.

From fiscal 2011, our company is combining information about its conventional CSR activities with that about its initiatives focusing on KAITEKI, the Group's unique CSR concept, and disclosing the information in the form of the KAITEKI Report.

By communicating with a wide range of stakeholders via its website, Mitsubishi Chemical Holdings Corporation will continue its initiatives toward KAITEKI.

## About this Report

In fiscal 2010, to disclose information to a greater number of stakeholders, while being kind to the global environment, Mitsubishi Chemical Holdings Corporation abandoned this report's paper version and began website-based publication. We will strive to capitalize on the advantages of the electronic medium to make the report as clear as possible. A PDF version is also available so users can download the full report at one time.

### ■ Scope of the report

The report covers the entire Mitsubishi Chemical Holdings Group. Mitsubishi Rayon became a new member of the Mitsubishi Chemical Holdings Group in April 2010 and has been partly included in the reported coverage since the previous Report. Mitsubishi Rayon data have been retrospectively added to the historical graphs in this Report.

The data shown at the end of this Report were collected under the following principles:

**Environmental data:**The four core operating companies as single entities and their group companies in Japan

**Social data (related to employees):**The four core operating companies as single entities

The Group companies included in the subjects are subsidiaries as defined by the Companies Act. Among them, the subjects are main production subsidiaries. The subjects do not include non-production and production-related subsidiaries within industrial complexes that are not among the four core operating companies. See the CSR report of each company for details.

The Group will disclose data, including overseas data, in the future.

### ■ Period covered by the report

Fiscal 2011 (April 2011 – March 2012) \*Some fiscal 2011 information is also included.

### ■ Report publication date

September 2012: The previous report was published in September 2011.

### ■ Inquiries

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For detailed environmental and other information on core operational companies, please refer to the CSR reports of the respective companies.

### ■ Disclaimers

This report includes not only historical and current facts about the Mitsubishi Chemical Holdings Group but also forward-looking statements with respect to social conditions, and the Group's management plans and policies and their results. These statements are based on the most accurate assumptions and judgments in light of the currently available information. Please note that changes in various conditions may cause actual social conditions and results of the Group's business activities to differ materially from those we currently expect.

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## Paving the way for **The KAITEKI COMPANY** Management in harmony with the earth

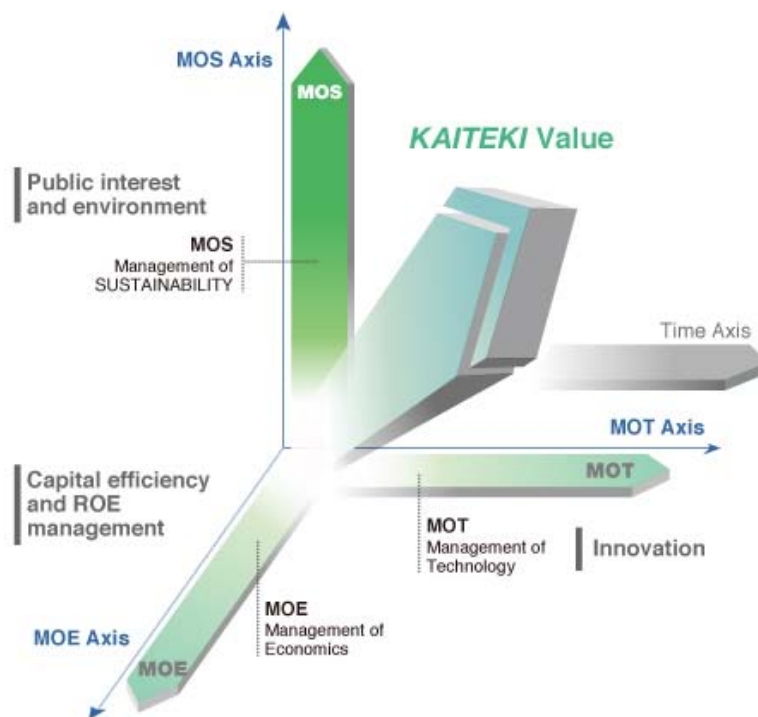
**Yoshimitsu Kobayashi**  
President & Chief Executive Officer  
Mitsubishi Chemical Holdings Corporation



### The Pursuit of KAITEKI Value

When we launched our *APTSIS 15* mid-term management plan (April 2011 to March 2016) here at Mitsubishi Chemical Holdings (MCHC) in April 2011, we set ourselves the goal of achieving “KAITEKI value”. Intended as a guiding management principle for the sustainable development of the MCHC Group, *KAITEKI* value revolves around three core axes. The first of these is aimed at maximizing profit and capital efficiency, as the cornerstones of conventional corporate value. The second axis is aimed at contributing to our business through technology and innovation, with our third axis aimed at providing value for society through our business activities. Factoring in a fourth time axis, we will strike the ideal balance between these axes to maximize *KAITEKI* value.

With so much political and economic upheaval in recent years, both domestic and international, it has been difficult to predict what will happen in the even near future. There are still many social issues that need to be addressed too, including the environment, energy, and uneven access to food and water. Taking all that into account, companies need to look towards sustainable development, rather than focusing exclusively on their profits, in order to create true value. We feel that *KAITEKI* epitomizes the sort of corporate activities that the world needs in this day and age. Here at the MCHC Group, we consider it our social responsibility to maximize *KAITEKI* value through innovation. As a group, we are committed to making that a reality through our corporate activities.



## MOS Index Initiatives

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As a crucial step towards maximizing *KAITEKI* value, we have established MOS (Management of SUSTAINABILITY) indexes that set out specific numerical targets for the final year of *APTS/IS 15* (fiscal 2015), alongside economic indexes such as operating income and ROA. MOS indexes show progress in the management of SUSTAINABILITY, one of the axes mentioned before. Example MOS targets include reducing domestic environmental impact by 30% compared to fiscal 2005, reducing CO2 emissions by 4 million tons through our products, achieving a 90% rate of CSR procurement for raw materials and packaging, increasing our contribution to quality of life in the healthcare sector by 40%, halving quality issues and accidents, and improving employee satisfaction. The first special feature in this year's report outlines our progress with the MOS indexes and specific activities during the first year of our mid-term management plan. Although we are still at the trial and select stage at the moment, as we have only just started to formulate the MOS indexes, we regard them as an essential tool that will enable us to enhance the corporate value of the MCHC Group on a sustainable basis. We will continue to actively incorporate the thinking behind MOS into our business activities in the future, whilst keeping our stakeholders informed of our progress and results wherever possible.

## Reinforcing Corporate Ethics and Other Initiatives

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As well as stepping up our efforts to realize *KAITEKI* value, we are committed to reinforcing initiatives in other areas that underpin our corporate activities too, including corporate ethics (compliance), safety, the environment, human rights and labor, stakeholder communication, corporate governance, and disclosure. We will continue to improve the quality of our activities by implementing the PDCA cycle.

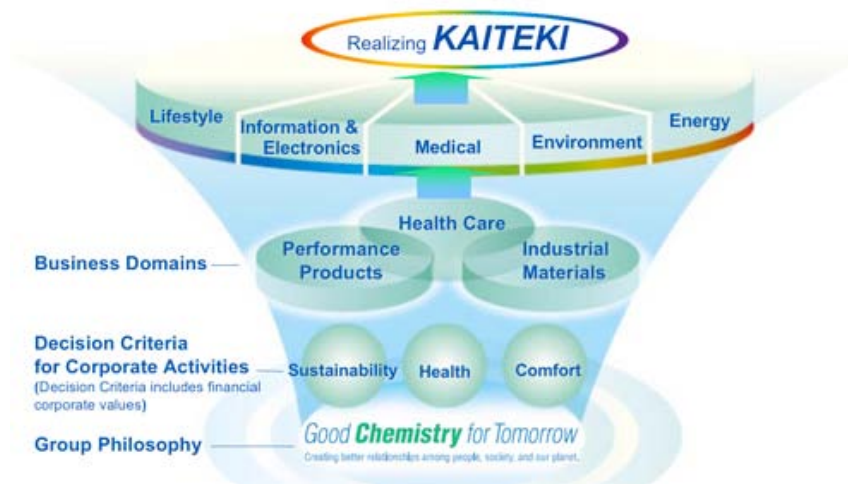
We are determined to join forces as a group and work together with our stakeholders, as we continue on our journey towards realizing *KAITEKI* in the future.

# Mitsubishi Chemical Holdings' Social Responsibilities

## KAITEKI Our Aspiration

The Mitsubishi Chemicals Holdings Group is working towards the goal of realizing KAITEKI.

Our aspirations here at the MCHC Group



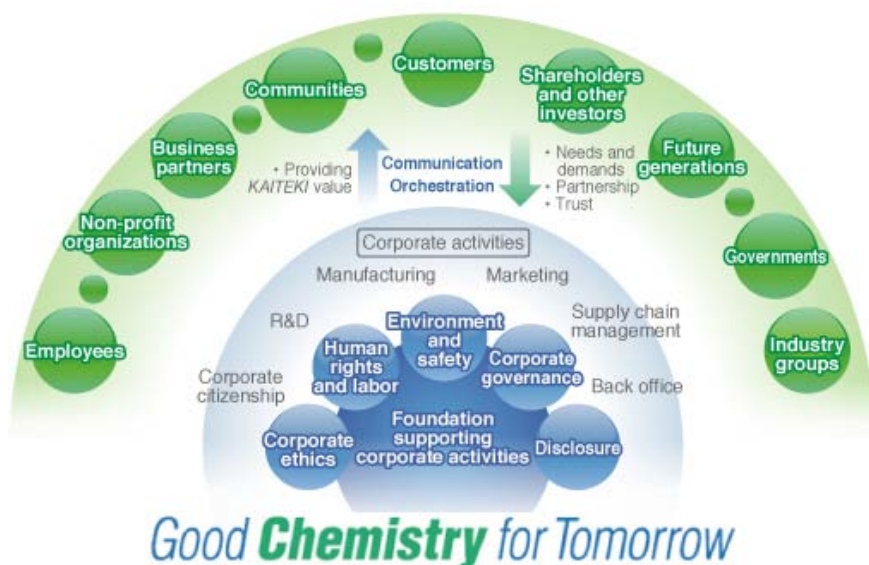
KAITEKI means a state of true sustainability, and also represents comfort for people, comfort for society, and comfort for the Earth. Mitsubishi Chemical Holdings (MCHC) promotes KAITEKI as worthy aspiration for companies all over the world in the 21st century.

## Basic Approach to Social Responsibilities

Drawing on the three decision criteria of Sustainability, Health, and Comfort, the MCHC Group aims to contribute to the attainment of *KAITEKI*.

In view of the MCHC Group's philosophy "Good Chemistry for Tomorrow – Creating better relationships among people, society, and our planet," we believe that we have a responsibility to put *KAITEKI* into practice, by disseminating the idea of *KAITEKI* value widely across society, through our corporate activities based on the three decision criteria of Sustainability, Health, and Comfort.

To achieve that, we will commit to maintaining and reinforcing basic corporate activities in areas that are essential to enhancing *KAITEKI* value, including corporate governance, safety, the environment, labor and human rights, aiming to contribute to the sustainable development of society.



In May 2006, we also declared our support for [the United Nations Global Compact](#) and the ten principles set out therein, covering areas such as human rights, labour, environment, and anti-corruption.



### Basic approach to orchestrating activities with our stakeholders

<b>Shareholders Investors</b>	We make sure that the MCHC Group's corporate activities are open and transparent, and disclose information in an appropriate manner in an effort to improve public understanding of our corporate activities.
<b>Customers Business partners</b>	We hope to build relationships of trust by communicating with our customers and business partners, all the while deepening partnerships and working hand in hand to achieve <i>KAITEKI</i> in our society.
<b>Employees</b>	We respect the dignity and rights of diverse individuals and strive to create a pleasant and rewarding working environment for everyone.
<b>Local communities and society</b>	We deepen our understanding of cultures and customs in other countries and regions where we operate and contribute to society through our business activities. We also act as good corporate citizens in responding to the requests and expectations of society and the public to help achieve <i>KAITEKI</i> .



## 01 ▶ *KAITEKI* Management and MOS Indexes

The Mitsubishi Chemical Holdings Group is promoting *KAITEKI* Management, with the aim of enhancing economic value, improving the management of technology, and increasing SUSTAINABILITY for people, society, and the planet.

▶ *KAITEKI* Management

▶ MOS Indexes

## 02 ▶ Steps to *KAITEKI* Management

This section presents the background for the process that led to the birth of the *KAITEKI* concept and the history of our Group-wide initiatives toward the achievement of *KAITEKI*.

# Toward the Realization of *KAITEKI*

## *KAITEKI* Management

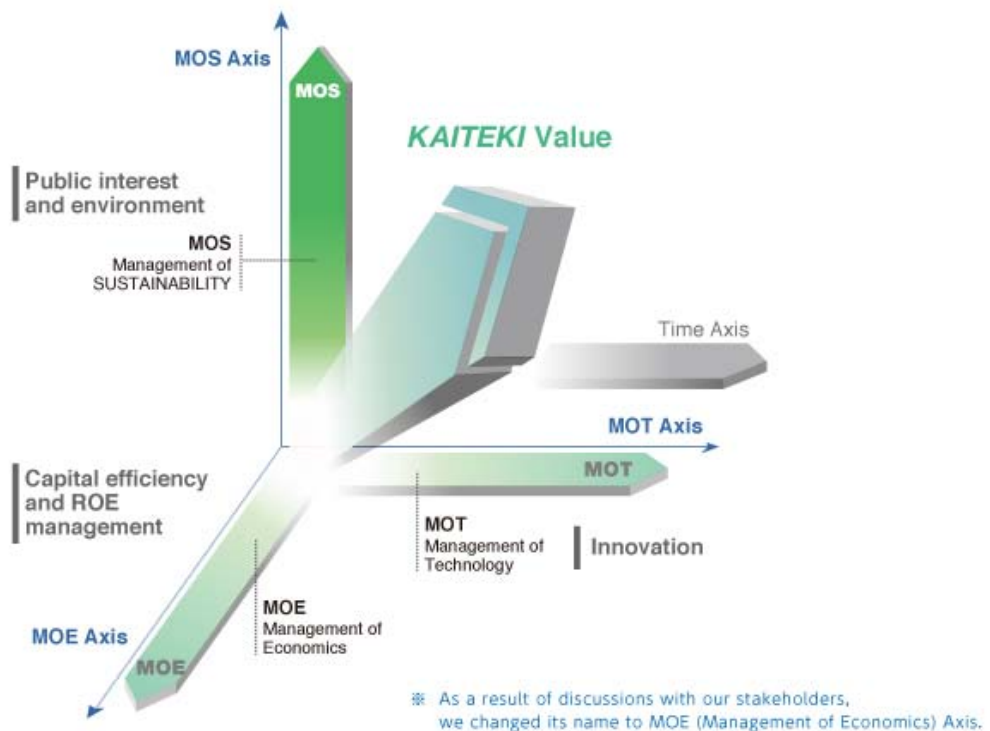
Mitsubishi Chemical Holdings Corporation (MCHC) manages its Group by applying an approach it calls *KAITEKI* Management. This approach aims to contribute to solve the global environmental and social issues in the 21st century, and realize *KAITEKI*.

### Toward the Realization of *KAITEKI*

At MCHC, we manage our Group according to the philosophy, “Good Chemistry for Tomorrow: Creating Better Relationships Among People, Society, and the Planet.” We aspire to realize *KAITEKI* for society and the planet through the infinite potential of Good Chemistry.

### MCHC's Four-Dimensional Management Aimed at *KAITEKI*

To realize *KAITEKI*, MCHC manages the Group based on four different axes: one axis is aimed at enhancing earnings and other forms of economic value; one axis is aimed at advancing technology management; one axis is aimed at increasing sustainability for people, society, and the planet; and one axis is time. We call this approach “*KAITEKI* Management.”



The first axis is aimed at enhancing economic value by pursuing profit ratio and other capital efficiency and shareholder value and making management decisions based on the figures recorded in the financial statements. We call this the “MOE (Management of Economics) Axis” as it is typically represented by a way of thinking of economics. Although the fundamental objective of every company is to increase economic value, in some cases that approach runs the risk of encouraging short-term or self-serving thinking.

The second axis is based on the concept of Management of Technology (MOT), and is aimed at balancing corporate activities with science and technology while achieving innovation to enable the sustainable development of society. We call this the “Technology Management Axis,” or “MOT Axis.” Innovation is an essential component of any technology-oriented company. By aligning the direction of innovation with the company’s management strategy, we intend to translate that focus on technology into results that effectively create corporate value.



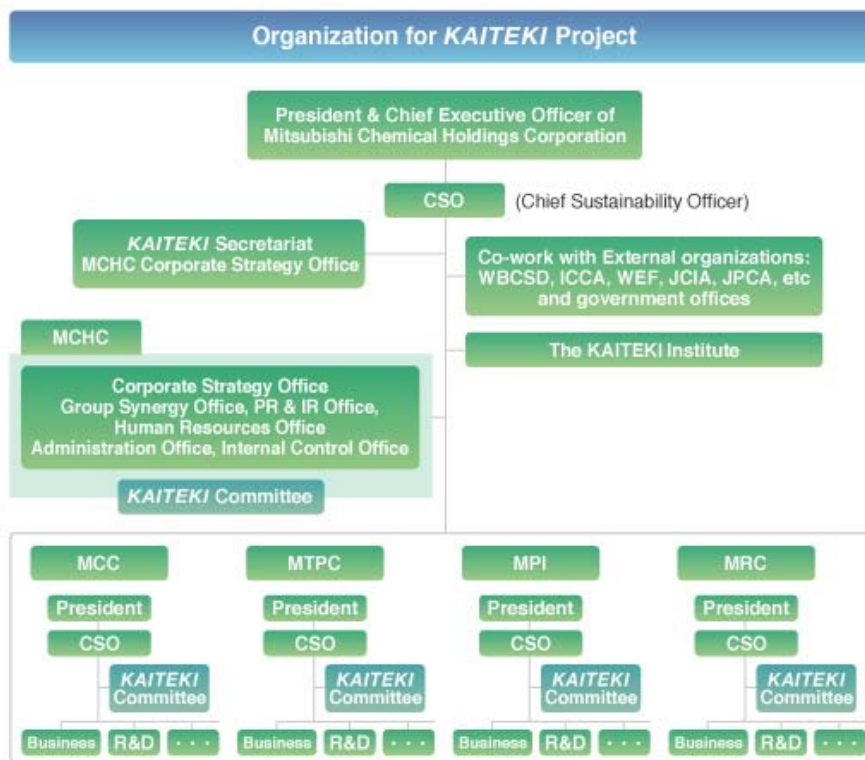
In addition to these two axes, which most companies use as their main decision criteria, MCHC has embodied our approach to Group management in the Management of SUSTAINABILITY (MOS) Axis. This is our third axis for management judgment, which aims to achieve sustainability for people, society, and the global environment. As we added this third axis, we could incorporate our management into our aspiration to shift to realize *KAITEKI*.

To make evaluations based on these three axes, we need to apply different time frames. The time frame applied to the MOE Axis is several months long, while that required for the MOT axis is decades long. The MOS axis may require an even longer. The corporate activities that we evaluate will change depending on these elements and the time period. In the long run, even the framework of these activities such as the energy composition of society may change. Accordingly, when we undertake *KAITEKI* Management, we need to consider time in addition to the above three axes. We actually undertake *KAITEKI* Management by considering the balance among these four axes in the four dimensions of space-time.\*

\*Patent No. 4800449 “Device, method, and program for evaluating corporate activities,” Mitsubishi Chemical Holdings Corporation

## KAITEKI Project Organization

In April 2011, the MCHC Group launched the *KAITEKI* Project, with the aim of embodying *KAITEKI*, under the leadership of the President of MCHC.



The aim of *KAITEKI* Project is to raise awareness of *KAITEKI* and consequently realize *KAITEKI* through Group-wide *KAITEKI* activities.

Under the *KAITEKI* Project, we discuss how to promote *KAITEKI* activities through the expansion and enhancement of existing initiatives while organizing and understanding our corporate activities based on three decision criteria. We also discuss how to implement the Plan, Do, Check, Act (PDCA) cycle of *KAITEKI* activities, for example. In addition, we put the results of the discussion into practice under the project.

*KAITEKI* Committees have been set up within the project to promote *KAITEKI* activities at MCHC and four of its operating companies. Most of the activities and meetings organized by the operating companies will be coordinated to tie into future *KAITEKI* Committee activities.

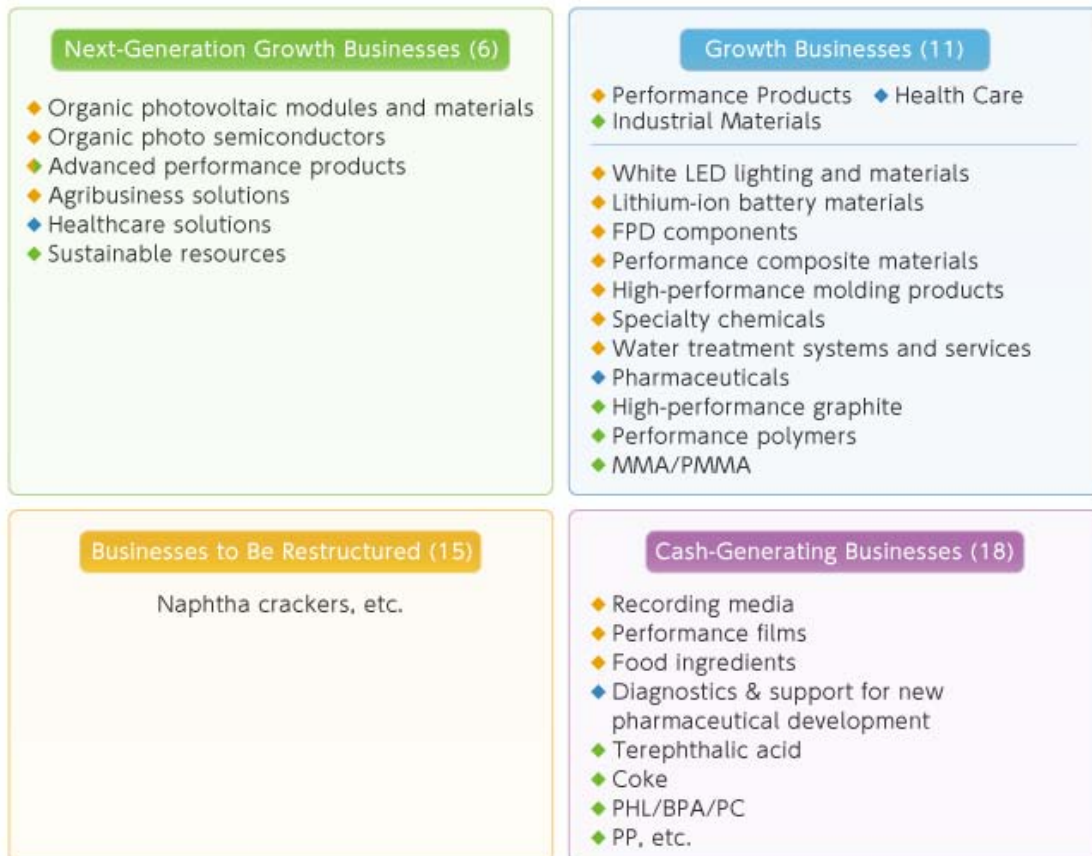
## MOE Axis

Businesses divided into the four domains of “growth businesses,” “next-generation growth businesses,” “cash-generating businesses,” and “businesses to be restructured, with strategies developed for each

### Business Portfolio and Management

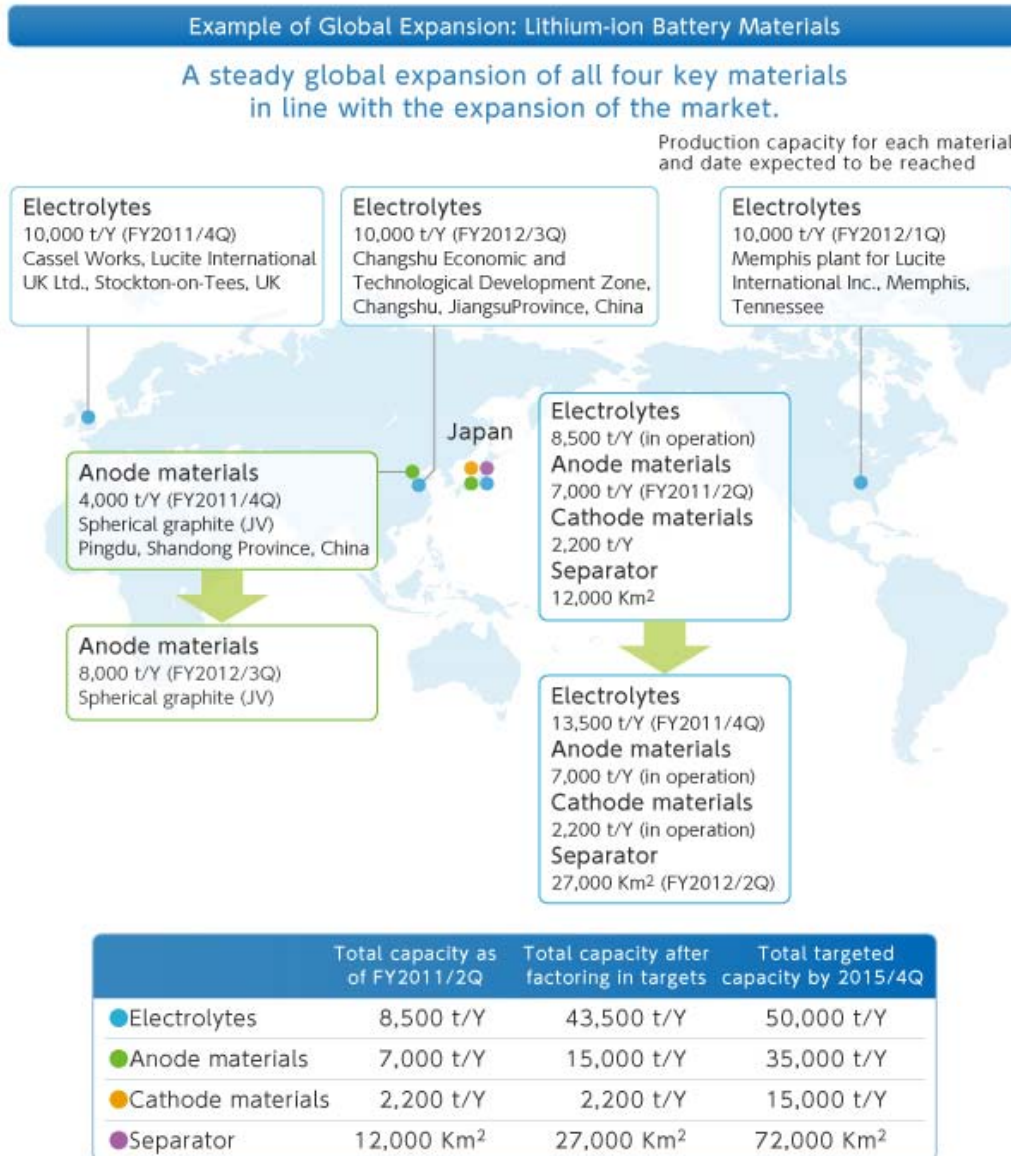
We envision our business portfolio and strategies by dividing our businesses into four quadrants of “growth businesses,” “next-generation growth businesses,” “cash-generating businesses,” and “businesses to be restructured,” and have formulated strategies for each. To achieve high profitability, we implement measures that are appropriate for the actual conditions of each business, such as globalizing, improving product performance, developing new products, stabilizing earnings, and restructuring plants and offices.

#### Business Portfolio



## Globalization and Response to Domestic Issues

We are also promoting globalization of our corporate activities, which are deemed important for sustainable growth, by establishing and improving overseas production bases and securing partnerships with overseas companies, for example.



Let's take lithium-ion battery materials, for example. As the only company in the world that can propose all four key materials of electrolytes, anode materials, cathode materials, and separators, we are operating the business globally by responding to the expansion of the market for hybrid vehicles and electric vehicles.

In addition to this global production capability, we also have the ability to run products internally and assess them to ensure safety designs, another strength of the MCHC Group. We will make full use of this advantage to ensure a stable supply of the materials, thereby contributing to the spread of lithium-ion batteries.

## MOS Axis

An ongoing quest for solutions to the issues that confront us all, toward the achievement of sustainability for people, society, and the planet

### ■ Making a judgment based on MOS with objective indicators

From the perspective of MOS, we try to manage a sustainable relationship between the company and people, society, and the planet. While the MOE axis focuses on profits from businesses made in a period of a quarter to one year and the MOT axis is aimed at making judgments on a technology over a time span of 10 to 20 years, the MOS axis is applied to judge whether a company is contributing to sustainability or not from a long-term perspective, say over a time span of 50 years or 100 years. That is the MOS axis supports *KAITEKI* Management by enabling judgments on the extent to which a company contributes to solving global environmental and social challenges such as protecting the global environment, securing food and water supply, sustainable resources and energies management, and balancing global economic disparities. However, this approach to business management was still new, and there was no indicator for measuring MOS objectively. It is in this context that Mitsubishi Chemical Holdings Corporation (MCHC) developed indexes for that purpose (MOS indexes), which have enabled us to examine our corporate activities from the viewpoint of MOS and implement the PDCA (plan, do, check, act) cycle accordingly.

### ■ Including MOS indexes in the management plan for enhancing targets

At MCHC, we have adopted three decision criteria for our corporate activities, namely Sustainability (environment and resources), Health, and Comfort. MOS indexes also consist of targets corresponding to these criteria. MOS indexes are also included in the *APTSIS 15* mid-term management plan and our numerical targets to achieve by 2015 are set therein.

### ■ Safety and compliance are elements of sustainability in a broad sense.

The working environment, risk management, internal control, and compliance are included in essential elements of corporate sustainability, so we include them in MOS accordingly. Among MOS indexes, the Comfort index includes “stakeholder satisfaction” and “recognition of corporate trust” as items. We set targets for improving these aspects.

### ■ Two roles in promoting *KAITEKI* toward the future

MOS has two important rules for specific corporate activities.

One involves solutions and improvements of issues in the businesses we are currently developing, such as include reducing GHG emissions and conserving energy.

The other role is to sow the seeds of new businesses and products and foster them for the benefit of future society. Examples include energy sources other than fossil fuels, the use of plant materials for synthesizing chemicals, development of new drugs, and the development of organic thin-film photovoltaic modules. Further, for research with a very long-term perspective, MCHC has established a research institute, The *KAITEKI* Institute, Inc. (TKI). TKI acts on the global level, conducting sponsored research and developing networks.

## MOT Axis

Aiming for high-performance, high value-added businesses based on decision criteria of Sustainability (environment and resources), Health, and Comfort, with a special focus on technological development in the growth businesses and next-generation growth businesses

### ■ The R&D strategies of Mitsubishi Chemical Holdings Corporation (MCHC)

It is essential for *KAITEKI* Management to achieve a balance among the standpoints of MOE, MOT, and MOS. Amid the sweeping changes in the economic and social environments, global competition in development has been growing fiercer. With this background, R&D has become increasingly important as the engine for proposing new business models and being the first to commercialize differentiated products to boost profits. We will consider the direction of R&D that MCHC should take, from the viewpoints of contributing to the prioritized businesses shown in the *APTSIS 15* mid-term management plan and helping to solve the social issues created in line with the criteria of Sustainability, Health, and Comfort.

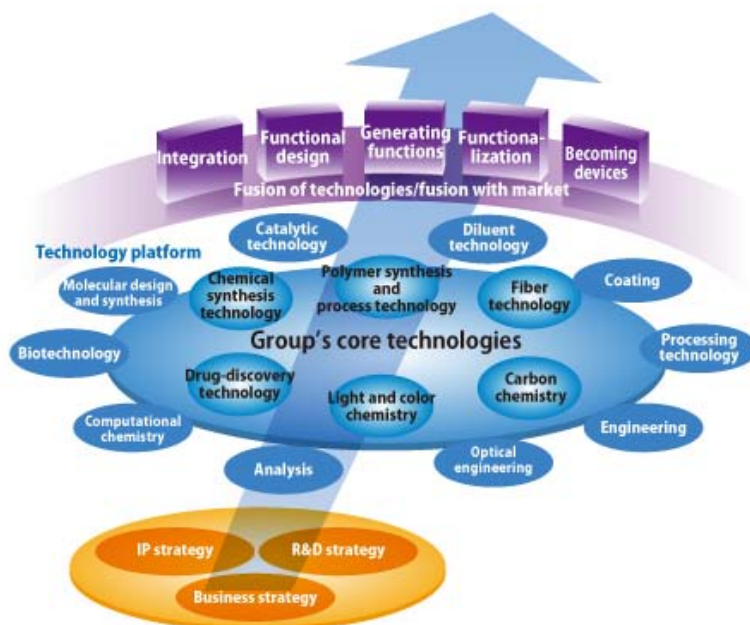
#### Approach to strategies for next-generation growth businesses in *APTSIS 15*



Energy creation, energy conservation, and energy storage are important technological initiatives for dealing with issues in energy and global warming. MCHC has been undertaking intensive R&D in these fields. For example, we are the only company in the world that develops all four key materials used in lithium-ion batteries: cathode materials, anode materials, electrolytes, and separator. We aim to improve battery performance by making effective use of our integrated knowledge of those materials. We also develop many materials for photovoltaic modules. In 2011, we succeeded in developing a printable organic photovoltaic (OPV) module element featuring superior incident photon-to-current conversion efficiency of more than 10%. This has opened up very significant possibilities for the future application of our photovoltaic modules to smart communities.

In the healthcare field, we will focus our efforts on enhancing pipelines for new drug development for responding to unmet medical needs. At the same time, in healthcare solutions as next-generation technologies, we will aim to enable the treatment and prevention of diseases to meet new medical needs by utilizing a number of element technologies MCHC owns, such as diagnostics tests and medical information services using information technologies, while also using conventional drug development technologies.

## ■ The core technologies of MCHC Group companies and their application



The operating companies of MCHC have long been developing exclusive technologies in a wide range of business fields. Core technologies and common platform technologies (technology platforms) fostered through these efforts form the basis of MCHC's product and service development. These technologies are our most important intellectual property, since they provide our competitive edge. They support the businesses of MCHC together with our intellectual property strategies, which seek to make the most effective use of the technologies

## ■ Harnessing R&D synergies and open innovations

Combining technologies owned by the operating companies of MCHC with each other, we aim to develop better products.

For example, Mitsubishi Plastics Inc. and Mitsubishi Rayon Co., Ltd. have established a system for the joint development of carbon fibers and have been engaged in R&D to enable wind turbine generators to carry larger blades. These companies are working to develop products that maximize the performance of each carbon fiber by effectively using the carbon fibers with different properties- PAN-based and pitch-based fibers. Similarly, in the joint catalyst development by Mitsubishi Chemical Corporation and Mitsubishi Rayon Co., Ltd., the companies share knowledge of each related to the essential quality of catalyst functions, such as useful life and selectivity, in their efforts to develop new processes.

At MCHC, we actively collaborate with domestic and overseas research institutes and companies toward the future, while also bolstering our core platform technologies and pursuing technological synergies.

The KAITEKI Institute, Inc. was established for just this purpose - that is, to absorb external technologies into MCHC to solve long-term social issues. Details of this company will be described in a later section.

In addition, Mitsubishi Chemical Corporation has formed a comprehensive R&D alliance with the University of California, Santa Barbara (UCSB) in the field of advanced functional materials. The company makes use of this alliance for accelerating its technological development in a wide range of fields, such as LED lighting and functional polyolefin. In addition, the company has also collaborated with Pioneer Corporation and developed high intensity and long-life OEL lighting using the wet coating process. Mitsubishi Chemical Corporation engages in these and many other collaborations with external parties.

At MCHC, we will continue to develop technologies, products, and services aimed at realizing *KAITEKI* by actively utilizing open innovations with external parties.

# Toward the Realization of *KAITEKI*

## MOS Indexes

We have created MOS indexes to visualize and quantify our progress in the management of SUSTAINABILITY, our original axis. We promote *KAITEKI* Management based on those indexes.

### What Are MOS Indexes?

MOS indexes are management indexes that we created to assess our progress on MOS. In devising the MOS indexes, we selected factors that were deemed particularly important and relevant to the overall Mitsubishi Chemical Holdings Corporation (MCHC) Group, and that we believed would help us realize *KAITEKI*. The indexes consist of nine factors—three each for Sustainability (S), Health (H), and Comfort (C), our three decision criteria for corporate activities—and sub-criteria under each heading. The degree to which S, H, and C are achieved is indicated on a 100-point scale for each, so the maximum score is 300. The results of our assessment are reflected in our activities for the following year, which are aimed at their improvement.

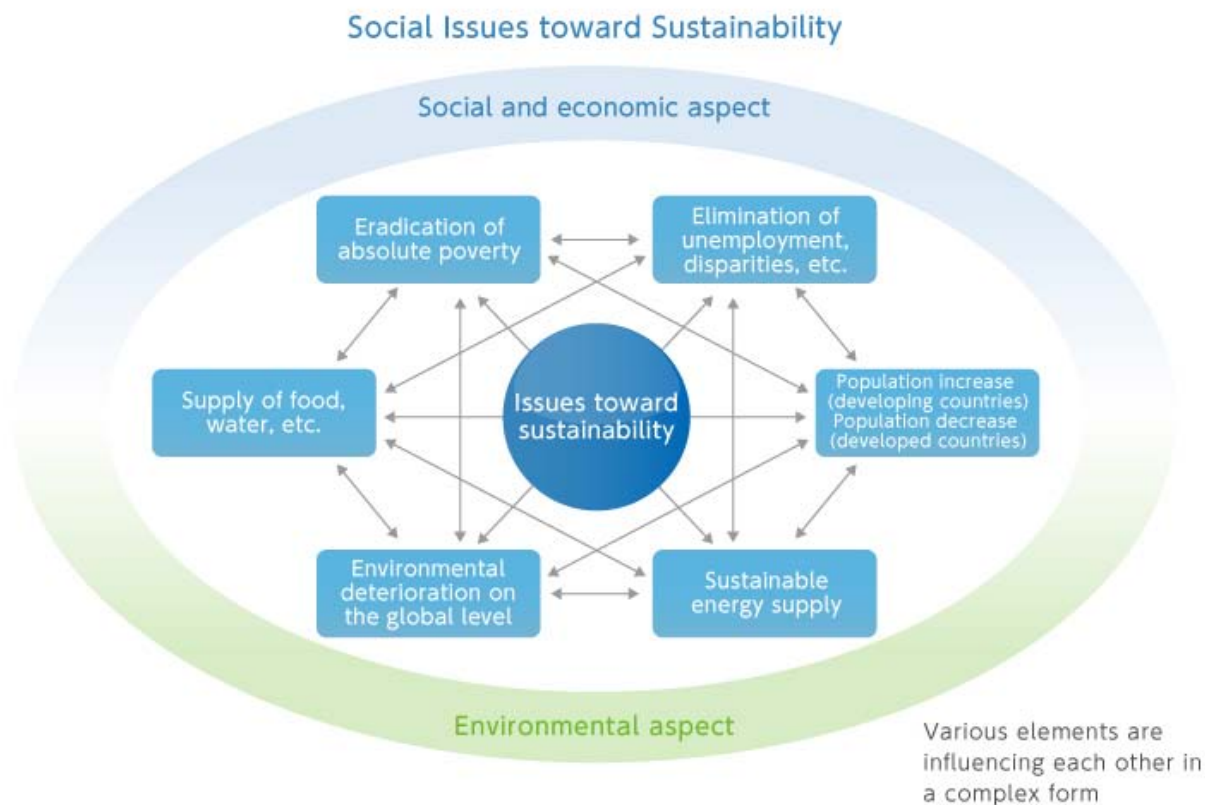
#### MOS Indexes

Sustainability Index	S-1: Contribution to reduce environmental impact through products and services
	S-1-1: Reduce environment impact by 30% from 2005 levels
	S-1-2: Generate reduction of CO <sub>2</sub> emissions through products
	S-2: Practice energy saving & reduction of depletion resources
	S-2-1: Procure reusable materials equivalent to 6,000 t/y of crude oil
	S-2-2: Suppress rare metal uses by 800 t/y through improving process and innovative products
	S-2-3: Generate resources and energy savings of ¥13 billion
	S-3: Contribution to reduce environmental impact through supply chain management
	S-3-1: Achieve 80% inspection rate on toxic substance in purchased items
S-3-2: Achieve 90% purchasing of raw materials and packaging according to CSR guideline	
Health Index	H-1: Contribution to medical treatment
	H-1: Increase index performance derived by the degree of difficulty to treat diseases and the number of administered patients by 30%
	H-2: Contribution to improvements of QOL
	H-2: Increase contribution to QOL improvements by 40%
	H-3: Contribution to early detection and prevention of diseases
	H-3-1: Increase index of vaccine treatment by 40%
H-3-2: Increase number of diagnostic testing by 17%	
Comfort Index	C-1: Deliver products (development and manufacturing) for comfortable lifestyle
	C-1-1: Increase sales of comfort-oriented products by ¥600 billion.
	C-1-2: Increase new product ratio from 16% to 35%
	C-2: Improve stakeholder satisfaction
	C-2-1: Improve third party corporate assessments
	C-2-2: Improve employee-related indices
	C-3: Recognition of corporate trust
<ul style="list-style-type: none"> <li>• Halve the number of troubles and accidents</li> <li>• Halve the work-time-lost injury rate</li> <li>• Complete confirmation of product safety according to GPS for 70% of the products.</li> </ul>	
Objective to be achieved	Achieve zero occurrence of material accidents and compliance violations

The current indicators were selected based on a combination of the current social environment and our current business activities. This means that they may be replaced with different indexes in the future. We believe it is necessary to evolve these indexes by reviewing them regularly in light of social trends and other factors.

### Social Issues and the Formulation of MOS Indexes

Modern society faces a number of issues considering its sustainability. These issues include those related to the global environment, such as climate change and ecosystem degradation problems; and social and economic issues, including poverty, unemployment, and population imbalance. Contemporary companies have an enormous social responsibility to try and alleviate these issues while working toward their solutions. At the same time, these efforts can lead to tremendous business opportunities.



In 2006, MCHC started a project to consider the company's goals and aspirations, and the role of chemistry in solving problems, from the long-term standpoint of what the global environment and social situation will be like in 2025 and beyond. Based on the results of our research, we defined Sustainability, Health, and Comfort as the three decision criteria for our corporate activities.

An age in which people must be aware of the Earth's environment and the depletion of resources, and are forced to confront these issues

An age in which health-related needs grow with the progress of longevity and the aging of the population

## Good Chemistry for Tomorrow

Creating better relationships among people, society, and our planet.

Toward the world's top levels with our customers. Important values shared with our customers are

Sustainability

Health

Comfort

In addition, in the summer of 2008, we saw a speculative rise of resource prices, the collapse of Lehman Brothers, and other events that increased our concerns about an over-reliance on the financial market. This led us to realize that a new management axis was needed—one that would maintain sustainable corporate development while also accommodating increasingly diverse values and



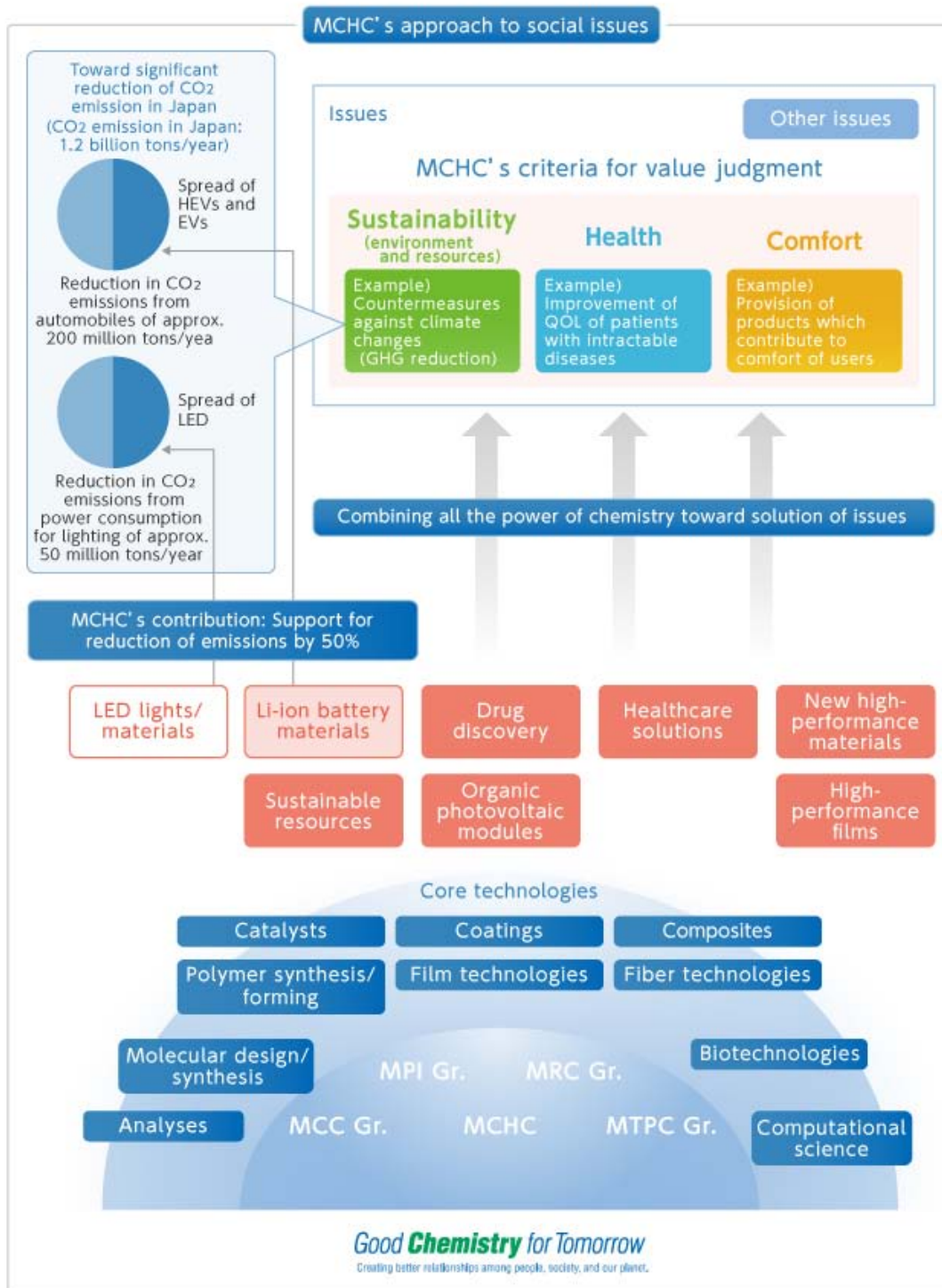
helping to resolve global issues. As a result, we established MOS Axis as the new axis that management needed in this new climate. At the same time, based on these newly improved criteria, the idea of *KAITEKI* emerged as a concept that represented the direction and approach that companies need to take.

At the MCHC Group, we provide people with a broad array of services and products in the fields of performance products, healthcare, and industrial materials. Helping to solve societal problems through the function of these services and products is our primary aim in realizing *KAITEKI*.

For example, the problem of climate change is caused by the human desire for a better life. This means that we must make more efforts to significantly reduce the environmental impact of our products in the future than to improve their functions. Corporate actions toward this purpose include replacing existing products with more sustainable products that are innovative in how they generate, store, and efficiently use energy.

Another issue is the aging population. Longer life expectancies have resulted in increased diseases and functional declines, and measures to address these problems are essential in order for people to realize *KAITEKI*. We will need to establish new methods for treating diseases that used to be hard to cure, and find effective ways to prevent these diseases.

We believe it is our mission to find a way to solve these social issues and propose these solutions to society.

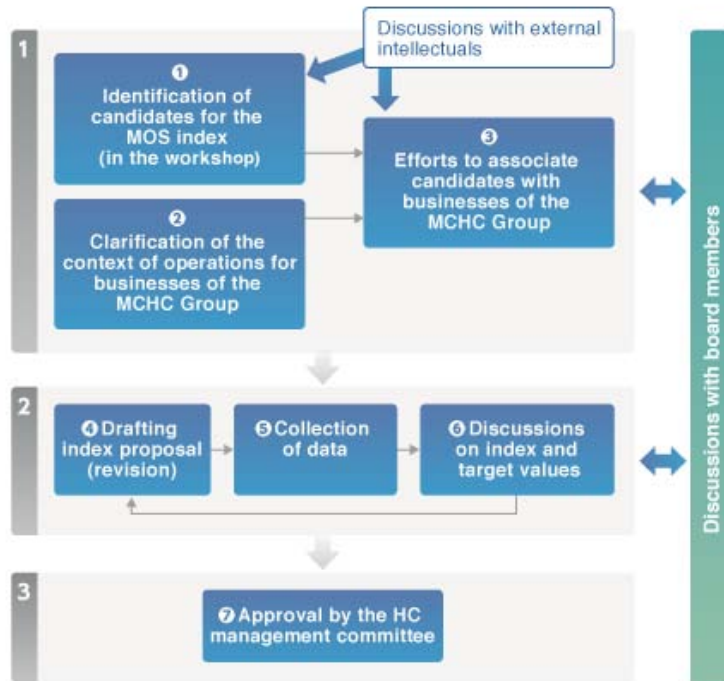


At MCHC, we are responsible for approximately 0.8% of all greenhouse gases emitted in Japan. In addition, approximately 2% of all the fossil fuels consumed in Japan are used for our business activities. Considering the scale of our operations, we also believe that it is important for us to consider the impact that our operations have on society, and make as many improvements as possible. Even if certain operations don't have much of an impact, we need to establish the course that society should take and help move people in the right direction. We believe these activities also comprise an integral part of our efforts toward realizing *KAITEKI*.

To further improve our business activities aimed at realizing *KAITEKI* and increasing *KAITEKI* value, we need to assess how sustainable our activities are and reflect the results of these assessments in our actions. Toward this end, we decided to create status and achievement indicators for our business activities, including what they need to be and the impact they have had on society, and undertake quantitative monitoring based on these indexes. The indicators were to be used for the Management of SUSTAINABILITY (MOS), which is why we named them MOS indexes.

To create these indicators, we compared social issues to our businesses and carefully examined what elements we should emphasize and how to monitor those elements, while also considering the opinions of external parties.

- 1 Efforts were made to relate candidates for MOS indexes, which were prepared from the achievements of the workshop, with businesses of the MCHC Group which are summarized in materials.
- 2 Candidates for the indexes were drafted based on the above, and data were collected. After a series of discussions, the final proposal was drafted.
- 3 This was approved by the MCHC management committee.



#### Determination of key indexes

- Detailed examination of the context of operations for all 69 business units of the MCHC Group
- Examination of the status of indirect departments, including procurement and human resources
- Clarification of the relationship with index candidates, and simulation
- Discussions with external intellectuals
- Discussions with board members

## Including the MOS Indexes in the Management Targets for our APTSIS 15 Medium-Term Management Plan

We have included the MOS indexes in the management targets for our APTSIS 15 medium-term management plan, which went into effect in April 2011 and runs until March 2016. Our aim is to measure the progress of our KAITEKI Management through this new MOS Axis as well as the MOE Axis and the MOT Axis.

Indexes and targets for the sustainable improvement of corporate value		
Financial Indexes	FY2015	
	Operating income	400 billion yen
	Growth and innovation	330 billion yen
	Leaps	70 billion yen
	ROA (income before income taxes)	At least 8%
	Net D/E	1.0
	Overseas sales ratio	At least 45%
MOS Indexes	Sustainability index	S-1 :Contribution to reduce environmental impact through products and services
		S-2 :Practice energy saving & reduction of depletion resources
		S-3 :Contribution to reduce environmental impact through supply chain management
	Health index	H-1 :Contribution to medical treatment
		H-2 :Contribution to improvements of QOL
		H-3 :Contribution to early detection and prevention of diseases
	Comfort index	C-1 :Deliver products (development and manufacturing) for comfortable lifestyle
		C-2 :Improve stakeholder satisfaction
		C-3 :Recognition of corporate trust

The MOS indexes will serve as an indicator of the MCHC Group's corporate value, along with basic financial indexes such as sales, operating income, and return on assets (ROA). MCHC is determined to develop its MOS indexes as a global standard for corporate value originating in Japan.

# Steps to *KAITEKI* Management

## History of *KAITEKI* Initiatives

October 3,  
2005

- Established Mitsubishi Chemical Holdings Corporation (MCHC)
- Established a basic philosophy for the entire MCHC Group: "Good Chemistry for Tomorrow – Creating better relationships among people, society, and our planet"

October 2005

- Started to look into Project (PJ) 10/20, proposed by Yoshimitsu Kobayashi (current MCHC President), which envisages society and the role of chemistry and MCHC in 2015 (10 years later) and in 2025 (20 years later)
- Proceeded with discussions and detailed studies, focusing on the year 2025

March 2006

- A one-year project starting in April 2006 was officially approved by the MCHC Management Committee. Agreed that the results of the project would be positioned as the basis for the direction of the MCHC Group's corporate activities.

April 2006

- Outputs targeted under the PJ 10/20

### Outputs targeted under the PJ 10/20



May 2006

- Joined the United Nations (UN) Global Compact as Mitsubishi Chemical Holdings Corporation (MCHC)  
Declared our commitment to the ten principles of the UN Global Compact as the internationally recognized norm for CSR

March 2007

- Outputs targeted under the PJ 10/20

### Project results

- When considering what the society would be like in 2025, discussed what role Chemistry should play. Through this, MCHC's aspiration in 2025, as well as what MCHC should be in 2015, were determined. Our present status was confirmed, and proposals for roadmaps to the goal were made.
- Then, to respond to the paradigm shift in the next 20 years, the three keywords of Sustainability, Health and Comfort were selected as our important direction. This was proposed as MCHC's corporate direction.

April 2007	<ul style="list-style-type: none"> <li>Yoshimitsu Kobayashi assumes position as MCHC President &amp; Chief Executive Officer</li> </ul>
April 2007	<ul style="list-style-type: none"> <li>MCHC Management Committee approves PJ 10/20 proposal <ul style="list-style-type: none"> <li>MCHC is determined to be "a global leading company based on the infinite potentials of Good Chemistry" as the aspiration for 2025.</li> <li>To achieve this, the three keywords of Sustainability, Health, and Comfort were settled on as the corporate direction.</li> </ul> </li> </ul>
May 2007	<ul style="list-style-type: none"> <li>Publicly announced the results of PJ 10/20 and explained the thinking behind our next mid-term management plan (fiscal 2008 onwards) at the Analyst Meeting</li> </ul>
May 2008	<ul style="list-style-type: none"> <li>Unveiled APTSIS 10 mid-term management plan (April 2008 – March 2010) <ul style="list-style-type: none"> <li>Clarified our aspirations for 2025 and accompanying goals for 2015</li> <li>Defined sustainability, health, and comfort as our three decision criteria for corporate activities, as outlined previously in our Direction of Corporate Activities</li> <li>Management targets for the year ending March 2010: Operating income of at least ¥190 billion, ROA of at least 6%, and a reduction in CO<sub>2</sub> emissions (basic unit) of at least 20%</li> </ul> </li> </ul>
June 2008	<ul style="list-style-type: none"> <li>Launched a prototype of the <i>KAITEKI</i> Project, with the aim of helping to resolve global challenges such as climate change and resource depletion</li> <li>Made a commitment as part of the project based on: <ul style="list-style-type: none"> <li>rather than focusing solely on short-term profits,</li> <li>the incorporation of environmental and social sustainability into business activities as a new dimension, and</li> <li>taking into account the global environment with a medium- to long-term perspective.</li> </ul> </li> </ul>
August 2008	<ul style="list-style-type: none"> <li>Became a signatory to Caring for Climate, a climate change initiative of the UN Global Compact, and declared our commitment to taking steps to address climate change</li> </ul>
Trends during the summer of 2008	<ul style="list-style-type: none"> <li>Soaring oil and other resource prices due to speculative investment</li> <li>Financial instability triggered by the Lehman Brothers crisis (September)</li> </ul>
April 2009	<ul style="list-style-type: none"> <li>Established The <i>KAITEKI</i> Institute Inc. (think tank and research institute)</li> <li>Growing recognition of <i>KAITEKI</i> as a major direction for MCHC</li> </ul>
November 2009	<ul style="list-style-type: none"> <li>The approach to "MOS:SUSTAINABILITY" was announced externally for the first time at an external lecture meeting on Management of Technology(MOT).</li> </ul>

<p>January 25, 2010 (KAITEKI anniversary)</p>	<ul style="list-style-type: none"> <li>● 「APTSIS 15 Basic Strategy below, approved by the MCHC Management Committee <ul style="list-style-type: none"> <li>■ Specified KAITEKI as the MCHC Group's goal</li> <li>■ Set out the MOS indexes, to measure progress with Management of SUSTAINABILITY and to act as an indicator of MCHC's corporate value, alongside existing financial indexes</li> <li>■ Made the decision to set numerical targets for both indexes for 2015</li> </ul> </li> </ul>
<p>January 25, 2010 onwards</p>	<ul style="list-style-type: none"> <li>● Finalized factors for MOS indexes and began the process of devising numerical targets</li> </ul>
<p>June 2010</p>	<ul style="list-style-type: none"> <li>● Publicly announced the basic thinking behind our APTSIS 15 mid-term management plan (fiscal 2011 onwards) at the Analyst Meeting <ul style="list-style-type: none"> <li>■ Defined KAITEKI and publicly redefined our aspirations to become a company that achieves KAITEKI by 2025</li> <li>■ Set out the concept that MCHC's corporate value is a combination of its economic corporate value and MOS value</li> </ul> </li> </ul>
<p>December 2010</p>	<ul style="list-style-type: none"> <li>● Confirmed items of MOS indexes and decided to incorporate those indexes into management targets <ul style="list-style-type: none"> <li>■ Introduced items as MOS indexes based on criteria that are of particular importance to MCHC and that are able to be monitored, as a result of careful deliberation about a year</li> <li>■ Set out three items apiece for sustainability, health, and comfort, making a total of nine, and incorporated fiscal 2015 targets into management targets</li> <li>■ Set out plans to monitor progress and implement the PDCA (plan, do, check, act) cycle, with financial indexes and progress to be released to the public</li> </ul> </li> </ul>
<p>December 8, 2010</p>	<ul style="list-style-type: none"> <li>● Held an Analyst Meeting to explain our new APTSIS 15 mid-term management plan <ul style="list-style-type: none"> <li>■ Provided an additional explanation on the introduction of the MOS axis as a new management axis, and made plans to promote KAITEKI management as a four-dimensional approach to management, including Time as a fourth axis alongside the existing MOE and MOT management axes</li> <li>■ Corporate activities were expressed as vectors in a space consisting of Business Administration, MOT, and MOS axes, and the size of the activities are positioned as the KAITEKI value. (Activities aimed at increasing the KAITEKI value will lead to the achievement of KAITEKI.)</li> </ul> </li> <li>● Good Chemistry for KAITEKI: A Challenge to a Sustainable, Healthy and Comfortable Society (ed. Yoshimitsu Kobayashi) published</li> </ul>
<p>January 17, 2011</p>	<ul style="list-style-type: none"> <li>● The first meeting of the Inaugural APTSIS 15 with MOS index Presentation Conference for operating companies</li> </ul>
<p>April 2011</p>	<ul style="list-style-type: none"> <li>● Launched the KAITEKI Project. started MCHC activities through the KAITEKI Conference (held monthly), whose participants included WGs and operating companies. Operating companies began implementing activities through their respective KAITEKI Committees.</li> </ul>

- April 2011**

  - MCHC and its operating companies held a total of 197 informational meetings (including 20 overseas) regarding *KAITEKI*.  
*KAITEKI* informational meetings were held at every available opportunity, such as during meetings with the presidents of operating companies or with regional organizations.
- June 10, 2011**

  - A meeting was held with PRI to discuss *KAITEKI* Management. Numerous meetings were held with investment banks, CSR-related NGOs, and others to discuss *KAITEKI*.
- July 29–31, 2011**

  - The exhibition “*KAITEKI*: Chemical Reactions between Technology and Art” was sponsored by The *KAITEKI* Institute, Inc. in Omotesando.
    - The exhibition featured works that bring together the myriad materials and technologies of the Mitsubishi Chemical Holdings (MCHC) Group, using the rich imaginations of multitalented artists to give form to a large variety of works ranging in discipline from painting, sculpture, and installations to fashion and food. The exhibition was designed to foster a better understanding of what “*KAITEKI*” means for society.
- November 4, 2011**

  - The first general meeting of the *KAITEKI* Project was held.
    - MCHC and its operating companies reviewed the progress of *KAITEKI* activities for the first six months, and confirmed the past direction and an action plan for the next six months.
- December 2011**

  - *Chikyu to Kyozon Suru Keiei* [Management for coexisting with our planet], a book authored by Yoshimitsu Kobayashi, was published.
    - A bible on *KAITEKI* Management was released that explains the background for why sustainability was necessary, the specific process for creating MOS indexes, the actual management undertaken by using the MOS indexes, etc.
- March 2012**

  - The first MOS indexes were roughly summarized toward the end of fiscal 2011.
    - MCHC’s activities in fiscal 2011 were reviewed, and an action plan for fiscal 2012 based on the indexes was formulated.
- May 25, 2012**

  - The second general meeting of the *KAITEKI* Project was held.
    - A general overview of results in terms of MOS indexes and MCHC activities for fiscal 2011 was given.
- June 12, 2012**

  - Reported on the progress of MOS Indexes in fiscal 2011 at the Investor Meeting

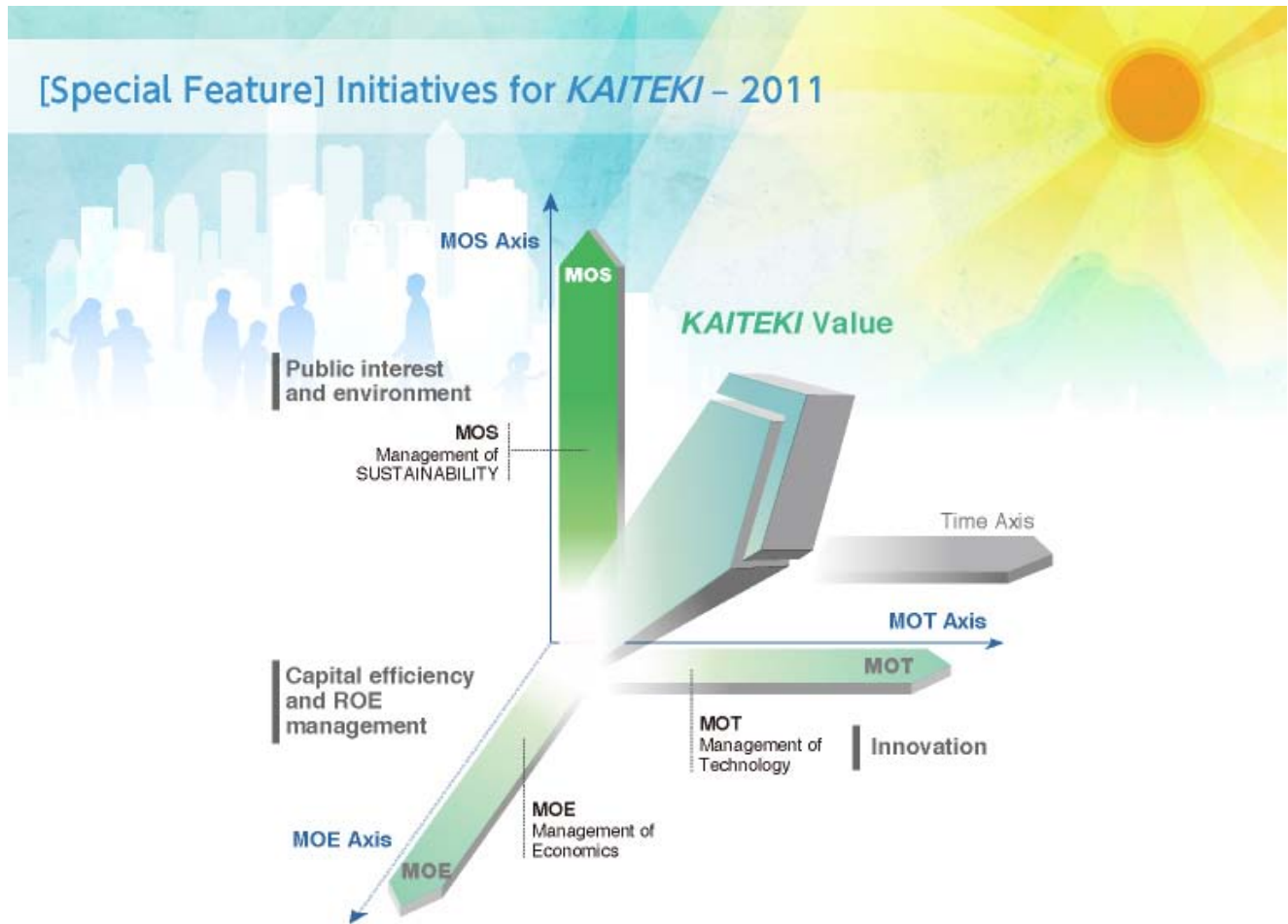
### Two books on management authored by Yoshimitsu Kobayashi

Sustainability, *KAITEKI*, and approach to *KAITEKI* Management are discussed in these books.





## Special Feature: Initiatives for *KAITEKI* - 2011



### Special Feature 01

#### ► Progress on MOS Indexes Made in FY2011

Progress was made in FY2011 in terms of MOS indexes—indicators of the degree of contribution to the newly introduced management axis, “Management of SUSTAINABILITY”—which have been quantified and included in our management targets

## Pickup



→ [\[Mitsubishi Chemical Corporation\]](#)

Developing printable Organic Photovoltaics (OPV), a technology that is expected to significantly expand the number of locations where photovoltaic modules can be used



→ [\[Mitsubishi Tanabe Pharma Corporation\]](#)

Continuously working to strengthen its R&D pipeline, and aiming to develop a high profit structure, with a view toward making strategic alliances



→ [\[Mitsubishi Plastics, Inc.\]](#)

Developing a separator for lithium-ion secondary batteries that is expected to be used for hybrid and electric vehicles, which are coming into widespread use



→ [\[MITSUBISHI RAYON CO., LTD.\]](#)

The first company to win the Porter Prize in the chemical and synthetic fiber industries with its "MMA Business Complex," and highly regarded for its unique strategy



→ [\[The \*KAITEKI\* Institute, Inc.\]](#)

Making steady progress in its mission to "Achieve *KAITEKI* beyond sustainability by using the power of science"

# Special Feature 1: Progress on MOS Indexes Made in FY2011

## Special Feature 1

### Initiatives toward *KAITEKI* from the Standpoints of the MOS Axis



Progress made in FY2011 in terms of MOS Indexes—indicators of the degree of contribution to the newly introduced management axis, “Management of SUSTAINABILITY,” which have been quantified and included in our management targets

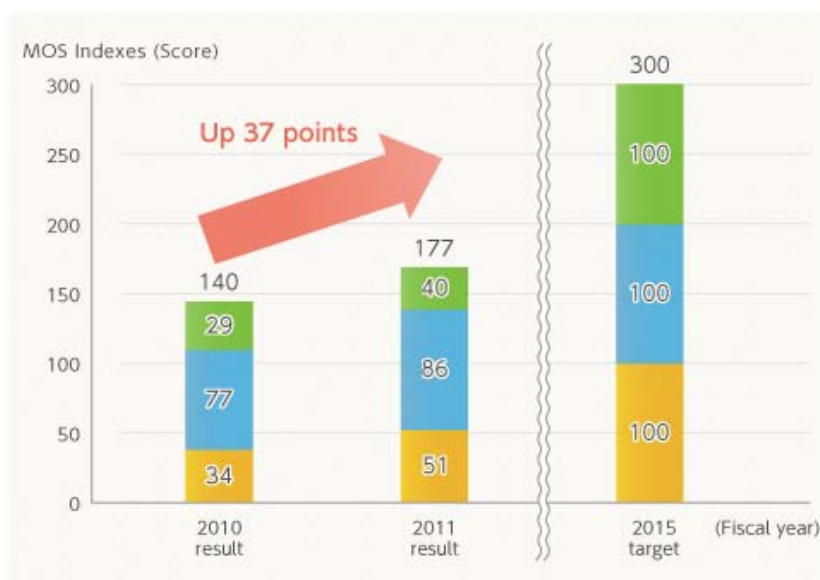
#### ■ Newly introduced MOS indexes and the progress made in FY2011 in terms of these indexes

Under the *APTSIS 15* mid-term management plan, which began in 2011, we have been monitoring the progress of *KAITEKI* activities in the entire Mitsubishi Chemical Holdings (MCHC) Group by using the MOS indexes as important management indexes.

This time, we undertook the first evaluations of MOS indexes in fiscal 2011, and summarized our corporate activities for realizing *KAITEKI*.

#### Trend in the Total Scores of MOS Indexes

At MCHC, we weigh the indexes constituting MOS indexes, that is, the Sustainability (S), Health (H), and Comfort (C) indexes, in accordance with their importance, rate the degree of the year 2015 achievements of S, H, and C on a scale of 100 points each, and make evaluations based on the achievement rate of each fiscal year. The figure below shows our targeted total scores of MOS indexes for fiscal 2011, and the actual score we achieved in the fiscal year.







For the evaluation of S, H, and C indexes, those contributions made before the launch of *APTSIS 15* (e.g., H and C-1) were included in the 2010 evaluation. On the other hand, for some indexes (e.g., S-1 and S-3) evaluations are made relatively in accordance with the progress from 2010 figures as the base.

In the current fiscal year, there has generally been steady progress in all the indexes, from their start in fiscal 2010 toward the target to be achieved by fiscal 2015. We will continue to take steps to achieve our 2015 targets and *KAITEKI*.

## MOS Indexes Progress List

\* Abbreviated expressions : Mitsubishi Chemical Holdings Corporation=MCHC、Mitsubishi Chemical Corporation=MCC、Mitsubishi Tanabe Pharma Corporation=MTPC、Mitsubishi Plastics, Inc.=MPI、MITSUBISHI RAYON CO., LTD.=MRC、The KAITEKI Institute, Inc.=TKI

Details of MOS Indexes and Targets to Achieve by 2015		Do	Check	Action
		2011 Results and Activities	Self-Evaluation	2012 Action Plan
Objective to be achieved	Achieve zero occurrence of material accidents and compliance violations	There was no material accident or compliance violation.		Continue to engage in activities by regarding this objective as the most important one
Plan		Do	Check	Action
Sustainability Index		2011 Results and Activities	Self-Evaluation	2012 Action Plan
S-1 index: Contribute to reduce environmental impact through products and services	S-1-1: Reduce environmental impact by 30% from 2005 levels	32% reduction · Introduced biogas boiler, etc.→ <a href="#">MRC</a> · Promoted energy-saving activities→ <a href="#">MPI</a>		· Change boiler fuel, etc. · Promote energy-saving activities in line with plans
	S-1-2: Generate reduction in CO2 emissions through products by 4million tons	80,000 tons · Promoted sales of parts and materials for the products with low GHG emissions (LEDs, batteries for EVs, CF, etc.)		· Expand sales by strengthening relationship with the users and manufacturers of each product, etc.
S-2 index: Practice energy saving & reduction of depletion resources	S-2-1: Procure reusable materials equivalent to 6,000 t/y of crude oil	260 tons Promoted sales of bio-based polymers → <a href="#">MCC</a> → <a href="#">MPI</a>		· Expand sales by finding customers who will adopt new uses for products
	S-2-2: "Suppress rare metal uses by 800 t/y through improving process and innovative products")	130 tons Reviewed and changed product and catalyst compositions		· Expand sales of low-scarcity metal products
	S-2-3: Generate resource and energy savings of ¥13 billion	¥3.8 billion Streamlined and renovated facilities and methods of operation, etc.		· Streamline and renovate facilities for various products, change operating methods, etc.
S-3 index: Contribute to reducing environmental impact through supply chain management	S-3-1: Achieve 80% inspection rate on toxic substance in purchased item)	59% Acted in line with the objective→ <a href="#">MCC</a>		· Review and apply case examples of companies that have already taken this initiative · Finalize the 2015 target
	S-3-2: Achieve 90% purchasing of raw materials and packaging according to CSR guideline	50% Conducted questionnaire surveys and analyzed their results→ <a href="#">MCC</a> → <a href="#">MRC</a>		· Review and apply case examples of companies that have already taken this initiative · Finalize the 2015 target

Plan		Do	Check	Action
Health Index		2011 Results and Activities	Self-Evaluation	2012 Action Plan
H-1 index: Contribute to medical treatment	H-1: Increase index performance derived by the degree of difficulty to treat diseases and the number of administered patients by 30% (from 2009 levels)	3.5% increase · Increased the number of administered patients with the subject diseases → <a href="#">MTPC</a>		· Focus efforts on disseminating the products launched in FY2011 by promoting proper uses and accelerating the adoption of the newly launched diabetes drug
	H-2 index: Contribute to improving QoL	H-2: Increase contributions to improving QoL by 40% (64% from 2009 levels)	57% increase · Launched three new products in the market as planned, launched a drug to treat MS in the domestic market ahead of schedule, etc. → <a href="#">MTPC</a>	
H-3 index: Contribute to the early detection and prevention of diseases	H-3-1: Increase the index of vaccine treatments by 40% (from 2009 levels)	44% increase · Increased the number of people who were vaccinated against influenza, administered a Japanese encephalitis vaccine to a greater number of children who were on the waiting list, etc. → <a href="#">MTPC</a>		· Increase the number of people who are vaccinated by releasing a quadruple vaccine that also contains an inactivated polio vaccine—a vaccine that has a long waiting list
	H-3-2: Increase the number of diagnostic tests by 17% (from 2009 levels)	5% increase · Achieved the planned number of samples of diagnostic tests through sales expansion by the sales team		· Increase the number of samples of diagnostic tests through further sales expansion

Plan		Do	Check	Action
Comfort Index		2011 Results and Activities	Self-Evaluation	2012 Action Plan
C-1 index: Deliver products (development and manufacturing) for comfortable lifestyle	C-1-1: Increase sales of comfort-oriented products by ¥600 billion (from 2010 levels)	¥18.8 billion reduction (2.4%) Expanded sales of comfort-oriented products		• Expand sales of products in the functional product business
	C-1-2: Increase the new product ratio from 16% to 35%	Increased to 19% Promoted R&D and expanded sales of new products		• Expand sales of products in new business fields
C-2 index: Improve stakeholder satisfaction	C-2-1: Improve third-party corporate assessments	Rose significantly in the Nikkei NICES ranking Promoted <i>KAITEKI</i> activities		• Improve the overall level of CSR through <i>KAITEKI</i> activities
	C-2-2: Improve employee-related indexes	Conducted employee's awareness surveys Determined the current status Formulated 2015 targets → <a href="#">MCHC</a>	—	• Implement personnel measures toward the target
C-3 index: Earn recognition of corporate trust	C-3: Halve the number of security-related accidents from the base year level	57% decrease Took thorough measures to prevent recurrence		• Initiate security activities appropriate for each site and workplace
	C-3: Halve the number of environmental accidents from the base year level	50% decrease Reduced the risk of discharged water		• Continue to take measures to prevent recurrence and reduce risks
	C-3: Halve the number of quality-related complaints by half from the base year level	27% decrease Improved data management		• Provide training on the general process and methods for quality control
	C-3: Halve the work-time-lost injury rate from the base year level	36% decrease Raised awareness for preventing work-related accidents		• Initiate activities appropriate for each workplace
	C-3: Complete confirmation of product safety according to GPS for 70% of the products	Confirmed 27% of products Promoted GPS activities within the MCHC Group		• Create a list of subject substances and make confirmations by following the priority order

**S-2-1: Procure reusable materials equivalent to 6,000 t/y of crude oil**

[Mitsubishi Chemical Corporation]

High expectations for spreading polymers from biological materials

[▶ Find out more](#)

S-2-1 index

Equivalent to  
**230 t/y**  
of crude oil



Mitsubishi Chemical Corporation has been actively taking steps to shift from producing plastics from petroleum to producing plastics from biomass.

In 2011, the company began operating a pilot plant to produce “DURABIO.” DURABIO is a new bio-based engineering plastic that has distinctive optical properties and superior physical characteristics, such as heat resistance and good light stability, although it is made from plant-derived materials. Regarding its ability to support a sustainable society, the product received a great deal of attention for its superior performance and environmental properties, attributable to its use of plant-derived materials, etc. As a result, shipments of the product grew steadily. In 2011, the company started constructing facilities for the full-scale production of DURABIO, and this plant is scheduled to begin operating in 2012. Furthermore, annual production of DURABIO is projected to be increased to 20,000 tons in 2015.

Launched in 2003, “GS Pla” is a polyester resin consisting of succinic acid and 1, 4-butanediol. The product is biodegradable and easily degrades in soil. The materials in GS Pla have been produced through petrochemical processes. To produce succinic acid, however, we are studying the application of a fermentation process using plant-derived materials. In 2011, Mitsubishi Chemical Corporation decided to form a partnership with an overseas company to both develop the production process and supply materials, thereby building a foundation to start bio-process production of succinic acid in 2015, the last year of the mid-term management plan.

These initiatives are still progressing slowly at present, but there are strong expectations for the spread of polymers made from biological materials as renewable materials to support a sustainable society in the future.

**H-2: Increase contributions to improving QoL by 57% (from 2009 levels)**

[Mitsubishi Tanabe Pharma Corporation]

Mitsubishi Tanabe Pharma Corporation (MTPC) made progress in many aspects of autoimmune diseases such as rheumatism and multiple sclerosis (MS), a priority area for the company.

► Find out more

H-2 index

**57% increase in contributions to improving QoL**



MTPC responds to medical needs concerning diseases for which there are no known effective treatment methods (unmet medical needs) through new drug discovery, an area of focus. In fiscal 2011, the company made progress in many aspects of autoimmune diseases (such as rheumatoid arthritis and MS), which is a priority area for the company.

Imusera, which was launched in November 2011, is a drug MTPC discovered for treating MS. In the past there had only been injectable drugs available for the treatment of MS, and Imusera is the world's first oral treatment for the disease.

The company also received approval for additional indications for Remicade, a drug for intravenous drip infusion launched in 2002. Remicade is now used for the treatment of rheumatoid arthritis, which is an autoimmune disease, and refractory diseases such as Crohn's disease and Behçet's disease. In addition, in September 2011, MTPC launched Simponi, a drug for subcutaneous injection used for the treatment of autoimmune diseases. This drug has made it possible to respond to diverse patient needs in the treatment of rheumatoid arthritis.

H-2 in the MOS indexes pertains to the company's response to unmet medical needs, and is enabled by providing new drugs and adding indications. These initiatives to address autoimmune diseases have led to a significant improvement in the MOS indexes. MTPC will continue to help treat patients by providing valuable pharmaceuticals.



**C-3: Reduce the number of security-related accidents by half from the base year level**

[Mitsubishi Chemical Group]

Conducted hands-on training to enable workers to predict risks

► Find out more

C-3 index

The number of security-related accidents at the Mitsubishi Chemical Group was reduced to

less than **half** the original number.



In our *APTSIS 15* mid-term management plan, which we started in fiscal 2011, the Mitsubishi Chemical (MCC) Group established “Safety First” as its action policy for company security and safety. The MCC Group takes actions based on the following two principles:

1. Establish and follow measures to prevent accidents and serious problems
2. Raise awareness as professionals on the front lines

The MCC Group’s work-time-lost injury rate in fiscal 2011 was 0.12, which was reduced significantly from the 0.30 rate it reached in fiscal 2010. Analyses of past accidents that resulted in lost work time have found that a lack of risk prediction procedures in basic operations or processes was a possible cause of these accidents. Accordingly, the MCC Group conducts hands-on training repeatedly to ensure that workers can determine possible risks.

**Initiative example : Mitsubishi Chemical Group**

→ [A unique MOS index created from the \*KAITEKI\* activities of each division](#)

At the Mitsubishi Chemical Group, issues and actions for realizing *KAITEKI* were discussed within each division, which led to the creation of unique MOS indexes of each. Members who played the central roles in the development of these unique MOS indexes discussed with the CSO of the Mitsubishi Chemical Group both current issues and future actions.

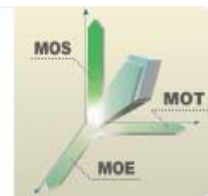
# Special Feature 2: Initiatives toward *KAITEKI* from the Standpoints of Three Axes

Special Feature2 Pickup1

[ Mitsubishi Chemical Corporation ]

Efforts to find practical application for the printable organic photovoltaic module have resulted in the world's highest photoelectric conversion efficiency, at more than 10%.

■ Mitsubishi Chemical Corporation : Printable organic photovoltaic module



## MOT Axis

### 〈Achievement of conversion efficiency of 10% enabled by use of advanced organic synthesis techniques〉

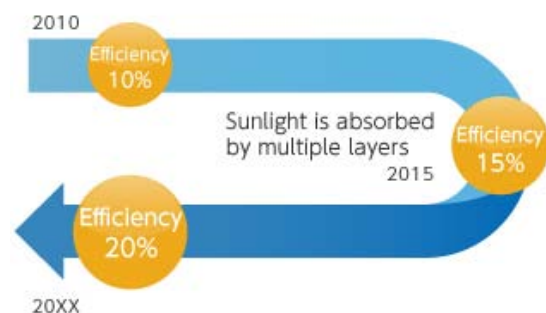
Mitsubishi Chemical Corporation has been striving to find practical application for the printable organic photovoltaic (OPV) module since 2008. Currently, the type of photovoltaic module in most widespread use is the crystalline silicon photovoltaic module. This type of module is hard and heavy because its crystalline silicon semiconductors are mounted on a glass substrate. The OPV module, in contrast, is made by applying organic semiconductor materials on a thin substrate of plastic film, just as a coating material is applied. This has resulted in many advantages, including flexibility, light weight, and attachability to objects of various shapes.

One of the challenges for the practical application of the OPV module is improving photoelectric conversion efficiency. Mitsubishi Chemical Corporation has been tackling this issue by making use of its organic synthesis techniques. Improving photoelectric conversion efficiency requires improvements in three factors: open voltage, short-circuit current, and the fill factor of the OPV module. Because open voltage and short-circuit current are determined by the molecular structure of the material, the company simulated molecular structures through computation, narrowed down the candidate materials, and created an element with superior electric properties through organic synthesis. It has also succeeded in improving the fill factor by designing the element so that it has low internal resistance, among other innovations.



Printable organic photovoltaic module

Further improve photovoltaic conversion efficiency

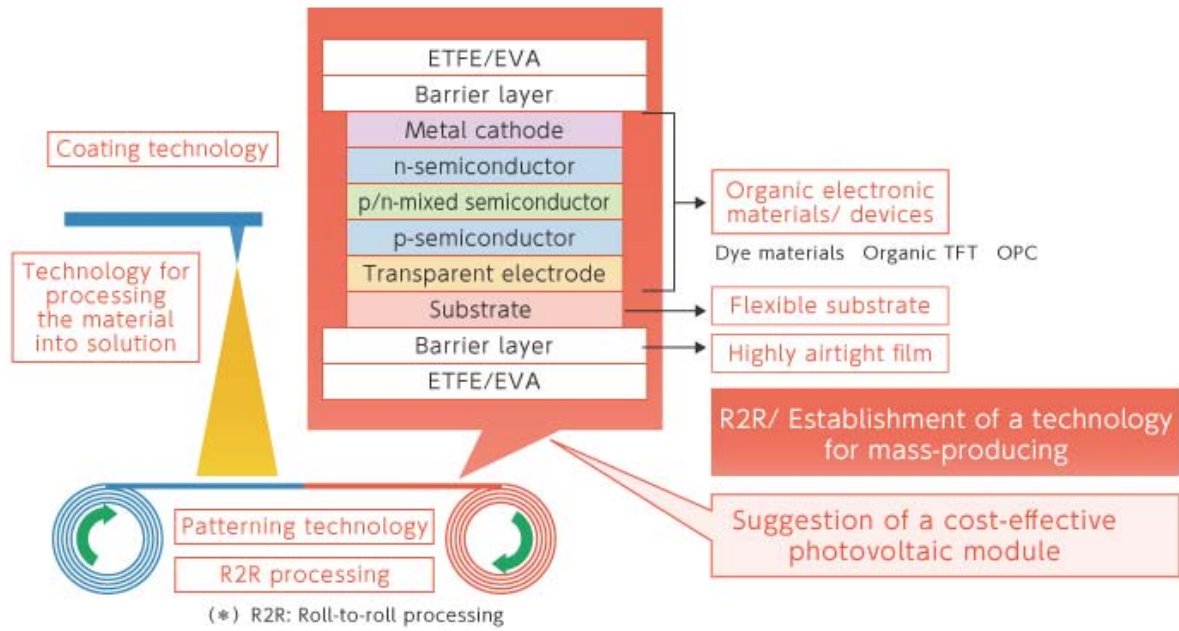


As a result of sustained efforts in nanometer-level material development and refinements, the photoelectric conversion efficiency of the OPV module, which was around 3% when the development work began, has been improved gradually to 5% and then to 7%. In June 2011, the efficiency finally exceeded 10%, becoming the world highest. The value of 10% was set by the company as one that had to be achieved if practical application of the OPV module was to be achieved. In September 2011, the efficiency was improved further to 11%.

The OPV module under development has a single layer. If multiple OPV modules that absorb different wavelengths are laminated in such a way that they work in tandem with each other, high-efficiency photoelectric conversion will be possible over a wide range of wavelengths, resulting in higher conversion

efficiency. Mitsubishi Chemical Corporation aims to achieve 15% by 2015, and even after that will continue efforts to reach even higher levels of efficiency through further technological innovation.

## An example of a layer structure of the OPV module and conceptual rendering of the process



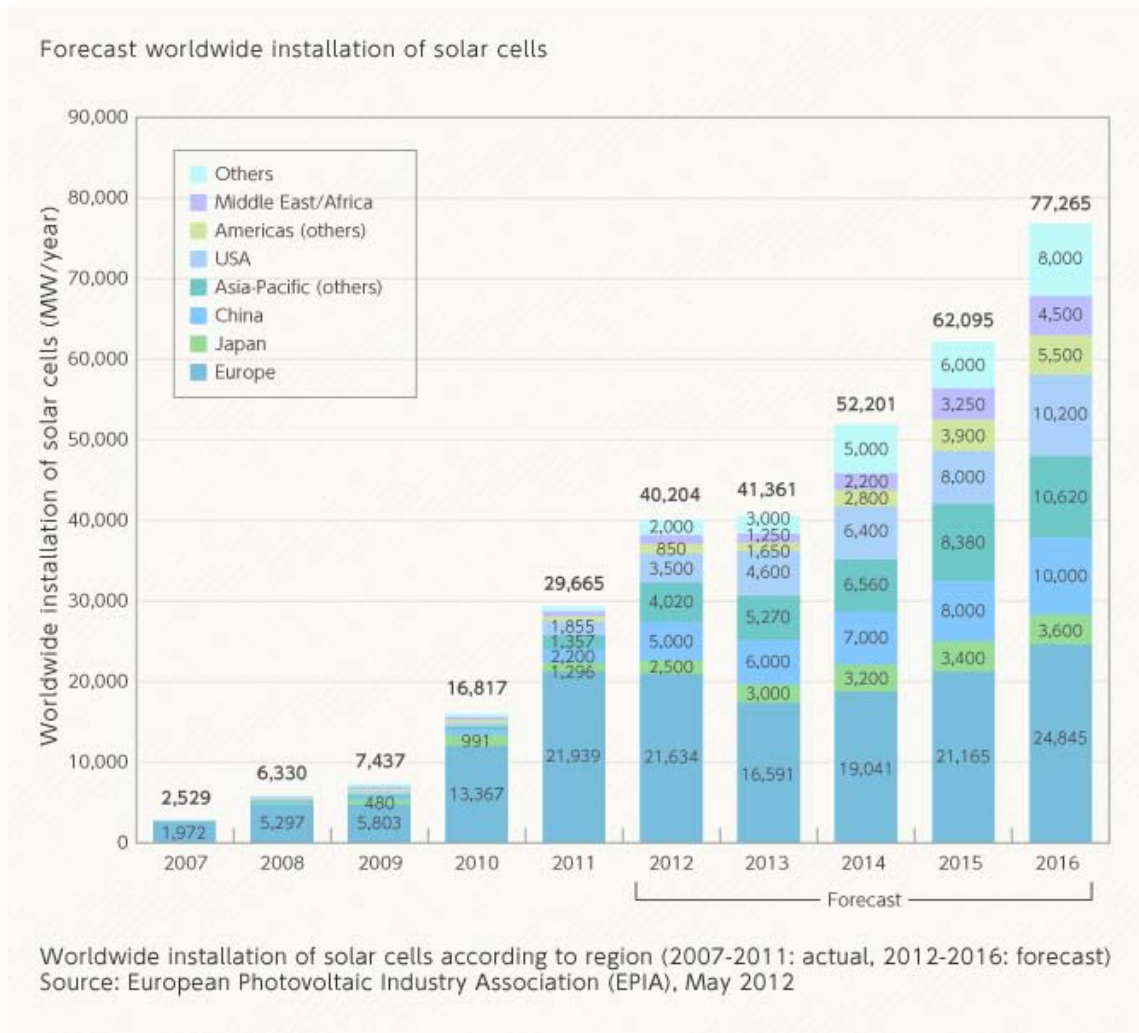
Mitsubishi Chemical Corporation is also developing an OPV module manufacturing process in anticipation of mass production in the future. The company has adopted roll-to-roll (R2R) processing as its manufacturing method. With this approach, a metal cathode, semiconductor layers, and a sealing layer are formed on a roll of substrate, which is re-reeled into an output roll subsequent to the process. It is highly productive processing well suited to mass production.

〈Aiming for a market launch in 2015〉

Today, the size of the photovoltaic module market is ¥3 trillion to ¥4 trillion. This is expected to reach ¥10 trillion in 2015. To capture this growth market, Mitsubishi Chemical Corporation has been focusing its efforts on the OPV module.

It plans to begin operating a pilot plant at Mizushima Plant in 2013 and to start full-scale production in 2015. The company assumes that in the initial period the product will be used for the interiors of buildings. In the future, the company expects the OPV module to be used as a power supply for every facility and product.

Forecast worldwide installation of solar cells



〈Clean energy contributing to the decentralization of power generation〉

Photovoltaic modules permit clean, sustainable power generation because they convert solar energy into electricity using semiconductors. They are also effective at preventing global warming because they do not emit greenhouse gases like CO<sub>2</sub>. Above all, OPV modules feature a wide range of applications. They can be installed even in places with complicated shapes, such as rounded surfaces, because they are thin, lightweight, and highly flexible.

At present, OPV modules are expected to be used for the roofs and exterior walls of houses and public buildings, room interiors, and automobile exteriors, for example. Essentially, the module can generate power wherever it can get sunlight. Therefore, it also has the potential to be used for decentralizing power generation or as an element technology for smart cities.



Stakeholder Message



**I look forward to Mitsubishi Chemical Corporation making further progress in the development of materials, such as organic semiconductor materials, at which the company excels.**

Masamichi Fujihira  
Professor Emeritus, Tokyo Institute of Technology

I have always had high hopes for the role of the new chemical industry, which makes significant contributions to society based on the concept of *KAITEKI* presented by Mitsubishi Chemical Holdings. Above all, I am paying attention to initiatives to find practical application for the printable organic photovoltaic (OPV) module with great interest, partly because it is relevant to my own specialization. I also find it very interesting from the viewpoint of sustainability.

Currently, the type of photovoltaic module in most widespread use is the crystalline silicon photovoltaic module. It has a long development history and therefore is very well established. However, it has shortcomings such as rigidity and heavy weight. On

the other hand, the OPV module is flexible and lightweight, and is expected to play supplementary roles in areas outside the applicability of silicon photovoltaic modules. In addition, the highly productive method of production enabled by the roll-to-roll (R2R) processing is appealing. The company has been outstanding in achieving a conversion efficiency of 11% on the cell level in a short period. It should not rush because the history of OPV module development is much shorter than that of silicon photovoltaic modules. Still, I hope that the company's research aimed at creating practical applications for the OPV module will make steady progress, since society's needs for the product have grown significantly.

I believe that, among the basic technologies, the development of materials such as organic semiconductor materials is the area in which Mitsubishi Chemical Corporation excels most. So I look forward to the company making further progress in this area.

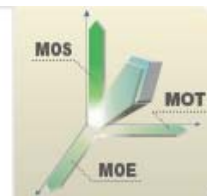
## Special Feature 2: Initiatives toward *KAITEKI* from the Standpoints of Three Axes

Special Feature2 Pickup2

[ Mitsubishi Tanabe Pharma Corporation ]

**Aiming for sustainable growth by providing pharmaceuticals to treat unmet medical needs, and improving the R&D pipeline**

■ Mitsubishi Tanabe Pharma Corporation : R&D pipeline



### MOE Axis

#### 〈Improving the R&D pipeline to continue to bring new drugs to market〉

By continuously providing new drugs that improve the health of people around the world, Mitsubishi Tanabe Pharma Corporation aims to gain people's trust. Toward this end, it is developing and marketing distinctive pharmaceuticals, including treatments for autoimmune diseases, brain diseases, cardiovascular diseases, and lifestyle-related diseases, as well as psychoneurotic agents and vaccines. To achieve sustainable growth, the company is also working to improve its ability to discover new drugs and enhance its R&D pipeline.\*1

In fiscal 2011, Mitsubishi Tanabe Pharma Corporation launched four new drugs\*2: Lexapro (an antidepressant), Simponi (a treatment for rheumatoid arthritis), Telavic (a treatment for chronic hepatitis C), and Imusera (a treatment for multiple sclerosis). The company aims to continue to provide valuable new products as well as reliable information.

#### Four new drugs launched in fiscal 2011

<b>Lexapro</b>	Released: August 2011	Category	Selective serotonin reuptake inhibitor (SSRI)
Lexapro is a highly selective serotonin transporter available in 96 countries and regions. It is recognized for its superior efficacy for depression and depressive symptoms, and good tolerability. It is also easily administered. Accordingly, Lexapro is expected to help improve medication adherence for patients with depression. Source: J. Lundbeck A/S Manufacturer and distributor: Mochida Pharmaceutical Co., Ltd.			
<b>Simponi</b>	Released: September 2011	Category	Anti-TNF- $\alpha$ monoclonal antibody
Simponi is a human TNF- $\alpha$ monoclonal antibody for the treatment of rheumatoid arthritis (including the prevention of damage to articular cartilage), and is co-marketed with Janssen Pharmaceuticals, Inc. It exhibits long-acting efficacy through subcutaneous injection once a month, and is currently under development by Janssen Pharmaceuticals, Inc. for ulcerative colitis. Source: Janssen Biotech, Inc.			
<b>Telavic</b>	Released: November 2011	Category	NS3-4A protease inhibitor
Telavic is positioned as a first-in-class oral drug for the treatment of chronic hepatitis C. It inhibits hepatitis C virus (HCV) proliferation by blocking NS3-4A protease, which is involved in HCV replication. It was shown that a combination therapy of three drugs (pegylated interferon, ribavirin, and Telavic) improved therapeutic efficacy and shortened the treatment period compared with the current standard therapy for patients with genotype 1 chronic hepatitis C virus. In addition, it is expected to provide a new treatment opportunity for patients for whom conventional treatment was not effective. Source: Vertex Pharmaceuticals, Inc.			
<b>Imusera</b>	Released: November 2011	Category	Treatment for multiple sclerosis (MS)
Imusera, originally discovered by Mitsubishi Tanabe Pharma Corporation, is a first-in-class drug that inhibits the receptor function of sphingosine-1-phosphate receptor (S1P1R) on the lymphocyte. Imusera prevents auto-aggressive lymphocytes from invading the central nervous system, thus controlling the brain and spinal cord inflammation that is typical of MS. Previously there had only been injectable drugs available for the treatment of MS; Imusera is Japan's first once-daily oral treatment.			

## Enhancing the pipeline for sustainable development



The first task of a strategy to support sustainable growth is to improve the ability to discover new drugs. Mitsubishi Tanabe Pharma Corporation is positioning areas where there is a marketing and R&D foundation and where the company is strong as “franchise marketing areas.” The company is also taking on challenges in new disease areas where unmet medical needs\*<sup>3</sup> are high, thereby continuously enhancing the development pipeline from the research stage.

The second task is to improve domestic operations centered on new products. The company is determined to provide more patients with valuable new products to be released by fiscal 2015, along with reliable information based on global evidence, in addition to its priority products. It has also established an information system that meets diverse customer needs by strengthening cooperation between MRs and specialized MRs.

The third task is to build a foundation for the expansion of overseas operations. In industrially developed markets, the company will promote in-house development of renal disease drugs and establish new focus areas to bolster and expand its operating base. In emerging markets, Mitsubishi Tanabe Pharma Corporation will rapidly launch products that have been approved in industrially developed markets, and aggressively in-license products that match the characteristics/needs of each market.

\*1 The “R&D pipeline” refers to the process from development to marketing for a drug at a pharmaceutical company. Having multiple pipelines in a specific disease area and bundling them together creates a synergetic effect.

\*2 “Launching” a product means beginning to market it. In the pharmaceutical industry, this term means to start marketing a new drug that has completed the R&D phase.

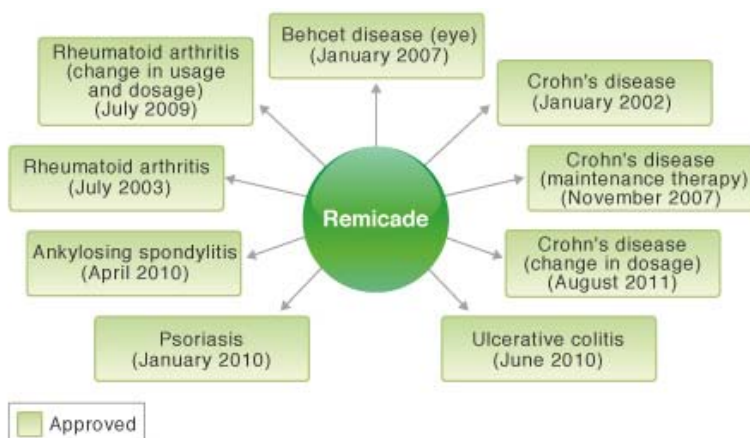
\*3 “Unmet medical needs” refers to medical needs that have yet to be met because there are no effective treatments or drugs for them.



〈Helping to treat more patients by promoting life cycle management〉

Pharmaceutical products are indispensable for maintaining people’s health. Mitsubishi Tanabe Pharma Corporation not only engages in new drug discovery, but also in the life cycle management of priority products.

Example of expanded/additional indications: Remicade

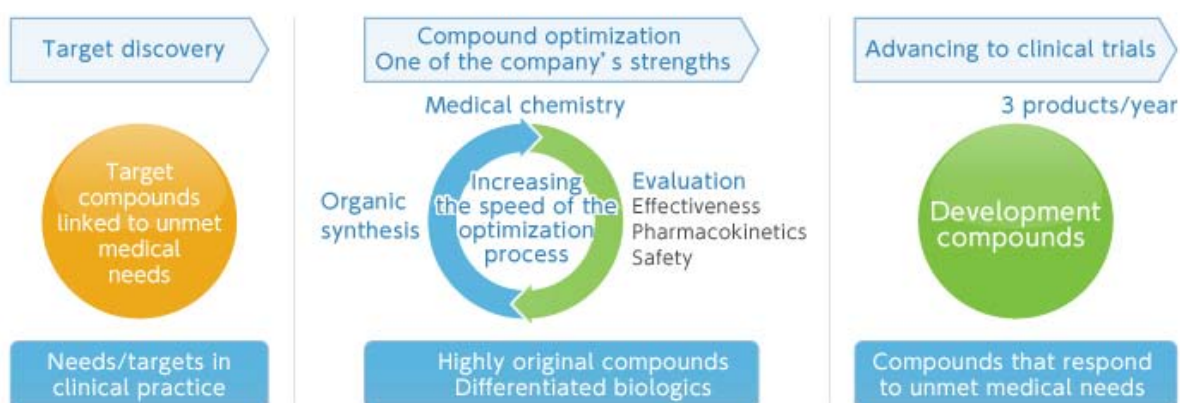


Our efforts are helping to improve the quality of life (QoL) of patients for whom conventional treatment methods aren’t very effective—not to mention the QoL of those patients who are not receiving any effective treatments or drugs. Moreover, optimizing the product’s value makes it possible to prolong its life cycle.

For example, Remicade was initially approved as a treatment for Crohn’s disease. Mitsubishi Tanabe Pharma Corporation later received approval to use Remicade for the additional indications of rheumatoid arthritis, psoriasis, ulcerative colitis, and others. In August 2011, the company received approval for a partial change of dosage and usage (an increase in dosage) of Remicade for Crohn’s disease. This approval was given after the efficacy and safety of a higher dosage of the drug than the original dosage was proven in a clinical trial involving Crohn’s disease patients for whom the original dosage was not sufficiently effective. Thus, Mitsubishi Tanabe Pharma Corporation helps treat more patients by taking a long-term view and considering a broad area.

〈Improving the ability to discover new drugs through compound optimization technologies and by concentrating on specialty areas〉

Example of expanded/additional indications: Remicade



Mitsubishi Tanabe Pharma Corporation’s technical advantages can be split into two main areas. One advantage is its compound optimization technologies. In particular, to discover highly original compounds, the company tests new drug discovery technologies in combination with quicker optimization processes. In this way, the company aims to discover compounds that respond to unmet medical needs. In the process from target discovery to the discovery of development compounds, the company also draws on external resources such as academic institutions engaging in clinical development, and venture companies, thereby bolstering its strength.

The second advantage of the company lies in its technologies for developing pharmaceuticals in specialty areas. Autoimmune diseases, diabetes, and renal diseases are disease areas where the company has accumulated evidence and know-how through its marketing and R&D. The company intends to continue to enhance its R&D pipeline in these areas by aggressively introducing products and technologies from external sources from a global point of view, as well as by discovering drugs on its own.

## Stakeholder Message



**I hope the company continues to take on challenges to discover drugs that will help patients.**

Toshifumi Hibi  
Professor of Gastroenterology  
School of Medicine, Keio University

It has been ten years since Remicade was launched, and with a confirmed safety profile, the drug has come to be widely used, recognized for its high degree of therapeutic efficacy. Remicade has greatly improved the QoL of many patients, allowing an increasing number to avoid hospitalization and surgery. Remicade is also effective as a treatment for rheumatoid arthritis, refractory uveoretinitis in Behçet's disease, ankylosing spondylitis, psoriasis, and ulcerative colitis. I expect Mitsubishi Tanabe Pharma Corporation to continue taking on challenges to discover superior drugs like Remicade, which are beneficial for patients. Even if a compound has the potential to be a superb drug, it can't be beneficial for patients until someone tries to develop it into a drug. I also hope that the company will contribute to the health of people around the world by delivering wonderful drugs not only to people in Japan, but also to those in the United States, Europe, and Asia, including South Korea and China.

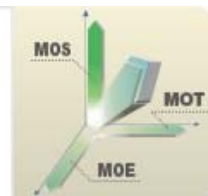
Meanwhile, my dream is to find a complete cure for Crohn's disease. This requires a link between conducting basic research to determine the cause of the disease and clinical practice to apply the findings. Professor Shibasaburo Kitasato, the first Dean of the School of Medicine at Keio University, advocated a "linkage between basic and clinical medicine." I expect Mitsubishi Tanabe Pharma Corporation to be the link between companies, universities, and the government. Let us all work hard for the benefit of our patients.

# Special Feature 2: Initiatives toward *KAITEKI* from the Standpoints of Three Axes



Developed separators that boost the performance of lithium-ion secondary batteries and have potential for market expansion

■ Mitsubishi Plastics, Inc. : Separator for lithium-ion secondary batteries



## MOT Axis

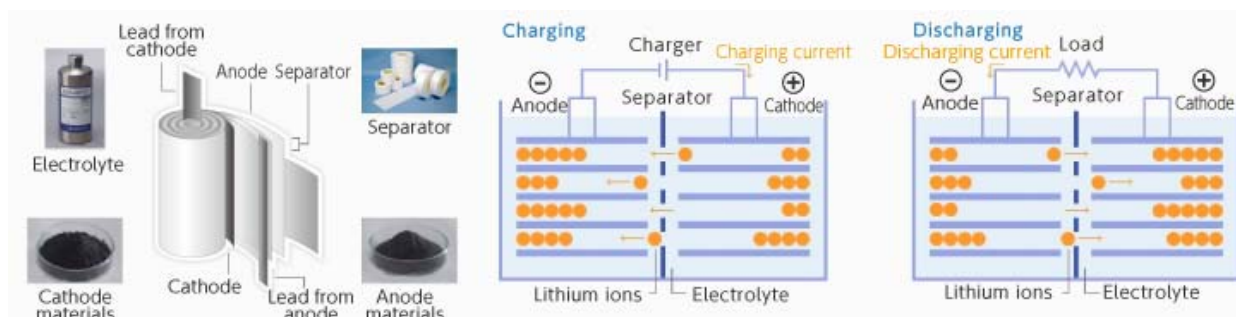
《Highly functional separators derived from material-design and film-formation technologies》

Lithium-ion secondary batteries have grown popular for being compact, lightweight, and offering high output for use in cell phones, notebook PCs, and other mobile devices. Today, demand has started expanding for use in hybrid cars and electric vehicles.

Separators are a basic component of these batteries and determine their performance. The porous film that separates the anode and cathode prevents short-circuiting while allowing only lithium ions to pass through. Separators are also equipped with a shutdown function that safely suspends battery functions. When any of a host of reasons causes batteries to heat up abnormally, the pores close by fusing.

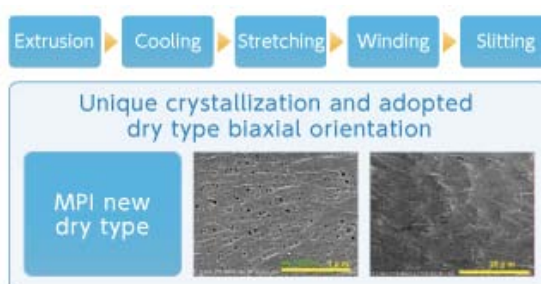


Separators for lithium-ion secondary batteries



Structure and four main components of lithium-ion secondary batteries / Mechanism of lithium-ion secondary batteries

MPI has utilized its material-design and film-formation technologies to develop highly functional separators. There are wet and dry manufacturing methods for separators, and today the wet method accounts for 70%. However, dry separators are expected to become commonplace for batteries in electric vehicles and other products because of their outstanding input and output properties and potential to reduce cost. MPI's separators are of the dry type but have a three-dimensional pore structure, similar to wet separators. MPI's separators therefore offer excellent output even in low temperatures, with only a small decline in functioning due to discharge.



Separator manufacturing process

Cars transport people and move at high speeds, so an even greater degree of safety is required with their batteries as compared to those for mobile devices. It is essential to eliminate abnormal heating caused by large-scale short-circuiting. To further enhance safety, MPI in 2011 developed high-heat-resistant separators aimed at the automotive battery market. Conventional products have been given a ceramic heat-resistant coating by applying a unique coating technology, to realize heat resistance in excess of 200°C.

## MOE Axis

### 《Volume-production planned aiming at the automobile market》

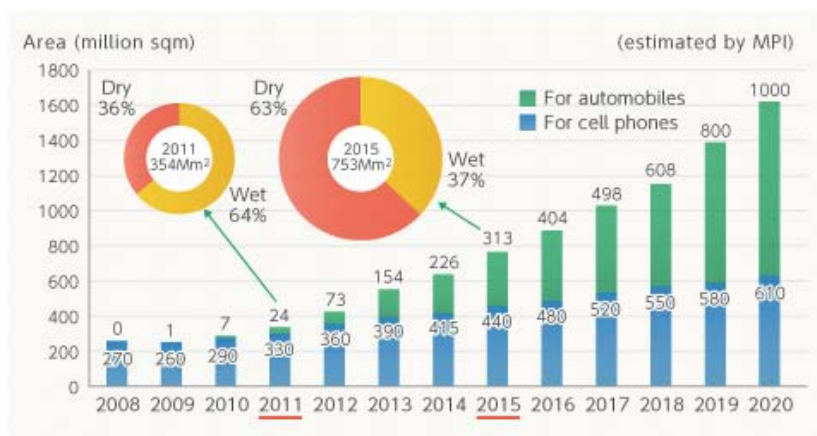
MPI has achieved strong sales results for its separators, in cooperation with Mitsubishi Chemical Corporation (MCC), which has established sales channels with battery manufacturers and other partners. At the production line built in the Nagahama Plant in 2009, 12 million sqm of separators are produced each year. Full-fledged sales of the product began in 2011 and there is a plan to further increase production.

The current major applications include cell phones, notebook PCs, and power tools. Demand has risen sharply since fiscal 2010 for use with automobiles, and in 2015, application in automobiles is expected to reach 40% of the market. To respond to this demand, MPI plans to start volume-production of high-heat-resistant separators in fiscal 2013, and targets annual sales of 72 million sqm of all types of separators in fiscal 2015.

LiB Market Forecast (estimated by MPI)



LiB Separator Market



### 〈Improving battery performance helps sustainability〉

Lithium-ion secondary batteries have a wide range of applications. In the three areas of mobile devices, electric and hybrid vehicles, and power storage facilities for cutting peak power consumption, these batteries have contributed to a sustainable society as a clean source of power.

Separators are vital for improving battery performance, and MPI, with its advanced material design and film formation technologies, manufactures high-functional separators. This has raised the performance of lithium-ion secondary batteries and expanded their applications. Through these efforts, MPI has contributed in areas including reducing carbon dioxide emissions, conserving energy, boosting power consumption efficiency, and Smart Grid technology development.

#### Stakeholder Message



#### For building win-win relations with customers

Yasushi Usami  
SPF Technology Group  
Film Development Department, Nagahama Plant MPI

SEPALENT is a separator for lithium-ion secondary batteries. Application of these batteries has steadily expanded in areas such as notebook PCs and cell phones, with usage in automobiles recently coming into view. The batteries have also garnered attention as power storage devices due partly to the impact of the March 11, 2011 earthquake. This widening of applications has created a need for even higher levels of performance and new functionality. Each day, MPI engages in new product development that seeks to respond to these needs.

Batteries are important items inseparable from energy issues. Starting this year, our company is participating in the market at full scale, and has taken its initial steps at a significant time. We will continue developing even more products that can contribute to society in order to build win-win relations with our customers.

#### Stakeholder Message



#### A desire to respond to the world's expectations

Yoshihiro Jimi  
Battery Materials Department  
MCC

I feel greatly rewarded by being able to engage in sales of SEPALENT and MCC's electrolyte and anode and cathode materials, as a member of the world's only manufacturer capable of offering four major battery materials. I have felt particularly strong reactions and expectations toward SEPALENT from battery manufacturers. Separators are important components requiring high-level safety and performance, so battery manufacturers inevitably tend to be cautious when adopting new separators. However, manufacturers have given SEPALENT high marks for its features that come from its unique manufacturing method and this has led to it being even more widely used.

The market for application in automobiles is expected to grow in the near future, and it is likely that facilities will expand and competitors will enter the arena. We will continue striving to increase our share, drawing on the advantages of SEPALENT and our ability to propose ideas to customers as the only manufacturer of the four major battery materials.

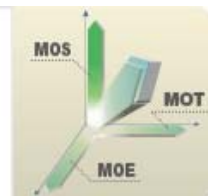
## Special Feature 2: Initiatives toward *KAITEKI* from the Standpoints of Three Axes

Special Feature2 Pickup4

[ MITSUBISHI RAYON CO., LTD. ]

Creating the world's largest and strongest MMA and PMMA Business Complex by pursuing synergy among divisions and a balanced profit structure

■ MITSUBISHI RAYON CO., LTD. : The MMA Business Complex



### MOE Axis

#### 〈Global development of an integrated complex of businesses, from upstream to downstream〉

Acrylic resin (polymethyl methacrylate: PMMA) has been called the "queen of plastics" for its excellent transparency and weatherability. Its features have given the material broad application in society, in areas such as automotive parts, home appliances, light-guiding panels for LCDs, and display screens of for mobile devices. Methyl methacrylate (MMA) monomers and their derivatives (functional esters) have also been widely utilized as source materials for products such as paints, adhesives, and coating materials.

MRC has operated businesses involving MMA and PMMA since the 1940s. Since the 1990s in particular, we have promoted strategies that maximize synergies among divisions. In 2009, we acquired UK company Lucite International (Lucite), one of the leading MMA manufacturers. In 2010, we merged with Mitsubishi Chemical Holdings Corporation to further consolidate our foundation for developing global business.



Comprehensive production from MMA monomers to acrylic resins and products with our MMA Business Complex

There are three cores to our strategies. First, diverse businesses involving MMA are regarded as a chain (MMA Business Complex) to derive maximum economies of scale and scope. Second, we aim for balanced growth of the upstream businesses (monomers) and downstream businesses (polymers and processed products). Monomers are applied as source materials of polymers as well, but we have set the in-house consumption rate of monomers and expanded our business for stabilizing the profit structure. And third, we pursue cost savings, high added value, and product differentiation. Our unrivalled production technologies and product groups have been beneficial in these pursuits.

MRC was awarded the Porter Prize in 2011 after having established the world's largest-scale MMA Business complex.

The Porter Prize commends companies that conduct unique and outstanding business, production, processes, and administration methods, and that have attained and maintained high profitability. The prize is named after Harvard University Professor Michael E. Porter, a renowned scholar of competitive strategy.



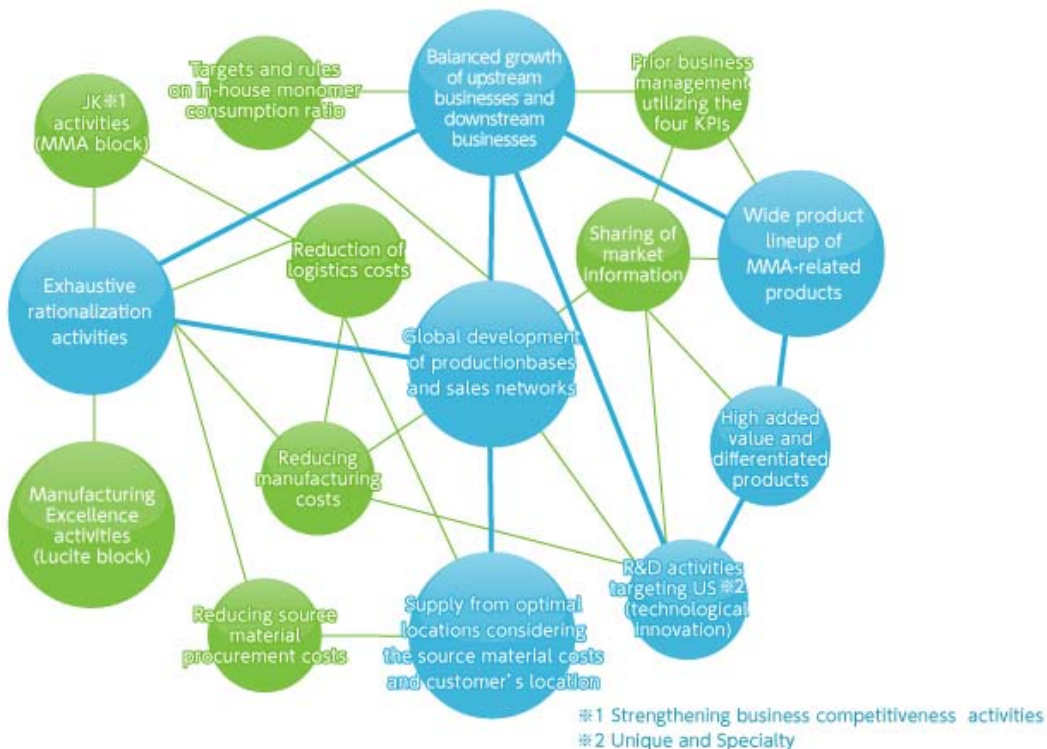
〈Initiated development of sustainable production technologies〉

MMA is a recyclable source material that can be used sustainably.

MRC owns technologies for recycling PMMA into MMA monomers. We began development of sustainable MMA monomer production technologies in 2011 with the aim of reducing the environmental burden on the planet. This work has been pursued from two directions: (1) application of existing MMA monomer production processes to biomass source materials and (2) development of new MMA monomer production technologies that involve fermentation process for biomass source materials.

Numerous final products utilizing optical properties, such as plastic optical fiber used in automotive networks and rod lens arrays providing the read-out function of multifunction peripherals have enabled a high level of multifunction peripherals that contributes to people's daily lives.

Activity system map of MMA Business Complex



Rod lenses are cylindrical lenses with refractive index distributed in the radial direction. Elected images can be achieved by adjusting the light path and lens length. They are used for the devices in fax machines, scanners, copiers, electronic blackboards, and LED printers.

〈Globally accepted production technologies and products with heightened competitive power〉

MRC has innovated on production technologies in MMA field and raised its competitive power. It is exemplified in the development of continuous sheet production technology (1971, world's first), continuous bulk polymerization technology (1977) and direct oxidation process for MMA monomer using isobutylene as a source material (1982, world's first).

Moreover, MRC has integrated these technologies to develop and commercialize the plastic optical fiber and rod lenses. This optical fiber features low optical loss during transmission and significantly helps to extend the transmission distance. The rod lenses have low chromatic aberration and have been used for read-out devices of multi function peripheral. MRC now holds about a 70% global share for plastic optical fiber and is the world's sole manufacturer of plastic rod lenses.



Otake Production Center in Hiroshima Prefecture, the birthplace of MRC

## Stakeholder Message



**The MMA Business Complex combines economies of scale with technological leadership.  
It has earned high marks as a global business leader based in Japan.**

Emi Osono  
Professor, Graduate School of International Corporate Strategy  
Hitotsubashi University

Highly regarded for its unique competitive strategy, the MMA Business Complex of Mitsubishi Rayon Co., Ltd. (MRC) won the 2011 Porter Prize. This prize, named after Professor Michael E. Porter of Harvard University, is distinctive in that winners are selected based on whether their businesses provide unique values, whether they have developed unique systems for realizing those values, and whether they have maintained a level of profitability that exceeds the industry average, based on competitive strategy theory. The Porter Prize was established in 2001 with Professor Porter as an advisor, and has been administrated by the Graduate School of International Corporate Strategy of Hitotsubashi University. The purpose of its establishment was to help enhance Japan's competitiveness. Among Japanese companies, many have achieved high profitability by pursuing unique strategies. By widely publicizing these businesses, the prize aims to make Japanese companies more competitive and help people overseas realize that they can still learn a lot from Japanese companies.

So what specific areas of the MMA Business Complex are highly regarded? The MMA Business Complex of MRC is a global leader that handles a wide array of products, ranging from monomers to polymers and processed products. Upstream monomers are similar to commoditized products, and economies of scale work very well for them. On the other hand, polymers and processed products, which are in the downstream, allow companies to establish strong positions in their specialty fields by making use of their unique technologies. Because of this, winning strategies for upstream and downstream companies differ, and many companies specialize in either one or the other. What is interesting about the MMA Business Complex of MRC is the fact that it regards upstream businesses and downstream businesses as a single business, and has created a value that is greater than the sum of both businesses. In fact, the Business Complex is competitive in both the upstream and downstream.

Regarding MMA monomers in the upstream, the company boasts the world's largest production scale. It has multiple production bases around the world, and supplies products from the bases that are closest to its respective customers, which has led to cost advantages. In addition, the company's production technologies enable it to use three main types of raw materials, allowing it to achieve long-term stability in its product supply. In the fields of MMA polymers and processed products, which are in the downstream, the company's technological innovations have resulted in a wealth of products that no other companies can provide. The company has therefore realized a differentiation strategy through its technological leadership. In addition to its strengths in these respective fields, the entire MMA Business Complex provides unique value. For example, it provides customer value in the form of convenient one-stop shopping and solution suggestions by making use of the company's broad array of product lines. The business merger between Lucite International and Mitsubishi Chemical Holdings Corporation (MCHC) has expanded the value chain both vertically and horizontally, allowing global operations. In addition, the company has expertise in diverse fields internally, which creates synergy in its technological development and supports its ability to provide solutions over a long period.

MCHC aims for *KAITEKI* Management, a concept that integrates the three axes of capital efficiency, innovation, and accountability for public/environmental concerns. Integrating these three axes is required on each business level of the company using competitive strategy. MCHC as a whole clearly intends to integrate these axes in a sustainable form, instead of simply striking a balance between them. I am therefore looking forward to the future of the company.

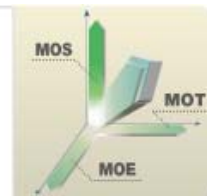


## Special Feature 2: Initiatives toward *KAITEKI* from the Standpoints of Three Axes



The institute searches for the paths to be taken by Mitsubishi Chemical Holdings Corporation (MCHC) and correspondingly makes proposals through investigation and research toward achieving *KAITEKI*.

■The KAITEKI Institute, Inc.



### MOS Axis / MOE Axis / MOT Axis

#### 〈Operating as the think tank function of the MCHC Group〉

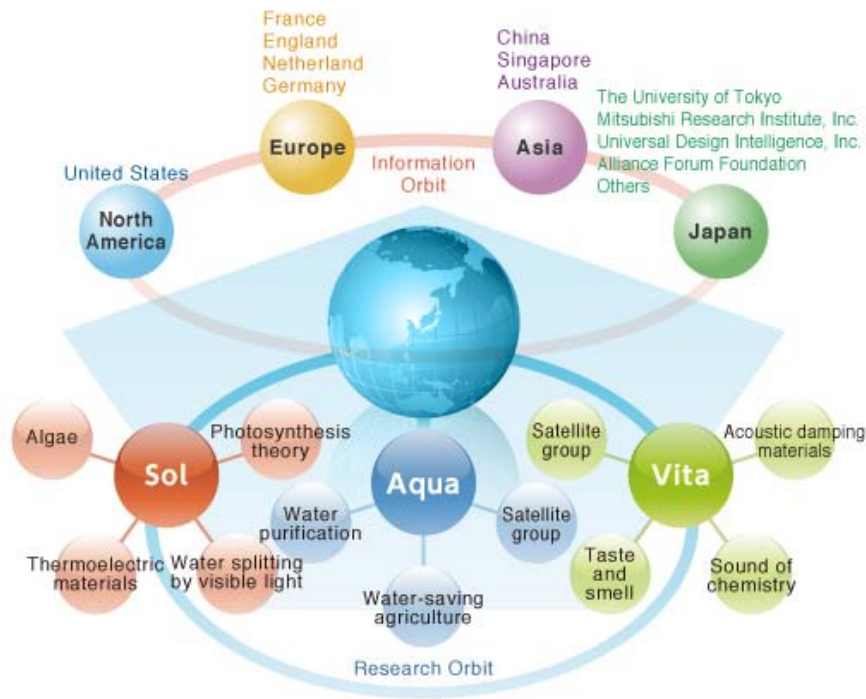
What can Mitsubishi Chemical Holdings Corporation (MCHC) do to address issues facing humankind such as worsening of the global environment, depletion of energy and resources, and food and water crises, and to achieve *KAITEKI*? MCHC has established The *KAITEKI* Institute, Inc. (TKI) to study these issues with a long-term perspective of 20-50 years.

#### Mission of the *KAITEKI* Institute

1	Identify major societal challenges related to energy, the environment, health, and sustainability that could represent opportunities for the Mitsubishi Chemical Holdings Group in 2030 and beyond
2	Set in place a virtual R&D program that engages the best minds in the world towards addressing those challenges
3	Capture the fruits of the R&D program in the form of basic science and technology that is transferred to the Mitsubishi Chemical Holdings Group
4	Promote good will for the Mitsubishi Chemical Holdings Group by pursuing a <i>KAITEKI</i> future for the earth's inhabitants.

As its mission indicates, TKI envisions future society and then takes a backcasting approach to develop the seeds for future businesses and establish corresponding research themes. TKI contributes to the achievement of *KAITEKI* by offering the fruits of their activities to the entire MCHC Group and facilitating their effective application.

## TKI's network and examples of research themes



### 〈Investigation and research on far-sighted themes; identifying new areas of research〉

The three keywords that guide TKI's selection of themes for research and investigation are sun (SOL), water (AQUA), and life (VITA). Specific areas of research that correspond to the keywords are, respectively, the environment, resources, and energy; water and food; and health and society. These are all essential for achieving *KAITEKI*.

A vision for the future of agriculture was formulated through a comprehensive survey, and several individual themes have been selected for further examination. Through the investigation, it was also revealed that the nitrogen cycle issues (water pollution caused by use of excessive amounts of nitric fertilizers, eutrophication of oceans, emission of the greenhouse gas nitrous oxide, etc.) are continuing to worsen. After considering possible businesses that could resolve these issues, TKI consigned research to the University of California, Los Angeles (UCLA). This demonstrates how TKI identifies important themes that are relevant to the realization of *KAITEKI*, and initiates new research.

The research subjects are diverse. Fiscal 2011 saw technological advancements in hydrogen production through water splitting by visible light, alcohol production using algae, and research on diagnosis and disease prevention by measuring the internal sounds of the human body.

### SOL: environment, resources and energy

- Investigation on the power supply structure after the earthquake and nuclear power plant accident → large-scale reduction of nuclear power generation capacity is essential.  
Wind power generation offers numerous potential capabilities, but there are many obstacles to popularizing its usage.  
Thermal power generation could be a central source, but fuel import costs are substantial.
- The possibility of disseminating organic photovoltaics (thin and lightweight) in Bangladesh has been investigated.
- Steady results have been obtained in hydrogen production through water splitting by visible light.
- Alcohol production by algae with transplanted gene groups obtained using *Bacillus coli* has been studied.

### AQUA: water and food

- With an aim of resolving the nitrogen cycle issues, new research has been commissioned for obtaining alcohol, ammonia, and useful amino acids from unused proteins.
- Investigation was conducted on future-oriented agriculture. Several individual subjects have been selected.

### VITA: health and society

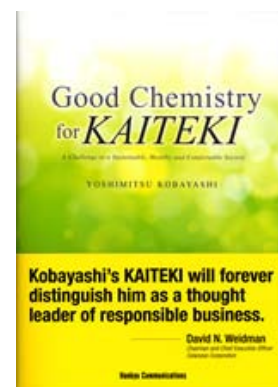
- Psychosomatic disorders have been chosen as a subject of investigation, with a focus on depression and dementia.
- Measurement of the internal sounds of the human body is making progress, with joint development underway for prototype devices for measuring pulse waves, respiration, body temperature, blood pressure and oxygen saturation.

### Communicating KAITEKI

- The *KAITEKI CAFÉ™* opened in April as a venue for advocating the *KAITEKI* concept.
- Exhibition titled “*KAITEKI: Chemical Reactions between Technology and Art*” was held in Omotesando in July to expressing *KAITEKI* in collaboration with artists.
- The English version of *Good Chemistry for KAITEKI* has been published in order to convey the philosophy of *KAITEKI* to people around the world.

TKI also assumes the role of strengthening the value of MCHC Group brands. It therefore puts forth efforts for branding that attempts to communicate and disseminate the *KAITEKI* concept.

As a part of these efforts, the exhibition titled “*KAITEKI: Chemical Reactions between Technology and Art*” was held in fiscal 2011 to welcome numerous artists to express the *KAITEKI* concept using materials made by the MCHC Group. Publication of the English version of *Good Chemistry for KAITEKI* (original Japanese version published in December 2010) was also promoted to disseminate messages regarding *KAITEKI*, both within Japan and abroad.





Exhibition titled "KAITEKI: Chemical Reactions between Technology and Art"



My inside garden by Takahito Kimura



Light 3D Sculpture by In Design



Wormhole by Yoshihiko Satoh



$\pi = CRT$  drawing  $C =$  Molar concentration,  $R = 0.082$  (gas constant),  $T =$  Absolute temperature by Katsuhiko Hibino



Muse the Chemistry by Kohske Kawase



KAITEKI Cocktail Bar by Nami Fukutome



Future Chandelier by Hiroyuki Moriwaki



ambience by Toshihiro Banba

At the KAITEKI CAFÉ™ operated as a base for Communicating the philosophy of KAITEKI to the public, there are opportunities to come into contact with the latest materials and products of the MCHC Group that lead efforts to achieve KAITEKI. Special exhibitions on KAITEKI are also held for limited periods. The cafe closed at the end of this June when the MCHC head office was relocated, and is scheduled to reopen on the first floor of the Otemachi Building in mid-September.



Also held in-house are KAITEKI Lecture Meetings on topics related to KAITEKI. For the Fifth KAITEKI Lecture Meeting held in March, lectures were given by Hiroko Akiyama, Professor at the Institute of Gerontology, The University of Tokyo and Chieko Asakawa, Fellow at IBM, both of whose lectures were received with great interest and excitement.



Fifth KAITEKI Lecture Meeting

## 《Intensive discussions on TKI's direction of investigation and research》

TKI categorizes its areas of research under three keywords: sun (SOL), water (AQUA), and life (VITA). These areas of research are, respectively, the environment and energy; water and food; and life. These are all essential for achieving *KAITEKI*.

To achieve the goals set when TKI was established, it is necessary to precisely understand the directions we should pursue in the future, in view of current social issues.

For this purpose, the Advisory Board was established within TKI for holding advanced-level discussions on several areas of research. Board meetings are held twice a year to discuss the directions of TKI's investigation and research. Members consist of President Kobayashi and other board members of TKI including the presidents of the four operating companies, as well as outside advisers who have profound expertise in the area of science, economy and society.

Advisory Board members are as follows: For the period of April 2009 to March 2012

Dr. Hiroaki Kitano, President, The Systems Biology Institute  
Dr. Hiroshi Komiyama, Chairman of the Institute, Mitsubishi Research Institute, Inc.  
Dr. Makoto Shiho, Chief Scientist, Institute for Applied Optics  
Dr. Eiichi Nakamura, Professor, Department of Chemistry, The University of Tokyo  
Mr. George Hara, Group Chairman and CEO, DEFTA Partners  
Dr. Ludwik Leibler, Director, Soft Matter and Chemistry Laboratory, ESPCI, Paris  
Dr. Jan Oosterveld, Professor, IESE Business School in Barcelona

Starting from April 2012:

Dr. Hiroshi Komiyama, Chairman of the Institute, Mitsubishi Research Institute, Inc.  
Mr. George Hara, Group Chairman and CEO, DEFTA Partners  
Dr. Jan Oosterveld, Professor, IESE Business School in Barcelona  
Dr. Tatsuhiko Kodama, Professor of Systems Biology and Medicine, Research Center for Advanced Science and Technology, The University of Tokyo  
Mr. Ken Senoh, President and Chairperson, The Industry Academia Collaboration Initiative Nonprofit Organization  
Dr. Norio Ozaki, Professor, Department of Psychiatry for Parents and Children, Graduate School of Medicine, Nagoya University  
Dr. Justus Wesseler, Professor, Center of Life and Food Sciences, Technical University Munich

Discussions took place on agriculture and healthcare at the Sixth Advisory Board Meeting held this April. Discussion on future issues in these areas further clarified directions to be pursued through MCHC's corporate activities from medium- to long-term perspectives.



Fifth Advisory Board Meeting in San Francisco November, 2011



Sixth Advisory Board Meeting at MCHC Head Office in Tokyo April, 2012

We will continue promoting activities targeting *KAITEKI*, making use of the outcomes of discussions that are held.

## Stakeholder Message



**TKI is pursuing *KAITEKI*, spreading the concept around the world and directly addressing the issue of how to achieve sustainability, health and comfort for people, society and the planet. I will continue to have high hopes for TKI.**

Hiroshi Komiyama  
Chairman  
Mitsubishi Research Institute, Inc.

I have been involved in the activities of TKI as a member of its Advisory Board since I was appointed to the position at the time of TKI's establishment in April 2009. Civilization, which mankind has created, has almost reached a saturation point in developed countries. It will surely cover the entire area of this finite planet within the 21st century. I advocate the concept of a "Platinum Society" as the vision of society we should aim for, and preside over the Platinum Network, which is a movement to realize this vision. Mitsubishi Chemical Holdings Corporation (MCHC) has also joined this movement. I think the relationship between TKI and the Platinum Network can be described with the following words: "A Platinum Society is the goal of the quest for *KAITEKI*." We are likely comrades who intuitively sensed a great historic milestone and came to have the same idea.

At the semiannual meetings of the Advisory Board, we seriously discuss the topics and issues that TKI presents and the direction of the research and surveys that TKI will conduct in the future. Specific examples of these issues include "Japan's energy mix after the Fukushima nuclear accident," "the earth's nitrogen cycle," and "how to maintain *KAITEKI* lives for the elderly in a rapidly aging society." In this way, the agenda concerns *KAITEKI* for people, society, and the planet with a 20- to 50-year perspective into the future, and with subjects selected from TKI's three key areas of "the environment, resources, and energy," "water and food," and "health and society." I hope that through these discussions, TKI will develop a model for the sustainable society that the world needs in the 21st century, just as our actions toward a Platinum Society do.

In the fall of last year, I was invited to TKI's poster session (a closed meeting). I was impressed to discover that TKI members conduct research on a wider range of topics than they discuss at the Advisory Board meetings. I was also impressed that they work on specific subjects, such as "obtaining hydrogen through water splitting by using sunlight," although these studies are conducted as long-term research.









TKI also regards communicating the concept of *KAITEKI* to society as its mission. In July last year, it held an art exhibition titled "*KAITEKI*: Chemical Reactions between Technology and Art." The exhibition removed the barriers between science (chemistry) and art, which tend to be regarded as two polar extremes, presenting a view of a world created through a joint effort between artists, engineers and researchers. What it expressed was a space that embodies the concept of *KAITEKI*, which was impressive.

I will continue to have high hopes for the activities of TKI, which pursues *KAITEKI*, spreads the concept around the world, and directly addresses the issue of how to achieve sustainability for people, society, and the planet.

# Initiatives for Reinforcing Corporate Foundation

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Mitsubishi Chemical Holdings aspires to reinforce the corporate foundations to build the relationship of trust through communication with all our stakeholders and wide range of activities, with strict compliance with rules and regulations.

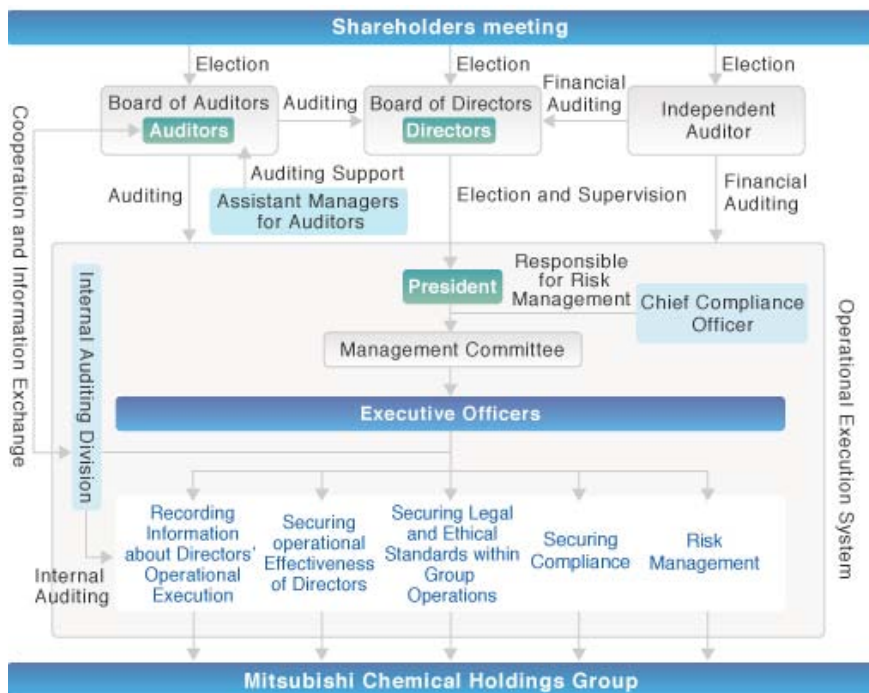
 <p>▶ Corporate Governance</p>	 <p>▶ Communication with Customers and Business Partners</p>
 <p>▶ Internal Control Risk Management Compliance</p>	 <p>▶ Initiatives Concerning Human Rights and Labor</p>
 <p>▶ Initiatives Aimed at Safety and the Environment</p>	 <p>▶ Corporate Citizenship Activities</p>
 <p>▶ Communication with Shareholders and Investors</p>	 <p>▶ Communication with Stakeholders</p>

# Corporate Governance

## To Continue to Be a Company People can Trust

Mitsubishi Chemical Holdings Corporation (MCHC) will work to strengthen its corporate governance, compliance and risk management to continue to be a company people can trust.

Corporate Governance System (as of April 1, 2012)



## Basic Approach to Corporate Governance

The MCHC Group has introduced a holding company system, which separates its portfolio management operations from its operations for managing individual businesses. As a holding company, MCHC will endeavor to improve the corporate value of the MCHC Group by formulating strategies for the entire Group, distributing management resources efficiently, and supervising business management. In its role overseeing the management of the MCHC Group, MCHC will work to ensure that management decision-making and execution is efficient and timely, and will also work to clarify management's responsibility as well as ensure compliance and enhance risk management.

### [The Rights and Roles of Each Organization]

#### Board of Directors

Based on the Board of Directors Regulations and other related regulations, the Board of Directors makes decisions on important managerial matters and fundamental matters regarding the management of the MCHC Group, and also supervises the directors' execution of their duties. As a general rule, the Board of Directors meets once a month. The Articles of Incorporation specify that MCHC have no more than ten directors, and as of the end of June 2012, the board comprised eight directors, three of whom assume dual roles as executive officers. To build a management system capable of swiftly responding to changes in the management environment and to provide greater clarification of the management responsibilities and roles of each director, directors are appointed for a term of one year.

#### Election of Directors

To determine candidates for director, the Board of Directors decides on people who possess the qualities and abilities best suited to achieving the management principles of the MCHC Group and fulfilling its social responsibility. Candidates are then presented at the Shareholders' Meeting and appointed by election.



## **Management Committee**

The Management Committee operates as a body for assisting the President and Representative Director in decision-making. The Committee conducts deliberations on investments, loans and other important issues involving business execution by MCHC and MCHC Group companies, and also deals with important matters concerning the promotion of corporate social responsibility (CSR), such as compliance, risk management, environmental and safety measures, human rights promotion and social contribution. Also note that important management matters discussed by the Management Committee are subject to approval by the Board of Directors before being carried out.

The Management Committee meets about once a month and comprises the President, directors, standing executive officers, the executive representatives of core Group companies and corporate auditors.

## **Compensation for Directors**

Compensation, etc. for directors consists of monthly compensation, the amount of which is determined based on the rank, etc. of each director, and stock acquisition rights as stock options, which are issued in consideration of the previous fiscal year's results, such as the business performance of the company, the status of the execution of each director's duties, and the degree of his or her contribution to MCHC. The total amount of compensation, etc. paid to the eight directors in fiscal 2011 was 228 million yen.

## **Corporate Auditors and the Board of Auditors**

Corporate Auditors and the Board of Auditors are in place as a body for the auditing and supervision of MCHC. The corporate auditors take part in the Board of Directors Meeting as well as other important meetings and committees to verify the details of reports from the Board of Directors and other bodies, look into company business activities and the state of its assets and audit directors' execution of their duties. As a general rule the Board of Auditors meets once a month, where it deliberates and decides on audit policy and other important matters concerning auditing. In fiscal 2011, the Board of Auditors met 14 times.

The Board of Auditors at MCHC comprised five members as of the end of June 2012. All three outside auditors are designated as independent officers as stipulated by the Tokyo Stock Exchange, Inc. Auditors also coordinate closely with accounting auditors, the Audit Office, which conducts internal auditing, and the Internal Control Office, discussing the status and results of each audit. They therefore strive to maintain and improve the soundness and transparency of management.

## Internal Control

### Internal Control Systems: Basic approach and implementation

At Mitsubishi Chemical Holdings Corporation (MCHC), the Board of Directors conducts inspections of the operation status at the end of every fiscal year concerning the basic policy for internal control systems, covering areas such as risk management, compliance, information management and auditing systems. At the same time, the Board of Directors reviews specific details as necessary, in an effort to continually enforce and strengthen our internal control systems.

In addition, the Directors regularly reports the implementation status of primary matters, such as risk management and compliance, to the Management Committee.

We will continue to carry out internal control evaluations more effectively based on the current implementation of internal control systems and evaluation results.

## Risk Management

### Risk Management: Basic approach and risk management systems

We have always been committed to improving the risk management systems at the MCHC Group, to both fulfill our social responsibilities and maintain and enhance our corporate value. We do this through our risk management system, headed by the President of MCHC in his capacity as Chief Risk Management Officer of the MCHC Group. We have also created the MCHC Group Risk Management Basic Policy, which we have been effectively implementing in an effort to avoid major risks and minimize any damage—whether human, economic or social—associated with our business activities, should any such risks materialize.

Important matters relating to risk management within the MCHC Group, including risk management policies and groupwide measures in response to major risks, are discussed by the Management Committee and determined by the President, in his capacity as Chief Risk Management Officer, based on the outcome of discussions.

Risk Management System (as of June 30, 2012)



We classify MCHC's potential risks into categories such as those relating to "external environment", covering natural disasters, market trends and laws and regulations; those relating to the "business process," including financial activities and marketing activities; and those relating to the "internal environment," such as governance and human resources. Every year, each MCHC division identifies these risks and studies countermeasures by ranking the risks based on an evaluation of the frequency of their occurrence and their impact, such as financial loss, human cost, or the erosion of society's trust in MCHC.

We also singled out risks to focus on, which were identified by the top management of MCHC, and risks that needed to be addressed both in light of the social situation and that would have a substantial impact on the MCHC Group if they did occur. The details of, and countermeasures against, those risks were confirmed by the Management Committee.

At our four operating companies, we have established risk management systems in line with the specific nature of each company's business activities. Our four operating companies also provide guidance and support to their subsidiaries to enable them to establish and implement their risk management systems effectively.

We believe that sharing information related to risks within the MCHC Group is important to further reinforce our risk management systems. MCHC therefore holds regular meetings with each of our operating companies to enable us to share information regarding common matters such as risk management strategies.

### Fiscal 2011 initiatives and results

In fiscal 2011, we took priority actions on risks related to overseas operations, the procurement of materials / responsibility of product supply, compliance, and human resources, among others. In the United States and China, we further strengthened risk management through internal controls at each MCHC base of operations. In Southeast Asia, where MCHC does not have an operational base, we specified which companies will play a key role in Indonesia, Singapore, Thailand, and other countries. We have therefore established a risk management system for confirming the risks that are specific to each country and promoting the sharing of information.

We have been studying the procurement of our materials and responsibility of product supply as part of our business continuity plan (BCP). We have been accelerating our efforts to review and improve our current BCP, by learning from our experience after the Great East Japan Earthquake in March 2011, when we suffered damage at multiple MCHC Group sites and facilities, including Mitsubishi Chemical Corporation's Kashima Plant. We will make groupwide efforts to minimize damage and ensure business continuity in the event of a disaster. For example, we are ready to transfer our head office capabilities in the event of a devastating earthquake directly under Tokyo, which would make it impossible to continue business in the Tokyo area.

<b>Initiative example : Mitsubishi Chemical Corporation</b>	<a href="#">→ Mitsubishi Chemical Corporations BCP Initiative</a>
The MCC group has been overhauling their BCPs including supplier responsibility.	
<b>Initiative example : Mitsubishi Rayon Co., Ltd.</b>	<a href="#">→ Mitsubishi Rayon Co.,Ltd.'s BCP Initiative</a>
In fiscal 2011, MRC has revised their BCPs.	

### Information security initiatives

We set out the MCHC Group Information Security Policy in order to protect our information system assets from both internal and external threats, and to maintain and enhance our corporate value.

Essentially, this policy requires MCHC Group companies to recognize the fundamental importance of information security assets and ensure the security of information. We are committed to maintaining and managing information security systems more effectively throughout the MCHC Group. That is why we have set up the MCHC Group Information System Security Administration Committee, headed by the executive officer in charge of information systems at the Group Synergy Office, and have appointed managers to oversee information system security at all MCHC Group companies.

We require all MCHC Group employees, including those based overseas, to comply with our Information Security Policy and related regulations, and disseminate them via regular educational and awareness programs.

To improve our information security further, we will create and distribute policies and rules concerning the use of social media by our employees, and also enhance our security systems related to other information.

## Compliance

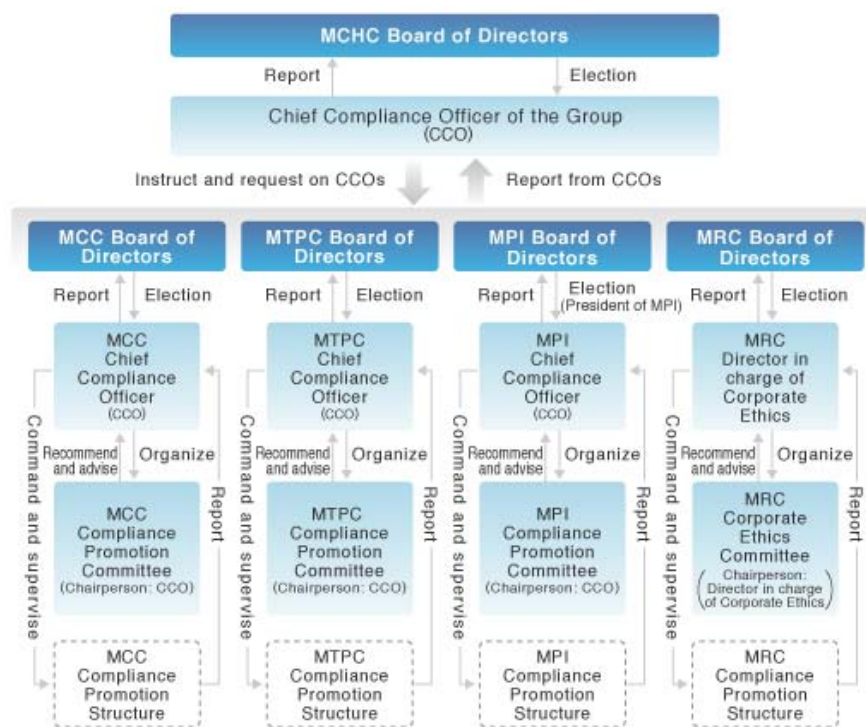
### Compliance: Basic approach and promotion structure

Here at the MCHC Group, we view compliance from a broader perspective, incorporating areas such as corporate ethics and social boundaries, rather than focusing strictly on legal compliance. We regard compliance as one of our top management priorities in order to continue to be a company that people can trust. Therefore, we have set out a number of regulations to underpin our operations, including our [MCHC Group Corporate Ethics](#), the [MCHC Group Compliance Code of Conduct](#), and the MCHC Group Compliance Promotion Policy.

To steadily incorporate compliance into the MCHC Group, we have established an Internal Control Office to oversee compliance at MCHC, as well as Compliance Promotion or Corporate Ethics Committees at our four operating companies, under the supervision of a Chief Compliance Officer (CCO) appointed by the MCHC Board of Directors. In accordance with basic rules and other provisions, each operating company has formulated a code of conduct, compiled manuals and held trainings and seminars. Furthermore, the operating companies also audit and monitor operations, have established and operate compliance hotline services, and report the status of their implementation to MCHC. MCHC is supporting these activities at our operating companies, such as assigning instructors to oversee training and producing training tools.

At overseas MCHC Group companies meanwhile, we are in the process of formulating codes of conduct and regulations in line with legislation and social norms in each country, based on our MCHC Group Corporate Ethics as a common basic rule, in an effort to ensure and reinforce compliance.

Promotion Structure



## Fiscal 2011 initiatives and results

In December 2011, we invited an outside attorney to give a lecture entitled “Compliance and Risk Management” for officers from MCHC and Chief Executive Officers and Chief Compliance Officers from MCHC Group companies. We also organized training sessions for new officers at MCHC Group companies in August and September.

In addition, for the compliance awareness survey conducted at each of our operating companies, we created common questions across the MCHC Group. The purpose of this survey is to find out to what extent our employees are informed of the philosophies and policies, etc. of the MCHC Group Corporate Ethics and the MCHC Group Compliance Code of Conduct, and to what extent these philosophies and policies, etc. have been assimilated into the actions of our employees. The results of the survey show that their awareness of compliance has been increased. It was also found, however, that further improvements are needed concerning creating a working environment in which employees are free to express their opinions. We make sure that managers exercise leadership by understanding the social needs and the company's policies, Listening to their subordinates' opinions and achieving accountability. We will thus aim to create vigorous workplaces the facilitate communications and continually work toward creating & warking environment in which employees are free to express their opinion.

In fiscal 2012, we are supporting training based on case examples, and have asked our operating companies to include the importance of “management accountability” in these case examples.

With regard to the MCHC Group's overseas bases, we held discussions with MCHC bases in the United States and China concerning the promotion of internal controls and conducted various trainings at each. In areas where MCHC doesn't have any operational bases, such as Southeast Asia, we promoted the establishment of a system where a leader in each country would promote internal controls, and undertake related training. We included “global trends” and “bribery and corruption” in the training topics discussed at each base to raise trainees' awareness of compliance issues. From now on we will make sure that our bases in the United States, China, and other areas exchange information and make use of a network like this to further promote internal controls in the MCHC Group.

Specific Initiatives at our Four Operating Companies:

→ [Mitsubishi Chemical](#) → [Mitsubishi Tanabe Pharma](#) → [Mitsubishi Plastics](#)  
→ [Mitsubishi Rayon](#)

## Auditing and reporting systems

### Auditing and monitoring

We conduct annual Control Self Assessments (CSA) at MCHC Group companies via the Audit Office at MCHC, in order to ascertain levels of compliance at each company based on a series of compliance-related questions.

### Hotline service

We launched a Hotline Service for the staff of MCHC Group companies to seek advice or report matters relating to compliance, either to the General Manager of the Internal Control Office or an outside attorney. Since then, we have been working to promote the service and ensure that it operates effectively.

To those employees seeking advice or filing reports, we vow to keep confidential the fact that they have sought advice or filed reports, as well as the contents thereof, and guarantee that they will not suffer any discriminatory or unjust treatment, including dismissal, on account of this fact. If anyone should act unjustly toward such an employee, that person will be disciplined in accordance with internal rules. An investigative team led by the General Manager of the Internal Control Office processes all information that is provided. If there is deemed to be a problem, we will take swift action to remedy the situation, under the supervision of the CCO.



## Amid the MCHC Group's expanding influence, we pursue thorough accountability and transparency to underpin society's trust.

### Noboru Tsuda

Managing Executive Officer,  
Chief Compliance Officer,  
General Manager, Internal Control Office,  
Mitsubishi Chemical Holdings Corporation

In April 2008, Mitsubishi Chemical Holdings Corporation (MCHC) formed the Internal Control Office. Although systems for compliance and risk management had been maintained and operated within the CSR Office until then, we thought it was necessary to have a department which specialized in and exercised across-the-board jurisdiction over internal control, including coordination with internal audit departments. Traditionally, internal control is understood as “having an organization function effectively as such to realize its goals.” At MCHC, we regard the term “effectively” to mean properly undertaking risk management, including compliance, and operating an organization in an efficient and effective manner. The mission of the Internal Control Office is to promote these improvements. At the MCHC Group, we regard the generation of *KAITEKI* value leading to the sustainability of society to be a pillar of our management, and to this end we ourselves must earn the trust of society and be a sustainable organization. In that sense, we believe that ensuring firm internal control is a precondition to pursuing *KAITEKI* value. Meanwhile, the MCHC Group has undergone substantial changes in recent years. Because of its growth in size and the rapid advancement of globalization, the MCHC Group has gained greater social influence and heavier responsibility regarding internal control. With these developments as a backdrop, we will continue to engage in activities with a focus on the points described below.

The first of these points is to strengthen the development of group-wide, cross-sectional guidelines and standards on internal control. To date, the MCHC Group has developed basic rules and systems which are common to its four operating companies. That said, since each company differs by industry sector and business conditions, operates under a different corporate culture, and has its own set of employment conditions, we have enabled each company to conform to basic rules while conducting internal control in an autonomous fashion. However, society has changed at a growing pace and we have become increasingly unable to keep up using this method alone. Overseas in particular, conventional laws, established practices and customs are often tightened without being noticed, and there are sometimes delays in taking action in the field. What's more, since the risks differ depending on the country, in many cases it is effective to approach a country with a stance that is shared across the four operating companies. In light of these circumstances, MCHC deems it necessary to go ahead with measures such as group-wide internal control guidelines.

The second point is to leverage the different companies within the MCHC Group to develop better systems. The four operating companies each have areas and methods of internal control in which they uniquely excel due to the experience they have acquired to date. Given this, MCHC plans to evaluate the systems and operational status of internal control at each company, and with the best companies serving as models, utilize the advantages of being able to convey experience, knowledge and expertise on a mutual basis to promote systemic reforms at other companies. We believe it is also the role of MCHC to take account of the characteristics of the four operating companies and overseas Group companies and constantly make adjustments so that the four operating companies engage in friendly competition with the aim of being the best.

The third point is to enable the operation of internal control in an autonomous and self-aware manner from the field level. To date, we have undergone a process of innovation and improvement concerning the systems and schemes for internal control at MCHC. Awareness on the part of every employee is essential to instilling these systems and schemes and making them actually work. There is also a tendency for internal control to be taken as “managing from senior management,” but without autonomous awareness in the field, this has no practical effectiveness. We recognize this as an enormous challenge. In particular, the roles of department and section managers are crucial. No matter how well developed a system is, it will end up a pie in the sky unless each and every organization functions as such. The same goes for me. When a problem occurs, I gather the section managers and try to get down to the questions of “where did the problem lie and what should we do about it?” Looking ahead, we will continue to put effort into training and other measures to raise the awareness of employees, and are considering personnel rotations and other ways to stimulate awareness with regard to leaders in departments of above a certain size.

The common thread to these initiatives, in other words, is that the fundamental attitude of internal control is the comprehensive implementation of “accountability” and “transparency.” Since MCHC is an organization with an extensive reach and we live in an era of rapid social change, no matter how far we go in establishing schemes and adding layers of protection, troubles and difficulties can happen. At those times, we must explain ourselves internally and externally in an accurate and sincere manner, and uncover the facts without concealment. Following that, it is extremely important to consider what to reflect on and what improvements to make, and to then take action. Moving forward, we will strive to ensure that this is instilled throughout the entire the MCHC Group as a natural practice.

## Mitsubishi Chemical Holdings Group Corporate Ethics

We, constituent members of the Mitsubishi Chemical Holdings Group (MCHC Group), shall share the following ethical standards and act with sound ethics and good common sense, and exert our utmost to ensure sustained development as a corporate group that engenders society's trust, in every aspect of our corporate activities.

### 1.Awareness and Responsibility

Based on the basic understanding that the foundation of our corporate activities is society's trust and confidence in us, we shall endeavor to contribute to the realization of an affluent and enriching society through respective business activities with a keen sense of corporate social responsibility.

### 2.Fairness, Equitability and Integrity

We shall respect the dignity and rights of all people and shall not engage in invidious discrimination for any reason whatsoever, be it racial, gender or religious. Furthermore, we shall deal with third parties including customers, suppliers, vendors, shareholders, business partners, administrative organs and local communities who associate with the MCHC Group, in a fair, equitable and sincere manner. The same holds true for relations among inter-MCHC Group constituent members.

### 3.Strict Compliance

Strict compliance constitutes the foundation as a member of society. "Never engage in unlawful activities," is a natural social norm (legal and ethical standards), which must be observed at all times.

At the MCHC Group, we shall act in accordance with the following standards in order to avert possible risks that may lead to illegality:

1. Continue to sharpen sensitivity toward illegal conduct.
2. Never engage in suspected illegal activity.
3. Do not be optimistic in evaluating risk of illegality.
4. In the event that an illegal act is committed, do not conceal or justify it.
5. Avoiding risk of illegality takes precedence over corporate interest at all times.

### 4.Prudence

With respect to inter-company or inter-group relationships, as well as relationships with our customers, vendors and business partners, we shall avoid improper associations and maintain proper relationships that conform to prevailing social standards, to prevent misunderstanding.

In particular, we shall make a clear distinction between official and private matters and shall not exploit one's position or status as a member of the MCHC Group to pursue one's own personal interests in any business activity.

### 5.Transparency and Openness

Recognizing the importance of accountability in corporate activities, we shall maintain transparency in our corporate activities and proactively disclose appropriate information to uphold "openness" within and without the Company.

## **Mitsubishi Chemical Holdings Group Compliance Code of Conduct**

At the MCHC Group, the meaning of the word "Compliance" goes much further than simply complying with laws and regulations. It means compliance with social rules and norms in a broad sense, including corporate ethics. We must develop a strong sense of corporate social responsibility, comply rigorously with social rules and regulations and live up to the expectations of our stakeholders, including customers, suppliers, vendors, consumers, investors such as shareholders, business partners, employees and local communities.

### **Chapter 1: Awareness and Responsibility**

#### **Awareness of Social Responsibility**

- 1-1. Recognizing corporate social responsibility, we will strive to win public trust by contributing to the affluence and comfort of society by offering socially beneficial goods and services based upon the expertise and technologies we have developed in various fields of endeavors, including chemistry.

#### **Responsible Care for the Environment**

- 1-2. We will commit ourselves to the protection of the environment and endeavor to reduce environmental burden in the course of all our business activities, including promotion of resource and energy conservation, waste reduction, reuse and recycling, as well as environmental conservation and development of its technologies.

#### **Responsible Care for Safety**

- 1-3. Recognizing safety assurance as a corporate social responsibility, we will place top priority on safety in the course of all our business activities, which include ensuring the safety of all our products and services, including adequate handling of chemical substances, as well as operational safety.

### **Chapter 2: Fairness, Equitability and Integrity**

#### **Respect for the Dignity and Rights of Individuals.**

- 2-1. We will respect individual human rights and character. We will abstain from any conduct that undermines individual dignity, such as discrimination against others on the basis of race, ethnicity, national origin, religion, gender, disability, disease and social status; we will also avoid language and behavior that offends others, such as sexual harassment. We will also adhere to internationally recognized norms, eschew forced labor in all of its forms, and support the effective abolition of child labor.

#### **Creating a Motivational Workplace**

- 2-2. We will strive to create a motivational workplace that provides job satisfaction to Group members through the nurturing of respect for diverse personalities and values, the creation of a free and open-minded working environment in which individual employees can manifest their best qualities, and the fostering of mutual trust through fair and equitable personnel treatment.

#### **Customer Relations**

- 2-3. We will listen to the voices of our customers and take a pro-customer approach so that we will be able to respond with utmost sincerity and offer safe and high-quality products and services.

#### **Partnership/Vendor Relations**

- 2-4. Based on the basic understanding that all business partners and vendors are our partners in conducting business, we will endeavor to foster mutual trust through fair and equitable transactions.

#### **Ethical Business and Government Relations**

- 2-5. We will abstain from illicit political donations, illegal incentives and bribe-giving to politicians and public servants, and strive to maintain healthy and transparent relations with political and governmental organizations at all times.



### **Severing Ties with Anti-Social Influences**

- 2-6. We will take a firm stand against anti-social influences that disrupt social order and threaten sound activities, and never involve ourselves in malfeasance or anti-social conduct. We will not provide any favors, including financial, to anti-social influences, under any circumstances whatsoever.

## **Chapter 3: Strict Compliance**

### **Compliance with Laws and Regulations**

- 3-1. We will conduct business by adhering to high ethical standards and sound common sense, and comply with all relevant laws and regulations in and outside of Japan, socially-recognized rules and standards, agreements and promises we have entered into with our customers, vendors, business partners and local communities, as well as our corporate rules and manuals.

In particular:

1. We will comply with relevant administrative laws and regulations applicable to our businesses and perform procedures required by such, including obtaining official approval and licenses and notification; and reporting properly and in complete detail.
2. We will comply with the Antimonopoly Act\* and other relevant laws and regulations, abstain from illegal conduct such as forming cartels, engaging in bid-rigging and abusing one's dominant bargaining position, and participate in fair and free competition in the marketplace.aa
3. We will comply with the Unfair Competition Prevention Law\* and other relevant laws and regulations, and shall not pursue our commercial interest by improper means such as illicit acquisition of others' trade secrets, or acts that may be detrimental to others' commercial interests.
4. We will comply with the Subcontract Act\* and other relevant laws and regulations and abstain from engaging in conduct that may be detrimental to subcontractors' interests, such as delays in payment.
5. We will comply with the Foreign Exchange and Foreign Trade Law\* and other relevant laws and regulations, and properly handle the import/export of raw materials, products, and other items. We will also abstain from exporting products and technologies that may destabilize international peace and security.
6. In addition to laws and regulations pertaining to accounting procedures and taxes, we will abide by generally accepted accounting standards as we implement proper accounting procedures, ensure the reliability of our financial reports, and make appropriate tax payments.
7. We will comply with the Labour Standard Law\* and other relevant laws and regulations, and strive to maintain pleasant working conditions including occupational safety and health.
8. We will not engage in fraudulent transactions prohibited under the Financial Instruments and Exchange Act\* and other relevant laws and regulations, including the trading of stocks and corporate bonds by taking advantage of undisclosed information one has come to know in the course of one's work.
9. We will correctly record business transactions and activities, including the signing of contracts, and properly manage and maintain the records in accordance with relevant laws and regulations as well as relevant internal rules.

### **Protection of Intellectual Property**

- 3-2. We will endeavor to develop innovative technologies, products and services, and obtain intellectual property rights and commercialize them. In this process, we shall not infringe upon the intellectual property owned by other parties, including patents, utility models, designs, trademarks and copyrights.

### **Protection of Personal Data**

- 3-3. We will strictly control personal data pertaining to employees, customers and other stakeholders that we may have access to in the performance of our duties. Unless personal consent is secured, we will not disclose or leak any personal data to third parties or other employees who have no need to acquire the information in terms of business, and, at the same time, will not use it for purposes other than the original intent.

### **Confidentiality**

- 3-4. Strict control must be maintained over trade secrets and other confidential information belonging to the company or to third parties (including customer information and technical know-how) that one might obtain in the performance of one's business duties. Without the express permission of the proper authorities, such confidential information must never be disclosed or leaked to third parties or to internal staff who have no legitimate need for it, and must never be used for purposes other than the original intent.

## **Chapter 4: Prudence**

### **Prudent Conduct**

- 4-1. In our relationships with customers, vendors and other business partners, we will not engage in misleading acts such as offering or receiving business entertainment and gifts that go beyond business norms or exceed the bounds of limits acceptable to the industry.

### **Appropriate Use of Corporate Assets**

- 4-2. Corporate assets and expenses, both tangible and intangible, must be used properly to achieve corporate business objectives and must not be used for personal purposes.

### **Appropriate Use of Information Systems**

- 4-3. Pursuant to relevant internal rules, corporate networks and operation software will be used only for business operations authorized by the company. Wrongful acts such as hacking into the information system, damaging, falsifying or altering data, or making unauthorized use of computer software, are not permitted.

### **Preventing Conflict of Interest**

- 4-4. We shall not exploit our official positions and authority or information we may have access to in the performance of our duties to engage in acts that benefit ourselves or third parties, nor shall we involve ourselves in activities that may compete against our corporate businesses, without corporate permission.

### **Prohibition of Political/Religious Activities at the Workplace**

#### **4-5.**

**We will not engage in political or religious activities at the workplace, including solicitation on behalf of political or religious groups or requests for votes, without corporate authorization.**

### **Discontinuance of Empty Formalities**

- 4-6. Except for those within the acceptable business norms, in-house and inter-Group gift-giving and exchange of gifts and items should be shunned in view of abolishing empty formalities.

## **Chapter 5: Transparency and Openness**

### **Co-existence with Local Communities**

- 5-1. We will strive to deepen our understanding of the cultures and customs of the countries and communities in which we operate our businesses, respect their social norms, and harmoniously co-exist with local communities as good corporate citizens through participating in activities that contribute to society.

### **Appropriate Disclosure of Information**

- 5-2. As a corporate group open to society, we will maintain the transparency of our activities and appropriately disclose relevant information to promote public understanding of our activities. Pursuant to relevant laws and regulations, we will also accurately and adequately disclose financial data and information pertaining to the state of our business activities to shareholders and investors.

### **Open Workplace.**

- 5-3. We will maintain an open environment at the workplace where members feel comfortable about discussing anything. If, at the workplace, one learns of acts committed that violate laws and regulations or transgress this Code of Conduct, or the possibility of such acts, one must not conceal or neglect it but report it to the Company for a solution through the management or other systems, such as the Compliance Hot Line.

# Initiatives Aimed at Safety and the Environment

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Here at the Mitsubishi Chemical Holdings (MCHC) Group, we act in accordance with the Group's Basic Policy on Safety and the Environment, which is described below.

## Basic Policy on Safety and the Environment

1. Safety lies at the foundation of the company's very existence, and ensuring safety is the company's social responsibility.
2. The company has a responsibility to ensure that its products are safe for clients and customers, and to minimize the impact of its products on the environment.
3. The company has an obligation to conserve and improve the environment, and become an entity that is friendly to both people and the planet.

Given this policy, we have established the elimination of serious accidents as a top priority and a binding target under the *APTSIS 15* mid-term management plan that began in April 2011. We have also established MOS (Management of SUSTAINABILITY) Indexes to ensure safety and environmental conservation, with the aim of using the social contributions determined by these indexes to make decisions and evaluate performance. This will enable us to characterize improvements in safety and environmental issues as a pursuit of MOS value in the context of our management and daily activities.

## MOS indexes for safety and the environment

- |  |  |
|--|--|
| S-1: Contribution to reduce environmental impact through products and services | (e.g., by implementing a 30% reduction in the environmental load at our sites, reducing CO <sub>2</sub> emissions during product use)                        |
| S-2: Practice energy saving & reduction of depletion resources                 | (e.g., by using renewable materials, controlling the use of rare metals)<br>(e.g., by reducing the occurrence of accidents and problems by 50%, conducting a |
| C-3: Recognition of corporate trust  | risk assessment of chemical products)  |

To meet these targets, we will continue to persuasively and proactively promote these activities in terms of ensuring safety and reducing the environmental load, thereby helping provide *KAITEKI* value.

## Management and Information Disclosure in Regard to Safety and the Environment

The MCHC Group has established the Group Synergy Office and reinforced the foundations in a Group-wide and cross-sectional manner. The aim of these moves is to combine Group expertise in areas such as environmental protection, disaster prevention, occupational safety and health, production technologies (manufacturing), in order to enhance Group strategy through unified functioning. Taking things a step further, general managers in charge of the environment, safety, and production technologies (manufacturing) from the four core Group companies, Mitsubishi Chemical Corporation, Mitsubishi Tanabe Pharma Corporation, Mitsubishi Plastics Inc. and Mitsubishi Rayon Co. Ltd., attend Four-Company Cooperation Council meetings which are held periodically. At these meetings, the attendees work closely to exchange information and opinions regarding the courses of action, activities and issues at each company. MCHC leverages its leadership abilities to draw out information such as the state of management in these areas in order to assess and confirm the details of management at each company and work to prevent trouble from occurring.

Each MCHC Group company has undertaken initiatives related to the Environmental Management System (EMS) and Quality Management System (QMS). 98%\*1 of all the sites of our production bases worldwide have obtained ISO 9001 certification, and 97%\*2 have obtained ISO 14001 certification. We effectively engage in environmental management by periodically conducting internal and external audits of these bases.

\*1: In terms of sales; however, the Mitsubishi Tanabe Pharma group is excluded, because it is managed under GMP.

\*2: In terms of sales

Regarding specific measures related to safety and the environment, regular meetings are held by each operating company's safety and health committee, whose members include the labor union. Meeting participants identify issues in the field and discuss measures to resolve them. The committee brings up company-wide issues and solutions in its educational activities and discussions, and takes steps to reduce costs, improve occupational safety and health, reduce problems, etc.

Detailed information on the safety and environmental activities being undertaken at each operating company can also be found on each company's website.

In disclosing information related to safety and the environment, it is important to examine and report business activities from a global perspective. Therefore, at the MCHC Group, we aim to apply more reliable disclosure criteria that meet international standards and improve the content of our reports, in order to conform to GRI Guidelines (G3). Over the next three years we also plan to expand the scope of our reports to include our major overseas bases.

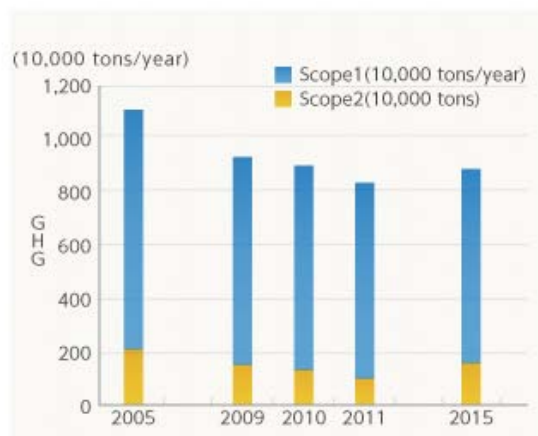
Safety and Environmental Activities at Operating Companies :

→ [Mitsubishi Chemical Corporation](#) → [Mitsubishi Tanabe Pharma Corporation](#)  
→ [Mitsubishi Plastics Inc.](#) → [Mitsubishi Rayon Co., Ltd.](#)

## Initiatives to Reduce Greenhouse Gas Emissions

We recognize that climate change is the most serious of all the issues related to the global environment, and as a company in the chemical industry, we need to give the highest priority to tackling this issue. At the MCHC Group, we launched *KAITEKI* Project in 2008, and since then have been making a group-wide effort to reduce greenhouse gas (GHG) emissions. For *APTSIS 15*, we have established two management indexes, the amount of GHG emissions at each office or plant and the provision of products and components with low GHG emissions. We have since been taking steps to cut GHG emissions under the *KAITEKI* Project.

MCHC Group GHG emissions in Japan



## Reducing the MCHC Group's GHG emissions [MOS Index: S-1-1]

In the *APTS/S 15* mid-term management plan announced in December 2010, the MCHC Group set a 2015 target for reducing GHG emissions. Among the MOS Indexes related to reducing emissions, we announced a target of cutting greenhouse gases in Japan by 17% in 2015 from 2005 levels.

Emissions in 2011 were down significantly, 22% from 2005 and 6% from the previous year (2010). This was mainly due to the shutdown of Mitsubishi Chemical Corporation's Kashima Plant after the Great East Japan Earthquake. It was also attributed to the slowdown in demand for certain chemical products in response to the economic deterioration. Meanwhile, each operating company has been engaged in activities to reduce energy consumption, in line with the voluntary target set by the Japan Business Federation. These activities have also been steadily helping to reduce the amount of our GHG emissions.

### Initiative example: Mitsubishi Rayon Co., Ltd.

→ [Use of carbon-neutral fuels](#)

The Toyama Production Center at Mitsubishi Rayon Co., Ltd. has installed facilities that employ a biogas boiler to use carbon-neutral fuels.

### Initiative example: Mitsubishi Plastics, Inc.

→ [Air-conditioning system using AQSOA](#)

Mitsubishi Plastics, Inc. has developed AQSOA, a zeolitic water vapor adsorbent that has a special adsorption property, and started a verification test of air-conditioning systems that use this material.

In addition to these improvements in the production process, we have also been undertaking initiatives to reduce the environmental burden from transport in our distribution and sales activities. Mitsubishi Chemical Logistics Corporation has been working to improve the energy consumption rate of transport through such measures as improving the fuel efficiency of ships, as well as considering a change in the type of transport. Mitsubishi Tanabe Pharma Corporation has taken steps such as replacing approximately 50% of its business-use vehicles with electric and hybrid vehicles.

We will continue to make a group-wide effort to reduce GHG emissions.

## Initiatives for reducing power consumption in response to the power shortage following the Great East Japan Earthquake

In response to the mandatory power-saving order issued by the government, every MCHC Group office and plant took steps to reduce its power consumption. At MCHC's head office building, which was designated as a large-volume user, we took measures such as keeping lights off on certain floors during certain hours by introducing a rotating work schedule, installing appropriate air-conditioning, replacing some light bulbs with energy-saving ones (LED), using the sleep mode for PCs, and keeping lights off during lunch breaks. As a result, we succeeded in reducing power consumption during the July–September quarter by 25% year on year.

The head office of Mitsubishi Rayon Co., Ltd. introduced daylight saving time, which reduced power consumption during the July–September quarter by 36% year on year. The system did more than just reduce power consumption. Because employees started and finished work earlier than usual, they had more free time after work. This gave them a good opportunity to review the way they had worked before and to reconsider their work/life balance.

We will maintain our position and measures regarding the appropriate use of electric power, which have spread across MCHC and operating companies.

## Initiatives to Reduce Atmospheric and Water Pollution

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Pollution of the atmosphere and water from chemical emissions is not as serious as it was in the past, partly due to the effect of tighter government regulations. We recognize, however, that chemical emissions directly affect the environment of people who live in the neighborhood of our plants, and we need to make whatever improvements we can. Accordingly, we have established the amount of emissions to be reduced at each plant as a management index, which will be integrated into the GHG emissions index mentioned in the previous section. We aim to reduce this integrated index by 30% from 2005 levels.\* We have been holding periodic discussions with people in the neighborhood of our plants to get feedback from them. By taking into consideration of these feedbacks, we will proceed with measures for further improvements.

Some emissions data will be kept in a database. More detailed data will be posted on the website of each operating company or each plant.

\*For the integration, we use LIME2, a weighting method for assessing environmental impact that was developed in the second-term National LCA Project in Japan. For details, please refer to [the website of the Life Cycle Assessment Society of Japan](#).

## Initiatives for Biodiversity

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In 2010, the MCHC Group joined the Declaration of Biodiversity by Nippon Keidanren\*1 as a corporate group, and began ongoing voluntary activities to reduce the impact of its business activities on biodiversity.

The MCHC Group first discussed to understand the impact of our business activities on the ecosystem. We also decided to reassess the existing environmental protection measures taken within our offices and plants by adding the impact on biodiversity as a criterion, based on the Guidelines for Private Sector Engagement in Biodiversity produced by the Ministry of the Environment. As a model study for this purpose, at the Mitsubishi Chemical Corporation's Yokkaichi Plant, we reconfirmed the status of our compliance with laws and regulations related to biodiversity and activities to help maintain biodiversity (such as cleaning up areas around plants, beaches, and rivers). We also checked our water use, including industrial water, and chemical emissions. As a result, we confirmed that there was no major environmental burden that would affect biodiversity. We will undertake the same study at other plants in the MCHC Group. Going forward, we will continue to bear in mind the effects of our business activities on biodiversity throughout lifecycles, and take steps to build a sustainable business.

\*1 Declaration of Biodiversity by Nippon Keidanren: A declaration announced by the Nippon Keidanren (Japan Business Federation) in March 2009 and comprising seven pillars dealing with, such as the promotion of resource recycling-oriented management, and other issues.

## Initiatives for Safety Management Regarding Chemicals

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While Mitsubishi Chemical Holdings Corporation (MCHC) seeks the realization of *KAITEKI* with chemicals as its key technology, in providing the diverse chemicals that support our lives it recognizes the primary importance of ensuring that its customers can use these products with peace of mind.

Therefore, concerning the chemicals manufactured directly by MCHC, in 2009 we started Global Product Strategy (GPS) activities, which are voluntary industry initiatives focusing “risk-based chemicals management throughout the supply chain” and “the disclosure of risk management information on chemicals and products.” We will assess the risks of the chemicals manufactured by our Group companies, conduct chemical risk management based on the results of this assessment, and publish the contents in the GPS Safety Summaries. At MCHC, we have set a target of conducting GPS assessments on all the chemicals the MCHC Group deals with by 2018. We intend to manage the achievement rate of these risk assessments under GPS activities by introducing this figure as an MOS Index item (C-3). Information about the chemicals contained in products used around the world is important when using and disposing of each product. Accordingly, information about the chemicals involved in the entire supply chain is required, especially for electrical appliances, among others. At MCHC, we intend to obtain information on the chemicals in all the products we purchase from suppliers. Therefore we will include the rate at which we obtain this information in the MOS Indexes (S-3).

<b>Initiative example : Mitsubishi Chemical Corporation</b>	<a href="#">→ Initiatives for management of chemicals</a>
Mitsubishi Chemical Corporation discloses risk management information on chemicals and products and undertakes risk-based chemicals management throughout the supply chain.	

To ensure that our products can be used with peace of mind by all of society, we will continue striving to disclose and utilize information through the above initiatives.

## Participation in International Standards and Public Policy Planning

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As a member of the Japan Chemical Industry Association (JCIA), MCHC is involved in researching and planning measures on issues related to safety and the environment. Through our activities for JCIA, we also participate in the operation of the International Council of Chemical Associations (ICCA), and are working to solve issues common to chemical companies worldwide, such as chemical management and global warming.

We are also directly involved in creating an international framework for managing, disclosing, and communicating information about chemicals, which is promoted by the Joint Article Management Promotion-consortium (JAMP).

# Communication with Shareholders and Investors

## Basic Approach

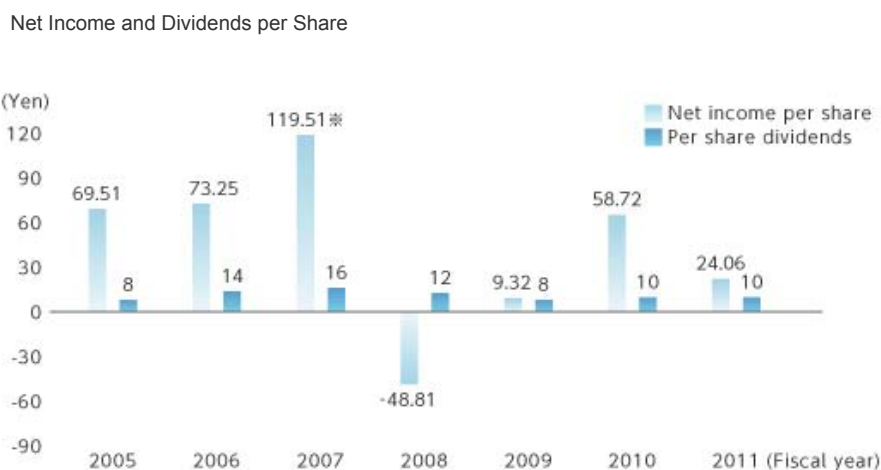
Here at Mitsubishi Chemical Holdings Corporation (MCHC), we make every effort to adequately and promptly disclose information to our shareholders, investors and other stakeholders, to ensure transparency, to promote a clearer understanding of our corporate activities, and consequently to earn the public's trust.

## Basic Policy on Dividends

We determine shareholder dividends based on our consolidated performance. From a broader perspective however, we also try to ensure stable dividends over the medium to long term and continue to secure sufficient internal reserves in order to fund the future development of the MCHC Group.

Based on this policy, we paid out year-end dividends at the rate of ¥5 per share in fiscal 2011. Combined with interim dividends (¥5 per share), total dividends for fiscal 2011 came to ¥10 per share. Here at MCHC, we have adopted a basic practice of distributing dividends from retained earnings twice a year, once halfway through the year and once again at the end of the fiscal year. Whereas the Board of Directors determines interim dividends, year-end dividends are decided via a Shareholders' Meeting.

In light of current conditions, we intend to use internal reserves to reduce interest-bearing liabilities, in order to strengthen our underlying foundations, and to finance priority capital investment, other loans and investments, and R&D, in line with the basic strategy set out under *APTSIS 15*, our new mid-term management plan that came into effect in April 2011.



## Basic Policy on Disclosure

The first step towards earning the public's trust is to ensure that information is adequately disclosed to shareholders, investors and all of our other stakeholders as and when necessary.

With that in mind, we not only disclose information relating to management, our business strategies and performance, as required by the Financial Instruments and Exchange Act and other legislation, but we also publish accurate, up-to-date information on product defects, accidents and other matters that may not portray the MCHC Group in a positive light. We are determined to be open to the public in everything we do.



## Improving IR Tools

As part of our efforts to disclose information to our shareholders and investors here at MCHC, we produce regular publications outlining our business strategies and performance in simple terms, including our IR NAVI biannual shareholder newsletter and annual reports.



IR NAVI shareholder newsletters and our annual report

We also post press releases on the MCHC website as soon as they are released, and have established an “Investor Center” section to enable investors to access information whenever they like, including documents from results briefings, shareholder newsletters, annual reports, information on MCHC shares and our calendar of IR events.



[Investor Center section of the website](#)

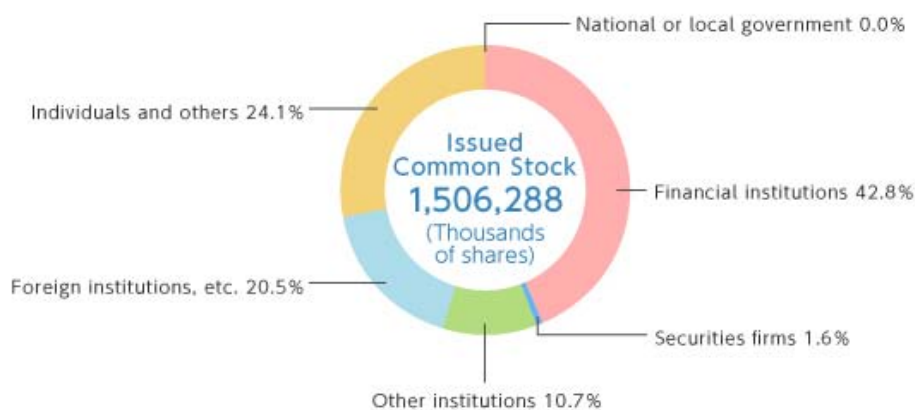
## Ideas for Shareholders’ Meetings

To enable as many of our shareholders as possible to exercise their voting rights and attend our Shareholders’ meetings, we avoid holding Shareholders’ Meetings on peak days when lots of other companies are holding theirs. We also send out notices to convene Shareholders’ Meetings as early as possible, announce meetings via the MCHC website, produce English language documents, and have introduced an electronic voting system.

More than 900 shareholders attended our 7th Shareholders’ Meeting on June 26, 2012.

## Communication with Investors and Analysts

Shareholder Distribution (as of March 31, 2012)



## Communication with individual investors

We have been holding briefing sessions for individual investors since fiscal 2008, in order to give investors a more in-depth understanding of our operations and performance here at MCHC. Each of the sessions raised numerous questions regarding current and future business development, and offered an invaluable opportunity to communicate with investors.

In fiscal 2011 opportunities for sharing information with many individual investors as possible were created by holding briefing sessions for individual investors at the Chemistry Plaza, which was in the head office building, and by attending more seminars organized by securities companies.

## Communication with institutional investors and analysts

We actively engage in dialog with institutional investors and analysts on a continual basis here at MCHC. We make the most of communication technology for instance, by holding online question and answer sessions for institutional investors and analysts at the time of announcement of our quarterly results.

In addition to Analyst Meetings, which provide more detailed explanations about our management plans, main operations, and other specific strategies, we also organize tours of our production facilities around the country, to enable investors and analysts to see our operations for themselves and gain a better understanding of what we do here at the MCHC Group. To keep overseas shareholders and institutional investors informed meanwhile, our Chief Executive Officer (CEO) and Chief Financial Officer (CFO) regularly travel overseas to provide details about our management strategies and performance.

In addition to creating more opportunities to improve communication, our CEO and CFO went to visit overseas institutional investors in fiscal 2011.

At the request of an investment institution signed up to the UN Principles for Responsible Investment (PRI), in June 2011 we took part in a workshop where we explained the thinking behind *KAITEKI* value and our efforts to introduce and use the Management of SUSTAINABILITY (MOS) indexes to put *KAITEKI* into practice.



## Socially Responsible Investment (SRI) (as of April 2012)

Investors are increasingly engaging in socially responsible investment (SRI), taking into account environmental and social initiatives and focusing their attention on socially responsible companies.

As of April 2012, MCHC is a component of the FTSE4Good Index Series, the Dow Jones Sustainability Asia Pacific Index 2011/2012, and the Morningstar Socially Responsible Investment Index.



## The Use of Public Programs and Certification Systems (financial support received from national and local governments)

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In fiscal 2011, the MCHC Group received a total of 1,437 million yen as subsidies and other forms of financial support from national and local governments. This includes a total of 824 million yen from NEDO\* in 11 projects targeting sustainable technologies (for the development of basic technologies, including green sustainable chemical processes and next-generation, high-efficiency, high-quality lighting). With respect to subsidies for attracting manufacturers that are institutionalized by local governments, Sakaide Plant of Mitsubishi Chemical Corporation was designated as a subsidized plant under the Kagawa Prefecture's subsidy program for attracting companies, and it was determined that new investments will be made in the Plant's facilities for manufacturing anode materials for lithium ion secondary batteries.

We will make good use of the experience and outcomes of our initiatives in such projects in the next generation by evaluating them from diverse perspectives, including technology, cost, and markets.

\*NEDO: [New Energy and Industrial Technology Development](#)

# Communication with Customers and Business Partners

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## Our Basic Approach

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The Great East Japan Earthquake that took place in March 2011 has made us reaffirm that, in a globalized society in which human activities have had a huge impact on the environment, we must conduct our business from the perspective of the entire value chain, rather than just based on those activities directly conducted by us. In today's society, to enable people to use our products and services with trust, continue the innovation that has led to the development of these products and services, and continue spreading *KAITEKI*, we regard communication and cooperation with our customers and business partners to be the most important factors.

Based on this idea, our Group's shared basic policy on stakeholder communications is to strive to ensure smooth, highly transparent communications in line with the *KAITEKI* Management philosophy, not to provide false or misleading information, and not to transmit libelous information.

The Mitsubishi Chemical Holdings Group (MCHC Group) hopes to build relationships of trust by communicating with its customers and business partners, all the while deepening partnerships and working hand in hand to contribute to achieve *KAITEKI* in our society.

## Initiatives to Achieve Social Justice through Procurement

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### Measures for CSR procurement

Establishing an appropriate value chain for environmental conservation, etc. enhances a company's consideration of social justice. It also leads to increased employee motivation and a better working environment, thereby improving company competitiveness. In recognition of this, in the MOS indexes the MCHC Group created in the year-end 2010 period, we added levels of achievement for environmental and CSR procurement. In our environmental procurement, we aim to share information about the chemical substances contained in products throughout the value chain. In our CSR procurement, we aim to understand the CSR measures our suppliers have taken and to fulfill our social responsibility by improving these measures.

MOS indexes related to procurement (FY2012)

S-3-1: Achieve 80% inspection rate on toxic substance in purchased items

S-3-2: Achieve 90% purchasing of raw materials and packaging according to CSR guideline

Our initial target was to achieve a certain rate of attainment for our business partners in Japan that were surveyed and assessed. Group companies have started to take measures toward this end. The targets of the MOS indexes above are those for fiscal 2012. As the scope of responsibility of our companies expands under ISO 26000, etc., we are setting targets to achieve the ideal procurement in 2015, the final year of *APTSIS 15*.

In fiscal 2011, we confirmed the procurement policies and business partner standards established by each operating company and investigated and understood the compliance with them. We examined the various levels of standards and methods at each company, with the aim of attaining the highest levels by 2015. In addition, each operating company held briefings for its major suppliers to convey the company's CSR procurement policy and the *KAITEKI* concept behind it. These briefings were aimed at sharing our values with suppliers by enhancing their understanding of environmental procurement, occupational safety and health, as well as compliance with laws and regulations.

## Providing Information to Customers and Business Partners

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At the MCHC Group, we provide a wide range of corporate information, mainly through our website. They include information about our products and services; research and technology development; information for shareholders and investors; details about our CSR and environmental activities; and our corporate profile. In addition, divisions at each operating company have created tools for stakeholders that are closely related to them.

### Improving customer satisfaction – Customer Satisfaction Survey

At the MCHC Group, we are planning to conduct a Customer Satisfaction Survey aimed at reflecting feedback from our corporate customers in our sales activities and our product and service improvement. Preparations for the survey have been underway since September 2011. The first survey is projected to be conducted by our operating companies in the fall of fiscal 2012. The valuable opinions and requests gained through the survey will be disseminated to everyone involved, including top management. They will be used to increase customer satisfaction, improve the brand value of the MCHC Group, and help us achieve *KAITEKI* for our society together with our customers.

## Technology Forum

The Mitsubishi Chemical Holdings Technology Forum introduces the innovation sought by Mitsubishi Chemical Holdings Corporation (MCHC) and the direction of technological development to achieve it. The forum has been held each year since 2008 as an opportunity for us to consider these themes together with our stakeholders, including customers and business partners. In fiscal 2011, the Fourth Technology Forum was held under the theme of “Sustainability, Health, Comfort – Coexistence of Human Life and the Global Environment.” The forum featured the following lecturers and topics, and was enjoyed by a large audience.



**Lecturer:** Taikan Oki  
[Professor, Institute of Industrial Science, the University of Tokyo]

**Theme:** “Water-Related Issues of the World and Measures for Solving Them”

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**Lecturer:** Haruki Sato  
[Director, Aqua Engineering Development Laboratories, Toyohashi Corporate Research Laboratories, Mitsubishi Rayon Co., Ltd.]

**Theme:** “Water-Related Business and Technology Development at Mitsubishi Rayon”

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**Lecturer:** Yutaka Kiyohara  
[Professor, Environmental Medicine, Graduate School of Medical Sciences, Kyushu University]

**Theme:** “Trends and Current Problem of Lifestyle-Related Diseases: The Hisayama Study”

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**Lecturer:** Masanori Koshoubu  
[General Manager of the Research & Development Group, Managing Executive Officer, Pioneer Corporation]

**Theme:** “Current Trends and Prospects in Organic EL Lighting Devices”

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**Lecturer:** Glenn H. Fredrickson  
[Executive Director, The *KAITEKI* Institute, Inc.; Professor, University of California, Santa Barbara]

**Theme:** 「Perspective from The *KAITEKI* Institute:Progress in Sustainability, Health, and Comfort」

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In fiscal 2012, we will clearly define this Forum as an opportunity for communications aimed at achieving *KAITEKI* and change its name to “*KAITEKI* Forum.”

## Showroom

MCHC has opened up a showroom inside our head office building as a forum for communicating with our customers and business partners. In fiscal 2011, the showroom hosted 3,175 visitors. (It was closed from mid-July to mid-September as an electricity-saving measure in the aftermath of the earthquake.) In October 2012, a new showroom called “*KAI/TEKI* Square” will be opened in MCHC’s new head office (1-1-1, Marunouchi, Chiyoda-ku, Tokyo). The new showroom will display the MCHC Group’s main products and businesses, as well as its initiatives and goals as a company. We hope that many people will come to *KAI/TEKI* Square, enabling us to communicate with our customers, business partners, and people in society to envision a better future.

# Initiatives Concerning Human Rights and Labor

## Our Basic Approach to Initiatives Concerning Human Rights and Labor

The Mitsubishi Chemical Holdings Group (MCHC Group) participates in the United Nations Global Compact and endeavors to comply with its ten principles. Consequently, in compliance with international norms such as the Universal Declaration of Human Rights and the fundamental principles of the International Labor Organization with regard to labor, we have developed the Mitsubishi Chemical Holdings Group Corporate Ethics, the Mitsubishi Chemical Holdings Group Compliance Code of Conduct and other regulations.

Mitsubishi Chemical Holdings Corporation (MCHC) regards its employees as its most precious asset, and in the *APTSIS 15* mid-term management plan that is currently underway, we have established items concerning employees as stakeholders in one of the MOS Indexes that serve as management indicators. We have stipulated quantitative targets with these items as a priority for employee policies and measures within the Group.

Based on this kind of approach demonstrated by MCHC, each of the Group companies develops activities autonomously in compliance with its own basic policies concerning human rights and employment while striving to respect the dignity and rights of individuals and develop a pleasant and fulfilling workplace for each and every person.

## MOS indexes related to human rights and labor

S-3	Implementation of CSR procurement
C-2-2	Employee satisfaction (job, workplace, etc.) Workplace where various individuals can contribute Workplace where work-life balance can be achieved Self-growth and improved awareness of contributions to society
C-3-2	Fifty percent reduction in accidents that suspend operations

## Respect for Human Rights

Respect for human rights is an essential matter for a company that engages in business activities around the world. Our basic approach to this is outlined below.

### Mitsubishi Chemical Holdings Corporation — Basic Approach to Human Rights

1. We will comply with the United Nations Global Compact and the Mitsubishi Chemical Holdings Group Corporate Ethics, respect the dignity and rights of all people in every aspect of our business activities, and never engage in unjustifiable discrimination whatever the circumstances, whether race, gender, religion or otherwise.
2. In the promotion of specific enlightenment activities, each Group company will set policies and priority issues in an autonomous fashion. We will consistently put into practice activities aimed at becoming a corporate group that offers a pleasant work environment, is spiritually fulfilling, is accepted by society, and has a highly developed awareness of human rights. At the same time, we will seek to work together as a group.

In line with this basic approach of respect for human rights, MCHC conducts training and awareness-raising activities for a broad range of human rights issues, including harassment, child labor, forced labor, discrimination against people in certain social groups, and issues pertaining to women, children, the physically challenged, and people with gender identity disorder.

Overseas Group companies endeavor to comply with the legal principles applicable in each country, foster best practices concerning human rights, and raise the satisfaction levels of the employees in each country. They also strive to promote business activities associated with appropriate value chain management. MCHC has established subsidiaries under its direct control to strengthen the supervisory functions of overseas Group companies in this regard. These subsidiaries are tasked with developing and strengthening the management of overseas Group companies.

**Initiative example : Mitsubishi Chemical Corporation**

→ [Use of e-Training to provide training on protecting human rights and preventing harassment](#)

Mitsubishi Chemical Corporation has provided training on protecting human rights and preventing harassment to 9,700 employees through group training sessions, and to more than 16,000 employees through e-Training on the intranet.

## Towards Becoming a Corporate Group Enlivened by Its Human Resources

At the MCHC Group, we believe that Group employees can lead fulfilling lives if they feel satisfied in their work, and growing through that experience not only contributes to the happiness of individual employees, but also increases the corporate value of the company and by extension leads to the achievement of *KAITEKI*. Therefore, each Group company is promoting initiatives in this regard by carefully implementing measures to improve the level of employee satisfaction through human resource development and assessment and through company work procedures.

We have set these targets as MOS Indexes to serve as management indicators. We will aim to achieve these targets in the operation of our business.

### Human resource assessment and development

We believe it is essential for each employee to improve his or her abilities and take on challenges willingly, thereby creating new values and bringing about change. We help our employees develop their capabilities on their own through a combination of skills development through daily work (OJT), various training programs, and support for personal development.

**Initiative example : Mitsubishi Plastics, Inc.**

→ [GLP given in English only](#)

Mitsubishi Plastics, Inc. conducts Global Leadership Program (GLP) training, which is given in English only, to its staff members working in various parts of the world.

At the MCHC Group, we have been managing personnel transfers in a well-planned manner to give its employees the opportunity to develop further. To give them broader opportunities to achieve growth, the company has introduced an "Internal Internship Program." This program allows employees to obtain work experiences that would be difficult to obtain through ordinary personnel transfers based on the departments they belong to.

**Initiative example : Mitsubishi Chemical Corporation**

→ [A personnel transfer system based on employee requests](#)

Mitsubishi Chemical Corporation has a system that allows employees to make requests regarding the duties assigned to them and their career development, in addition to ordinary personnel transfers and rotations within departments.

To allow each employee to find worthwhile work and develop themselves through their work, it is necessary to assess and treat employees fairly based on their roles and achievements. Therefore, major MCHC Group companies have introduced an "Interview System" where individual employees discuss with their immediate superiors, at least once a year, the extent of their achievements at work, an assessment of their work, and the roles the company expects them to play.

In the interview, each employee reviews his or her job performance and work process in light of the plan developed in the previous year, and assesses these points by discussing them with their superior. The companies that are implementing this system work to ensure that each employee fully understands their weaknesses and the company's expectations by talking specifically about these points. In the interview, each employee is also made aware of his or her target challenges for the new fiscal year. This is aimed at encouraging employees to develop their capabilities and achieve growth.

**Initiative example : Mitsubishi Rayon Co., Ltd.**

→ [Personnel performance evaluation system for an accurate evaluation of achievements](#)

Mitsubishi Rayon Co., Ltd. has introduced a personnel performance evaluation system in which employees boldly take on challenges toward organizational goals set through discussions, and accurately assess the goals they have achieved.



## Diversity and work-life balance

Responding to globalization will be even more necessary in future. This means it will be increasingly important to make judgments from diverse points of view, which will require a diversity of human resources. From this perspective, MCHC includes the following indexes designed to measure diversity.

- Percentage of female employees recruited as career employees
- Percentage of female managers
- Percentage of local recruits among Directors or higher-ranked employees at key local subsidiaries

With the decline in birthrates and the aging of the population gathering momentum, one of the important elements for achieving *KAITEKI* for our employees is that each one of them leads a fulfilling life outside the company, by working in a way that meets the needs of each. At MCHC, we have set the following targets to build a workplace in which each employee can achieve a good work-life balance. To achieve these targets, the Group companies design a variety of systems and programs.

- By fiscal 2015, reduce the proportion of workers putting in long hours by 20% from fiscal 2010 levels.
- By fiscal 2015, raise the paid vacation utilization rate to 70%.

<b>Initiative example : Mitsubishi Tanabe Pharma Corporation</b>	→ <a href="#">Application of diverse work styles and promotions to managerial positions and other leadership roles</a>
Mitsubishi Tanabe Pharma Corporation introduces diverse working systems that are closely aligned with employees' lifestyles, and takes steps to promote employees to managerial positions and other leadership roles.	

<b>Initiative example : Mitsubishi Chemical Corporation</b>	→ <a href="#">Measures to reduce total working hours</a>
Mitsubishi Chemical Corporation was granted the award of excellence of the Work Life Balance Campaign 2011 by the Japan Productivity Center. The company was highly evaluated for its measures for solving the issue of long working hours and step-by-step transition of its shift-work system to a five-team three-shift system.	

## Employee health

Daily efforts to maintain physical and mental health are important to lead a fulfilling life in society today, with the increase in life expectancy. Companies affiliated with MCHC conduct regular health checks of employees and their families and also provide health counseling as a follow-up measure in cooperation with each company's health insurance association.

MCHC companies also take steps to maintain the mental health of their employees by distributing booklets, holding seminars, and introducing a system where employees can receive counseling from specialists.

<b>Initiative example: Mitsubishi Chemical Corporation</b>	→ <a href="#">Initiatives for special health counseling*</a>
Mitsubishi Chemical Corporation provides special health counseling as a follow-up measure to the health checks conducted by the company, in cooperation with Mitsubishi Chemical Health Insurance Association.	

\* Special health counseling is a health system for all public medical insurance subscribers aged 40 to 74. Its official name is Special Health Check-up and Special Health Counseling

## Employee awareness survey

At the MCHC Group, we are working to improve the employee-related indicators included in our MOS Indexes. To find out how aware employees are of these initiatives, and to further improve these initiatives, we began conducting an annual employee awareness survey in fiscal 2011 to discover if there were any changes in employee awareness, including their satisfaction level.

This fiscal year, we conducted the survey mainly at companies in Japan, and had an approximately 90% response rate.

With regard to their level of satisfaction, the survey asked employees whether they agreed with the statement "I am satisfied with the work at my company." Respondents answered on a 5-point scale, selecting either "5. Strongly agree," "4. Agree," "3. Neither agree nor disagree," "2. Disagree," and "1. Strongly disagree."

The average score was 3.70, which was almost the same as the average score of similar surveys conducted by other companies.

The survey also found that although the subject companies have made progress, they have yet to complete tasks for a variety of different initiatives. We will incorporate these data on employee awareness into personnel measures for further improvement.

## Stakeholder Message



**I look forward to, together with the Group, following the process of its improvement through future orchestrated initiatives aimed at strengthening the entire Group's governance and increasing its corporate value.**

Akiko Sakurai  
Organizational and Human Resource Strategy Research Department  
JMA Research Institute Inc.

I was in charge of a survey of over 40,000 people in the Mitsubishi Chemical Holdings (MCHC) Group. The number of companies that conduct awareness surveys for strengthening their groups' governance has been increasing each year, but extensive surveys such as this are still rare. I also find it extremely innovative that the Group makes use of the results of the survey for improving corporate value as MOS Indexes.

Looking at the survey results, the Group companies mostly reached a certain level in terms of "work satisfaction." This satisfaction is attributed to being able to "support management philosophy and policy" of the companies and "worthwhile nature of work," reflecting strong bonds between the employees and companies and a strong awareness concerning work. These are outstanding features common across the entire MCHC Group.

On the other hand, room for improvement was seen in "awareness as a member of the MCHC Group," which was still uneven. This aspect is difficult to improve over the short term, but I look forward to, together with the MCHC Group, following the process of its improvement through orchestrated initiatives taken in the future.

## Opinion



**Based on this survey's results, each company should prioritize points to improve, reflect them in its personnel system, training, and other relevant areas, and create a proactive cycle that will lead to the companies' development and to achievement of KAITEKI value.**

Noriyoshi Ohira  
Managing Executive Officer  
General Manager of Human Resources Office  
Mitsubishi Chemical Holdings Corporation

The operating companies do not differ greatly in the basic trends among the survey results, and relatively higher numerical values than other companies are seen in survey items such as "worthwhile nature of work," "understand management philosophy and policy," and "teamwork in the workplace." On the other hand, values were low in areas such as "friendly competition in the workplace," "communication of information from the frontline," and "personal development and social contribution activities," reflecting insufficient bottom-up communication. It is possible that there was low intent for respondents to change themselves or their companies while they are satisfied with the comfort of their workplace and their good human relations.

For the MOS Indexes, we have set "raising the percentage of workers engaging in personal development to 70%" and "raising the percentage of those taking part in volunteer and social contribution activities to 30%" as our targets with reference to areas such as governmental guidance. The low percentage of those engaging in volunteer activities shown in the survey was probably due to the unclear definition of volunteer. I believe the direction of personal development of individual employees can be determined if they discuss their career plans with their superiors.

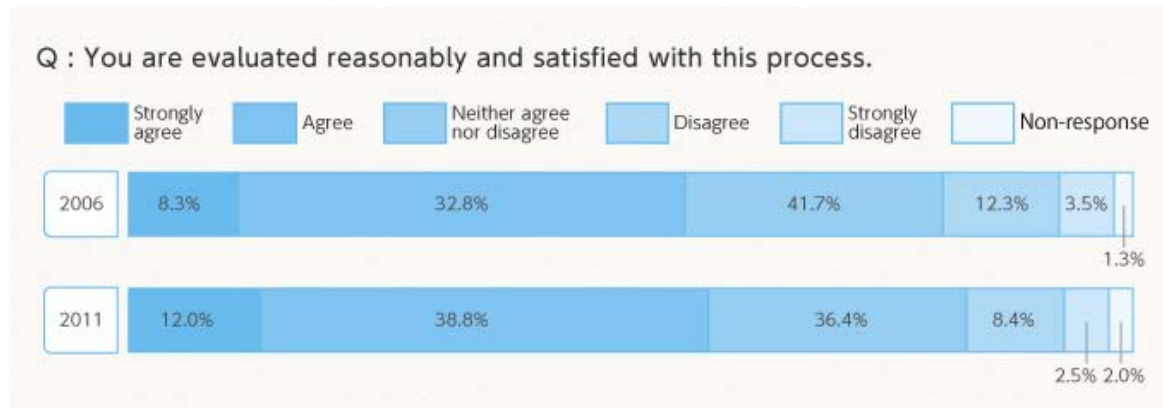
Based on these survey results, each company will prioritize points to improve and reflect other survey items in areas such as their personnel system and their training. An awareness survey is like a medical examination for a company. Its effects can be seen when it is conducted regularly while taking countermeasures to address any inadequacies that are identified. I would like us to create a proactive cycle in which all employees will identify their position in and significance for the company by sharing such activities with their superiors and coworkers, find their work worthwhile, and improve their abilities. This in turn contributes to the development of the company, which extends to achievement of KAITEKI value.



### Reviewing work to achieve work-life balance

Kazuyuki Futamata  
General Manager of Human Resources Dept.  
Mitsubishi Chemical Corporation

Respondents from our company answered a total of 120 questions in this survey. These include 63 questions exclusive to our company, including some related to the new personnel system introduced last year, in addition to questions common to the MCHC Group. The survey also had a free-response section, in which more than 30% of the respondents gave their opinions.



The survey results show that “satisfaction with evaluation” was significantly improved, partly because we focused our efforts on feeding back evaluation results. Values were generally improved from the previous survey, including “understand management philosophy and policy” of the company and “worthwhile nature of work.” Looking at the details, however, we see such comments as “The work burden is heavy” and “Response to changes in the environment is slow.” Some respondents also complained that priority is given to short-term goals rather than medium-term issues such as human resource development and workplace revitalization. Employees’ interests in social contribution activities have been growing, partly because we recruited volunteers to work in areas hit by the Great East Japan Earthquake. However, the number of employees who participate in volunteer work is still low. We will need to make improvements in this area in ways such as striving to raise employee’s awareness of volunteer leave system.

To improve employee satisfaction included in the MOS Indexes, first it is important to improve employees’ work-life balance. Employees cannot engage in volunteer activities unless they have enough spare time. To reduce their overtime work and their work burden, measures need to be devised to allow efficient usage of time. All employees, including those in top management, must have a firm intent to change the way they work. Superiors must also understand the situations of their subordinates at all times and inform them of the significance and importance of their work. Communication is the foundation of work-life balance. Moving forward, we will strive to have the new personnel system spread and take root in the entire company and apply it more widely and intensively. At the same time, we will promote measures for employing women, the elderly, and non-Japanese workers through ways such as making use of survey results.



### Creating a corporate culture of respecting each other's work and finding each other important for the company

Masaaki Ochiai  
General Manager of Human Resources Development Department  
Mitsubishi Tanabe Pharma Corporation

Partly because this was our first awareness survey, our employees had high interest and the response rate exceeded 90%. The survey contained 96 questions, including some exclusive to our company and others common to the MCHC Group. Our company is a merged company and when the survey was conducted we were facing problems in the process of integrating systems of the two companies and issues that arose after the merger. Despite such circumstances, we can say that the numerical results of the survey were generally good.



Detailed investigation of the results has also clarified some contradictions. For instance, some respondents gave a low appraisal in items such as “work stress and fatigue” and “feeling of being valued by the company” though they find their work worthwhile. There were also respondents who sided with and understood the corporate philosophy but did not understand how it is related to their work, which led us to suspect that their superiors had not sufficiently informed them of the significance of their work. Results of the survey must be analyzed fully in individual divisions and workplaces, as well as in the Human Resources Department and Human Resources Development Department. At the management conference, we confirmed our intent to promote reform of our corporate culture through management of all the departments throughout the company.

Emphasis under the current target management system tends to be placed on priority issues and business performance, but lack of any one area of work supporting our businesses would make it impossible to build a strong value chain. Back-office tasks should be more highly appraised and managers should properly understand and assess their subordinates' work. I believe the amassing of such activities will establish relations of trust, make work truly worthwhile for employees, and foster in them a sense of being valued by the company.

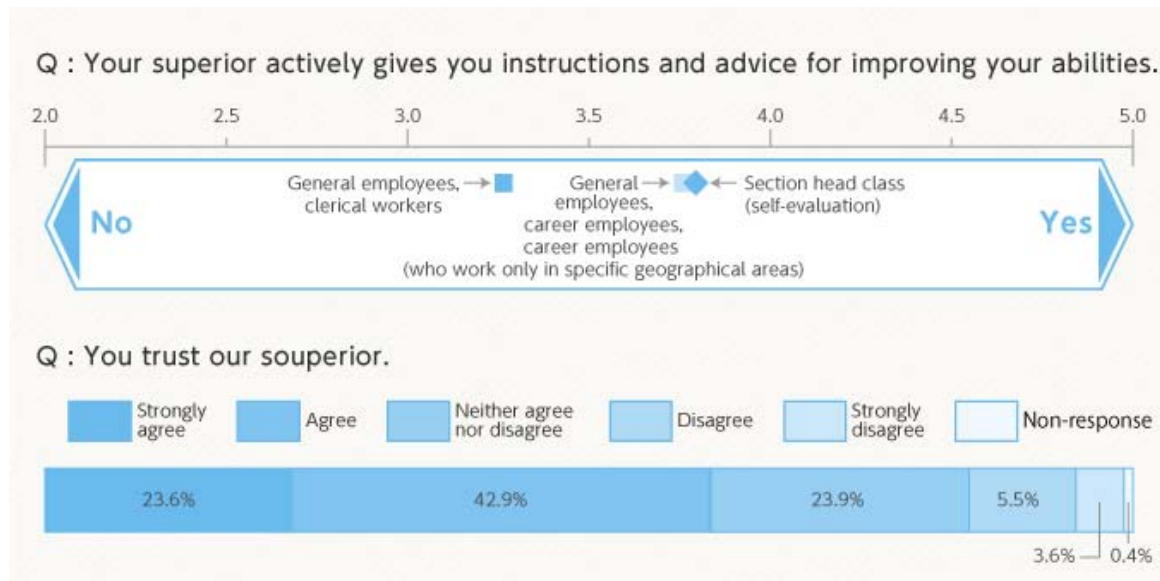
We would like to work together to create a corporate culture in which employees, their superiors, and the entire company will respect one another's work and find each other important for the company.



**Reduce work burden and eliminate gaps between job classes.**

Masahiro Misaki  
 General Manager of Human Resources Department  
 Mitsubishi Plastics, Inc.

At Mitsubishi Plastics, Inc., we conducted an awareness survey before the merger and took improvement measures, and we wanted to again conduct a survey to see how matters have changed since then. This time around we surveyed all our consolidated subsidiaries, and respondents answered a total of 77 questions including those exclusive to our company.



Survey results show that values were generally improved over the previous results. I believe this is partly because the new systems introduced since the merger have been working relatively well and integration within the company has progressed steadily. On the other hand, results concerning "work burden" did not improve greatly from the previous survey. This has clarified the fact that people in specific departments and specific employees work overtime much more frequently than others. We therefore will specify targets in order to reduce overtime work.

Questions regarding "trust in superiors" received a high rating overall but there is a gap between management-level employees and those engaged in practical operations. We need to make improvements in this respect by holding comprehensive discussions based on the data each department was provided with. The labor union also undertakes an annual questionnaire about the target management interviews. Based on its results, we will take measures for ensuring that results of performance evaluations will be appropriately fed back to employees. At the present, our employees do not proactively participate in volunteer activities. We do however have a Social Contribution Promotion Committee. At our head office, we use the Yuyake Club, a voluntary study session, to hold lecture meetings concerning volunteer activities. We will continue striving to raise awareness among our employees. Since our company is rapidly being globalized due to the business alliance with Quadrant AG, an issue we need to address in the future is how to foster globally competitive human resources. It is also important to create workplaces in which women can even more extensively apply their abilities. We will use this awareness survey as an opportunity to take on challenges to bring about change, so that employees will feel happy to work here.



### Fostering a strong sense of unity by reducing vertical and horizontal distances

Kotaro Kita  
General Manager of Human Resources Department  
Mitsubishi Rayon Co., Ltd.

This is our third awareness survey and the response rate reached 99%. The percentage of respondents who gave opinions in the free-response section increased from the previous survey to over 40%, which allowed us to sense our employees' thinking about the future of the company. The latest survey consisted of a total of 121 questions, including 64 exclusively for our company, some of which are related to our Corporate Behavior Charter established in fiscal 2010, in addition to items common to the entire MCHC Group.



The search results show that our employees highly appraised such aspects as "worthwhile nature of work," "pride in the company," and "feeling of being valued by the company." It appears that the policy of Full Human Resource Development set by the top management has spread and taken root in the company. In addition, the value for "satisfaction with evaluation" was improved concerning the target management system, as a result of improved biannual interviews and training of performance evaluators. Our employees are also more satisfied than before with "education and training" due to the increased opportunities. And we also improved the environment for supporting efforts to balance work and family life. In 2010, we received the Tokyo Labor Bureau Director's Excellence Award from the Ministry of Health, Labour and Welfare at the Commendations for Equal and Balancing Promotion Companies.

While we can say that human relations in the workplace are mostly favorable, not many employees feel an "atmosphere of friendly competition and encouragement," and many seem to be dissatisfied with "information exchange and cooperation with other workplaces." We will need to make efforts to reduce vertical and horizontal distance in our organization and deepen communication between superiors and subordinates in each workplace to further increase their sense of unity and solidarity. We are still in our early days as a member of the MCHC Group, and it seems our employees have yet to complete the process of absorbing the principles advocated by the Group, such as *APTSIS* and *KAITEKI*. As a member of the MCHC Group we will strive to further disseminate these principles and foster a sense of unity.

### Employee communications

Core MCHC Group companies regularly take time to explain their management statuses and other matters to labor unions in accordance with each union's collective agreement, building on the good labor/management relationship that was established through mutual trust. When companies intend to make revisions to their systems that will result in changes to working conditions, they offer proposals to the labor unions as far in advance as possible, take sufficient time to engage in labor-management discussions over the proposed revisions, and amend the contents of the revisions as necessary based on the feedback received in the discussions. These are some of the efforts they are making to maintain the relationship of trust between labor and management.

# Corporate Citizenship Activities

## Corporate Citizenship Activities

Having set out a groupwide policy for corporate citizenship activities, we at the MCHC Group provide a range of support via each of our operating companies. We are involved in community activities, including taking part in local events at our plants and research centers, providing support for employee volunteer activities and opening up recreation and welfare facilities to the local community. We are also active in providing financial support, such as donations to various organizations and research institutions, subsidies for research activities, and aid for areas affected by disasters.



## 1. Corporate Citizenship Activities Policy

The Mitsubishi Chemical Holdings (MCHC) Group has been engaged in corporate citizenship activities in all over the world in accordance with our Corporate Citizenship Activities Policy.

### The MCHC Group Corporate Citizenship Policy

As good corporate citizens, the MCHC Group has been striving for realizing *KAITEKI* with better understanding the culture and customs in communities and countries where we operate. Furthermore, we have been active in responding to real needs and demands of the communities through various manner including our business activities where we locating.

#### Approach

As a whole we shall

- Conduct corporate citizenship activities in communities and countries where we operate from a view point of Sustainability, Health, and Comfort.
- Deepen our understanding on social needs through communication with various stakeholders and other organizations.
- Go along with all employees for the activities and encourage their positive participation.
- Support employees for their volunteer activities.

## 2. Unified Corporate Citizenship Activities as the MCHC Group

In fiscal 2011, in addition to the corporate citizenship activities carried out by our operating companies to date, we also planned and undertook groupwide activities through communication with NPOs.

At present, we are on the lookout for corporate citizenship activities in which all MCHC Group employees can continually participate. In fiscal 2011, which was designated by the United Nations General Assembly as the International Year of Chemistry, the MCHC Group organized a series of activities aimed at further promoting and raising awareness of chemistry. We also undertook a range of activities to provide support for people and areas affected by the Great East Japan Earthquake.

### Initiatives for the International Year of Chemistry

The year 2011 was designated as the International Year of Chemistry (IYC 2011) as it coincided with the 100th anniversary of the Nobel Prize awarded to Marie Curie. The MCHC Group was involved in a number of corporate citizenship activities in the IYC 2011.



International Year of  
**CHEMISTRY**  
2011

#### Initiatives for IYC 2011

- Creation and use of dedicated stickers for business cards (Mitsubishi Chemical Holdings Corporation (MCHC), Mitsubishi Chemical Corporation (MCC), Mitsubishi Plastics, Inc (MPI), Mitsubishi Rayon Co., Ltd. (MRC))
- Use of the IYC 2011 logo/ Publication of related articles
  - Press releases (MCHC, MCC, MPI)
  - *IR NAVI* shareholder newsletters (MCHC)/ *Chemipal* Group house journal (MCHC)/ External journal (MPI)
  - CSR reports (MCHC, MCC, MPI, MRC)
  - Website pages (MCHC, MCC, MPI, MRC)
  - Science classes (MCC: Head office, Kashima, Tsukuba, Mizushima, Kurosaki/ MPI: Nagahama, Asai/ MRC: Otake, Yokohama)
- Activities for raising awareness of IYC 2011
  - During plant tours by students from elementary schools in nearby area (MCC: Yokkaichi, Mizushima/ MRC: Toyohashi, Toyama)
  - During PC classes for children (MCC: Yokkaichi)
- Lectures and panel discussions (MCHC, MCC)
  - President Kobayashi (IYC 2011 Symposium, etc.)
  - Managing Executive Officer Ikeura (Japan Productivity Center, etc.)
  - Panel discussions by researchers
- Participation in *Yume Kagaku 21*\* (dream and chemistry 21) (MCC, MRC)
- Exhibition at "*Kimitachi no Maho – Kagaku 'Shin' Hakken*" (Your magic – New discovery of chemistry) (organized by the Chemical Society of Japan) (MCHC, MRC)
- Activities for raising awareness of IYC 2011 during plant tours, etc. (MCC, MPI, MRC)

\* *Yume Kagaku 21* is a campaign launched in 1993 to raise awareness of chemistry and promote understanding of the chemical industry's contribution to society. It is organized by the *Yume Kagaku 21* Committee (consisting of the Chemical Society of Japan, the Society of Chemical Engineers, Japan, Japan Association for Chemical Innovation, and Japan Chemical Industry Association)



## Support activities in response to the Great East Japan Earthquake

The MCHC Group has been taking part in support activities reflecting our hope for the reconstruction of areas and people affected by the disaster.

<b>Donations</b>	MCHC: Contributed 100 million yen to local governments and NPOs (March 2011) Mitsubishi Tanabe Pharma Corporation (MTPC): Contributed 100 million yen via Japan Red Cross Society (March 2011) MRC: Contributed 50 million yen to local governments and NPOs (March 2011)
<b>Provision of relief supplies</b>	MCC: 200 mobile solar power chargers (April 2011) MTPC: Pharmaceuticals (including non-prescription drugs) (March 2011) MPI: 100,000 rolls of food wrap film (long, 50-meter rolls) (March 2011) The <i>KAITEKI</i> Institute, Inc. : 2,000 solar-charged LED lights (April 2011)
<b>Fund-raising activities by employees</b>	MCHC, core operating companies, and Group companies: Employees undertook fund-raising activities and donated a total amount of approx. 50 million yen (March – May 2011)
<b>Support for employee volunteer activities</b>	MCHC and core operating companies gave support for employee volunteer activities by providing them with opportunities to participate in such activities and paying part of the costs needed for the activities (transportation costs and volunteer insurance premiums). (July 2011 – March 2012)
<b>Others</b>	MCC: Lent company-owned land in Iwaki City, Fukushima, to Fukushima Prefectural Government for the construction of emergency temporary housing. (July 2011 –) The MCHC Group: Participated in the IPPO IPPO NIPPON Project, a project launched by the Japan Association of Corporate Executives (October 2011 –)

### Support for employee volunteer activities

1. Recruitment period: July 2011 – March 2012
2. Number of employees who participated in volunteer activities: 208 (as of March 31, 2012): (Breakdown: 8 from MCHC, 119 from MCC, 35 from MTPC, 19 from MPI, and 27 from MRC)
3. Details of the volunteer activities
  - Carrying in goods to temporary housing
  - Survey of temporary housing residents
  - Participation in volunteer work arranged by volunteer centers (Kesenuma, Rikuzentakata, etc.)
4. Others (volunteer activities related to the Great East Japan Earthquake)
  - Sorting out goods to carry into temporary housing (Tokyo: MPI)
  - Collating the data of the National Federation of Fisheries Co-operative Associations (Tokyo: Ryoka Systems Inc.)

### Stakeholder Message



#### Extremely valuable cooperation from a company, which provided resources in areas where we as an NPO faced shortages

Tomoko Yamashita  
Peace Winds Japan (PWJ)

At PWJ, we have shifted the focus of our activities from emergency support to reconstruction support. At present, our activities include delivery of the daily necessities to temporary housing areas, mental health care for children through support to the local communities surrounding them, economic reconstruction through support to fishermen's unions, and living support for local people. First volunteers from MCHC delivered daily necessities (including eating utensils and Japanese-style bedding) sent on trucks to temporary housing areas. They worked hard, especially in areas with many households. Volunteers who joined later became responsible for surveys, which they conducted by visiting individual households to find out their needs concerning mobile vending services and the support they will need in the future. The in-person survey gave them the opportunity to have meaningful exchange with people in the affected areas. I really appreciate the help from the people of MCHC, who they engaged in the

volunteer activities with sincerity. People who have never met before would talk with each other about common subjects after work on their first day in the area. The atmosphere differed depending on who came together, but someone to inspire and someone to lead would naturally emerge from every group, enabling each team to demonstrate its strengths. They made use of their skills and experiences both in physical work and in the surveys. The demand for volunteers changes depending on the situation of each site and the weather. I hope they will continue to respond flexibly to the different situations with their understanding that the activities are intended for people who need help.

I think the dispatch of workers on an ongoing basis was extremely valuable cooperation from a company, which provided resources in areas where we as an NPO faced shortages (such as people, goods, and money). I hope people from the MCHC Group will use these experiences as an opportunity to think about the public interest.

## Stakeholder Message



**People who met each other for the first time at the volunteer site were united in the important tasks they faced.**

Satoshi Arai  
Advanced Medical Research Laboratories  
Mitsubishi Tanabe Pharma Corporation

Each time I saw pictures of affected areas on TV, I would feel motivated to assist in the reconstruction. However, I was not sure where to go and what to do. I saw the volunteer recruitment ad on the internal bulletin board. The board provided specific information on preparations and where to work and where to stay, so I felt confident enough to participate in the activities. First, I joined a team responsible for surveying people living in temporary housing at Rikuzentakata and Ofunato. The survey was aimed at finding out what the people purchased using the gift certificates distributed to them by PWJ, and understanding their use of mobile vending services provided by pickup trucks. We conducted the survey by visiting each household in pairs. At Ofunato, people in the affected area are always smiling and friendly to their neighbors. A large store has opened in the area, attracting many local people. I felt that reconstruction was actually making progress there. At Kesenuma, I registered at the volunteer center and collected fishing nets from the gardens of private residences. The task was onerous because we had to collect long, heavy fishing nets that had become tangled up with each other under a scorching sun with no shade. Our group of 40 people, who had never met each other before, became united before we realized it. I felt a sense of achievement every time we collected a net. In the affected areas, school bags, notebooks, and daily necessities are still scattered about the gardens of private residences and a transportation container was caught in a tree. These views—normally inconceivable—brought home to me the threatening power of tsunami and the sadness of people who have lost everything. It was five months after the earthquake when I was working there. While reconstruction efforts were about to start in some areas, rubble had yet to be removed in others. Sustained support must be provided as appropriate to the needs of each area, which means that a range of volunteer activities are required. I hope that the people who will participate in volunteer activities will do their best.

## Stakeholder Message



**It is important to provide support by seeing the affected areas in person through participation in volunteer activities and sharing the situation with others.**

Miho Nakajo  
Yokohama Corporate Research Laboratories  
Mitsubishi Rayon Co., Ltd.

I participated in the volunteer activities because I had wanted to do whatever I could and I felt that my memories of the disaster were beginning to fade as my life had returned to the normal state.

On the first day, I visited people in the affected areas to undertake a survey of what they were using and what their needs were with respect to the mobile vending trucks. The trucks were prepared by PWJ as a part of its support for economic reconstruction. I was very nervous because I was going to talk face to face with people living in temporary housing. But I was surprised how many had a positive frame of mind, which made me feel that people are strong. On the second day, I participated in volunteer activities of the Kesenuma Volunteer Center and helped remove dirt from private residences. This task required two days of work with eight people per residence, and brought home to me how hard reconstruction was. I again understood that we should do whatever we can, even if it is only a little. I took part in the activities with a desire to do whatever I could.

Ultimately, though, it was me who benefited, encouraged by the positive frame of mind of the people in the affected areas and

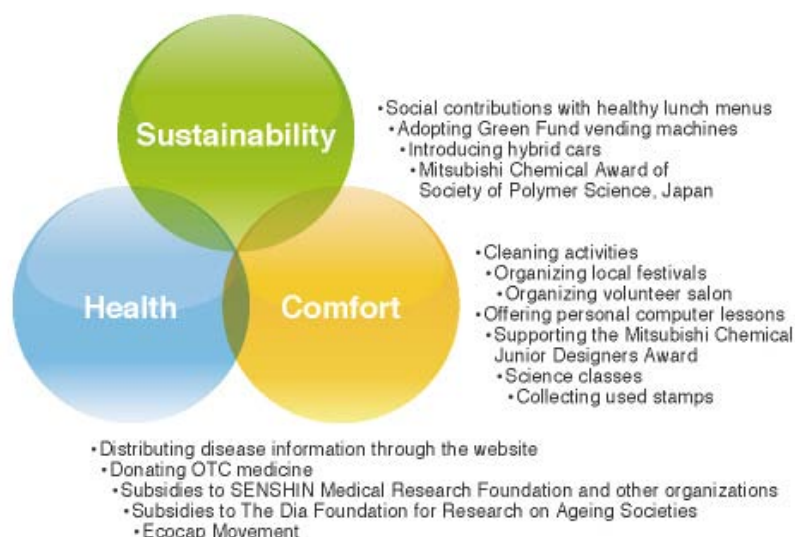
inspired by the thinking of people from the MCHC Group and elsewhere.

I strongly urge people wondering whether or not to participate in volunteer activities in the affected areas, including people from the MCHC Group, to go there and take part. There are many ways to provide support, but the affected areas you see in person are quite different from those you see in the media. I think it is important to see the areas for yourself, understand them, and share what you learn with the people around you.

### 3. Measures by Operating Companies

Each of the operating companies has addressed unique activities, in addition to participating in community activities in the neighborhood of their plants and research centers, supporting volunteer activities by employees, making companies' welfare facilities available to local residents, contributing to various organizations and research institutes, and offering subsidies for research activities.

Corporate Citizenship Activities under APTSIS 15



#### Number of employees who took volunteer leave and number of days of volunteer leave taken at each operating company

Name of the company	MCC	MTPC	MPI	MRC
Number of employees who took volunteer leave	121	70	36	15
Number of days of volunteer leave taken	311	183	77	45

### 4. Activity Plan for Fiscal 2012

In fiscal 2012, we will continue to exchange opinions with NPOs and NGOs and facilitate discussions among members responsible for corporate citizenship activities at the operating companies, so as to plan specific activities focused on "developing the next generation."

As initiatives for the Great East Japan Earthquake, we will strengthen support for children in the affected areas, including activities to help these children fulfill their potential as the next generation. Specifically, we are planning to give science classes by visiting the affected areas and to invite children from these areas to the plants of our operating companies. We will also recruit volunteers to take part in these activities from among employees and raise funds, so that the activities will be promoted through the unified efforts by our employees.

With respect to initiatives to be taken overseas, we will deepen the understanding that each of our overseas facilities has of their local community and plan initiatives to be taken by each facility from a global perspective. At the same time, we will aim to develop a system to identify the results of our initiatives.

# Communication with Stakeholders

## We will orchestrate our relationship with stakeholders through our communications with them.

At the Mitsubishi Chemical Holdings (MCHC) Group, we are determined to engage in open communications with all of our stakeholders and build a relationship with them. This will be the driving force that will enable us to achieve *KAITEKI*. To this end, we will make use of various communication tools, create opportunities to communicate with stakeholders in various corporate settings, and engage in other communication activities.

### List of Our Communication Activities with Stakeholders

	Basic Approach	Communication Tools	Communication Opportunities
<b>Shareholders Investors</b>	We will make sure that the MCHC Group's corporate activities are open and transparent, and disclose information in an appropriate manner in an effort to improve public understanding of our corporate activities.	<ul style="list-style-type: none"> <li>• Website</li> <li>• Financial Results</li> <li>• Operating Summaries</li> <li>• Analyst Meeting Materials</li> <li>• Annual Reports</li> <li>• Shareholder Newsletters</li> <li>• Securities Reports</li> </ul>	<ul style="list-style-type: none"> <li>• Investor Meeting</li> <li>• General Meeting of Shareholders</li> <li>• Investor Briefing Session</li> <li>• IR Activities</li> </ul> <p style="text-align: right;">etc.</p>
<b>Customers Business Partners</b>	We hope to build relationships of trust by communicating with our customers and business partners while deepening our partnerships and working hand in hand to achieve <i>KAITEKI</i> in our society.	<ul style="list-style-type: none"> <li>• Website</li> <li>• News Releases</li> <li>• Product Brochures</li> <li>• MSDS</li> <li>• Advertising</li> <li>• Corporate Brochures</li> <li>• Call Center</li> </ul>	<ul style="list-style-type: none"> <li>• Sales Activities</li> <li>• Purchasing Activities</li> <li>• Questionnaire</li> <li>• Organization of the Mitsubishi Chemical Holdings Technology Forum</li> <li>• <i>KAITEKI</i> Square</li> <li>• <i>KAITEKI</i> CAFÉ™,</li> </ul> <p style="text-align: right;">etc.</p>
<b>Employees</b>	We respect the dignity and rights of diverse individuals and strive to create a pleasant and rewarding working environment for everyone.	<ul style="list-style-type: none"> <li>• Intranet</li> <li>• House Journal (<i>Chemipal</i>)</li> </ul>	<ul style="list-style-type: none"> <li>• Employee Awareness Surveys</li> <li>• Labor-Management Consultations,</li> <li>• Employee Evaluation Interviews</li> </ul> <p style="text-align: right;">etc.</p>
<b>Local Communities and Society</b>	We deepen our understanding of cultures and customs in countries and regions where we operate, and contribute to society through our business activities. We also act as good corporate citizens in responding to the requests and expectations of society and the public to help achieve <i>KAITEKI</i> .	<ul style="list-style-type: none"> <li>• Website</li> <li>• CSR Reports</li> <li>• Websites and Reports of Operating Companies</li> </ul>	<ul style="list-style-type: none"> <li>• Plant Tours</li> <li>• Meetings with Local Residents' Associations</li> <li>• <i>KAITEKI</i> CAFÉ™</li> <li>• Science Experimental Classes</li> </ul> <p style="text-align: right;">etc.</p>

## Evaluation by Outside Parties

The following are external evaluations of the initiatives taken by the Mitsubishi Chemical Holdings (MCHC) Group.

### Products and Technologies

Fiscal Year	Recipient	Name of the Award	Award Granted to:	Award Granted by:
2011	Mitsubishi Plastics, Inc.	The Chemical Society of Japan Award for Technical Development for 2011	AQSOA	The Chemical Society of Japan
	Mitsubishi Chemical Corporation			
	Mitsubishi Chemical Group Science and Technology Research Center, Inc.			
	Mitsubishi Rayon Co., Ltd.	Minister of Economy, Trade and Industry Award, Monodzukuri Nippon Grand Award of the Ministry of Economy, Trade and Industry	Rod lens	Ministry of Economy, Trade and Industry
	Mitsubishi Tanabe Pharma Corporation	The Pharmaceutical Society of Japan Award for Drug Research and Development	"Imusela," a treatment for multiple sclerosis	The Pharmaceutical Society of Japan
	Mitsubishi Chemical Medience Corporation	Grand Prix, Japanese Society of Toxicologic Pathology President Award		Japanese Society of Toxicologic Pathology
	Mitsubishi Plastics, Inc.	Good Design Award	"Thermomild" heating & cooling panel equipment	Japan Institute of Design Promotion
2012	Mitsubishi Chemical Corporation	Minister of Education, Culture, Sports, Science and Technology Award	Red phosphor	Japan Institute for Promoting Invention and Innovation
	Mitsubishi Chemical Corporation	Environmental Technology Prize	Red phosphor	Japan Chemical Industry Association

## Common Ground Awards

Fiscal Year	Recipient	Name of the Award	Award Granted by:
2011	Mitsubishi Chemical Corporation	Award for Excellence in Work/Life Balance	Work/Life Balance Promotion Committee
	Mitsubishi Chemical Corporation	Okayama Prefectural Governor's Award (for companies supporting child-rearing)	Okayama Prefecture
	Hiratsuka Plant, Mitsubishi Plastics, Inc.	Environmental Report Award/Sustainability Report Award	Toyo Kezai, Inc.
	Mitsubishi Tanabe Pharma (Guangzhou) Co., Ltd.	Certification as a company with ideal, harmonious labor relations, granted by Guangdong Province	Guangdong Province (China)
	Mitsubishi Rayon Co., Ltd.	Environmental Advertising Award	Nikkei Business Publications, Inc.
	Mitsubishi Rayon Co., Ltd.	Excellent Business Expert Advertising Award	Nikkei Business Publications, Inc.

## Management

Fiscal Year	Recipient	Name of the Award	Award Granted to:	Award Granted by:
2011	Yoshimitsu Kobayashi	Manager Award		ZAIKAI magazine (ZAIKAI Co., Ltd.)
	Mitsubishi Rayon Co., Ltd.	Porter Prize	MMA/PMMA Business Complex	Hitotsubashi University

## Inclusion in SRI Indexes

Fiscal Year	Award Granted to:	SRI Indexes	Assessment organization
2011	Mitsubishi Chemical Holdings Corporation	Asia Pacific 2011/2012	Dow Jones indices and Sustainability Asset Management
	Mitsubishi Chemical Holdings Corporation	FTSE4Good Index Series	FTSE International Ltd.
	Mitsubishi Chemical Holdings Corporation	Dow Jones Sustainability Asia Pacific Index FTSE4Good Index	Morningstar Japan KK
2012	Mitsubishi Chemical Holdings Corporation	Dow Jones Sustainability Asia Pacific Index	Dow Jones indices and Sustainability Asset Management

## Financial Data

	FY2007	FY2008	FY2009	FY2010	FY2011
Net sales (billions yen)	2,929.8	2,909.0	2,515.1	3,166.8	<b>3,208.2</b>
Operating income (billions yen)	125.0	8.2	66.3	226.5	<b>130.6</b>
Ordinary income (billions yen)	128.9	-1.9	59.0	223.9	<b>133.6</b>
Net income (loss) (billions yen)	164.1	-67.2	12.8	83.6	<b>35.5</b>
ROA*1 (%)	0.9	-0.2	0.1	0.5	<b>0.4</b>
Total assets (billions yen)	2,765.8	2,740.9	3,355.1	3,294.0	<b>3,174.0</b>
Net interest-bearing debts*2 (billions yen)	823.1	1,033.2	1,454.1	1,304.6	<b>1,164.5</b>
Capital expenditure (billions yen)	170.1	139.0	119.0	117.8	<b>116.1</b>
Depreciation and amortization (billions yen)	102.2	119.2	129.6	148.7	<b>145.7</b>
R&D expenses (billions yen)	112.1	127.8	136.9	130.8	<b>138.5</b>
Number of employees	3,930.5	4,148.0	5,390.7	5,388.2	<b>5,397.9</b>

\*1 ROA: Income before income taxes/Total assets (average of beginning and end of fiscal year)

\*2 Net interest-bearing debts include notes discounted.

## MCHC Group

### Environmental and safety data of domestic plants in fiscal 2011

#### Greenhouse gas (GHG)

GHG emissions (1,000 t of CO <sub>2</sub> e)	8,352
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#### Energy

Energy consumption (TJ)	118,500
Direct consumption (TJ)	95,900
Coal (TJ)	13,500
Oil (TJ)	10,700
Gas (TJ)	12,800
Byproduct gas and oil (TJ)	58,900
Indirect consumption (TJ)	22,600
Electric power (TJ)	20,200
Steam power (TJ)	2,400

#### Water

Water usage (million m <sup>3</sup> ) *excluding seawater	190
Water discharge into ocean (million t)	580
Water discharge into lake and river (million t)	18
Water discharge into sewage (million t)	5

#### Industrial waste and recycling

Industrial waste generated (1,000 t)	440
Landfill disposal (1,000 t)	11

PRTR substance emissions (t)	1,140
NO <sub>x</sub> emissions (t)	10,800
SO <sub>x</sub> emissions (t)	3,000
COD emissions (t)	2,220
Particulate emissions (t)	310
Total phosphorus (t)	88
Total nitrogen (t)	6,170
VOC emissions (t)	5,020

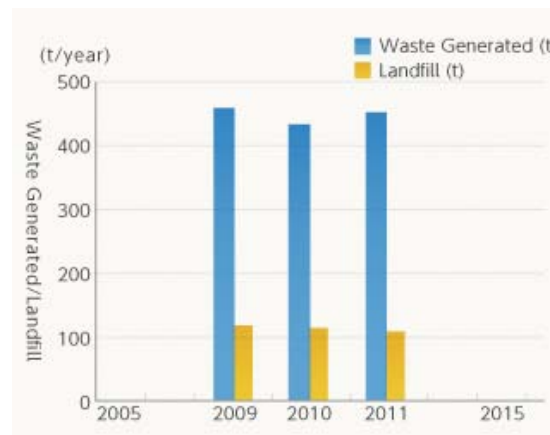
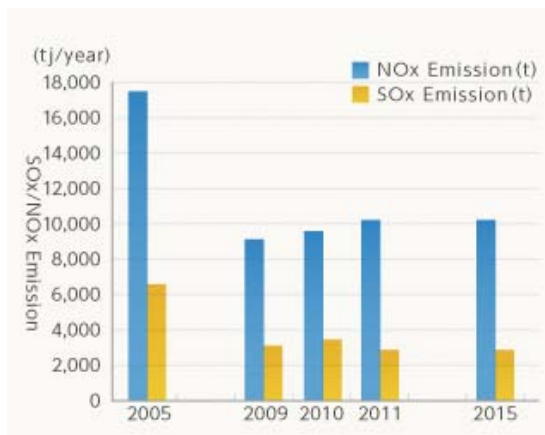
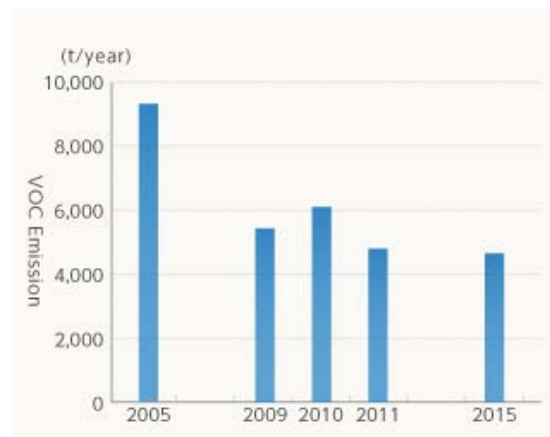
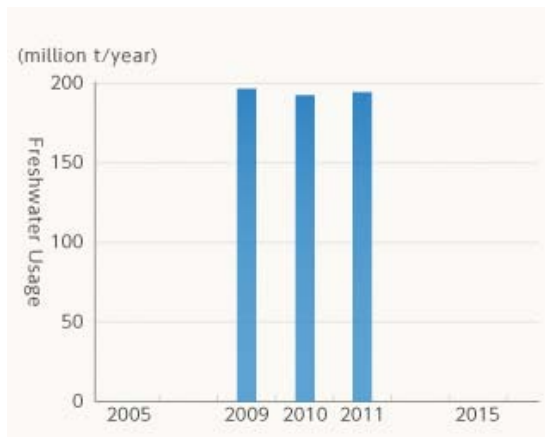
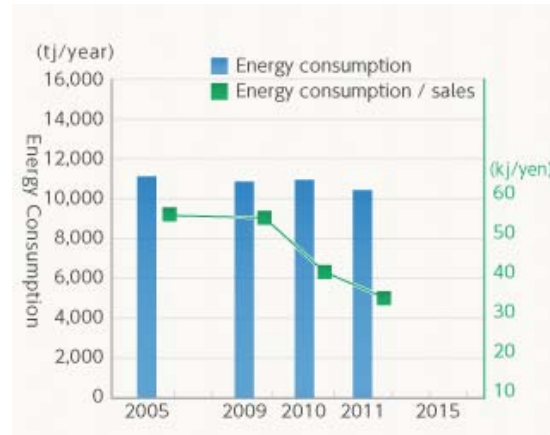
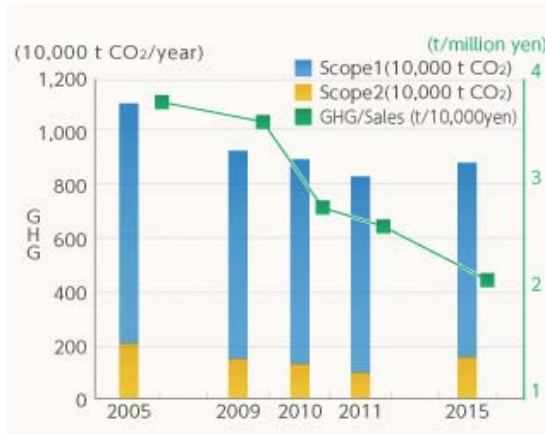


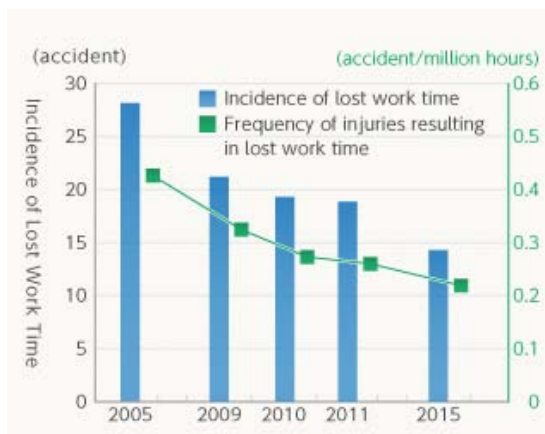
## Environmental accounting

<b>Environmental protection cost</b>	
<b>Investment amount (million yen)</b>	5,682
<b>Cost amount (million yen)</b>	36,149
<b>Economic effect of environmental protection measures (million yen)</b>	3,217

There were no significant environmental accident or leakage.

No hazardous wastes defined by Basel Convention were transported.





## By Business Corporation

### Environment and safety data for offices in Japan

#### Greenhouse gas (GHG)

	Mitsubishi Chemical	Mitsubishi Tanabe Pharma	Mitsubishi Plastics	Mitsubishi Rayon
GHG emissions (1,000 t-CO <sub>2</sub> e)	6,638	126	337	1,251

#### Energy

	Mitsubishi Chemical	Mitsubishi Tanabe Pharma	Mitsubishi Plastics	Mitsubishi Rayon
Energy consumption (TJ)	98,300	2,000	8,100	10,000

#### Water

	Mitsubishi Chemical	Mitsubishi Tanabe Pharma	Mitsubishi Plastics	Mitsubishi Rayon
Water usage (million m <sup>3</sup> ) *excluding seawater	107	9	15	59

#### Industrial waste and recycling

	Mitsubishi Chemical	Mitsubishi Tanabe Pharma	Mitsubishi Plastics	Mitsubishi Rayon
Industrial waste generated (1,000 t)	290	20	40	90
Landfill disposal (1,000 t)	7.4	0.1	0.0	3.6

PRTR substance emissions (t)	380	10	34	750
NO <sub>x</sub> emissions (t)	8,800	60	110	1,820
SO <sub>x</sub> emissions (t)	2,280	10	12	710
COD emissions (t)	1,240	50	17	920
Particulate emissions (t)	200	1	10	100
Total phosphorus (t)	72	3	-	13
Total nitrogen (t)	5,450	30	15	670
VOC emissions (t)	3,620	200	240	960

■ Environmental accounting

	Mitsubishi Chemical	Mitsubishi Tanabe Pharma	Mitsubishi Plastics	Mitsubishi Rayon
Environmental protection cost				
Investment amount (million yen)	2,847	78	1,695	1,062
Cost amount (million yen)	27,796	1,228	2,965	4,160
Economic effect of environmental protection measures (million yen)	0	17	1,726	1,474

# Social Data

## Basic information

		Mitsubishi Chemical	Mitsubishi Tanabe Pharma	Mitsubishi Plastics	Mitsubishi Rayon
<b>Number of Employees</b>		5,827	4,826	2,855	3,175
<b>Number of Employees by Gender</b>	Male	5,228	3,869	2,527	2,735
	Female	599	957	328	440
<b>Number of Employees by Age Group</b>	20s or younger	922	368	437	576
	30s	1,889	1,103	801	766
	40s	1,843	2,073	1,034	1,041
	50s or older	1,173	1,282	583	792
<b>Average Age</b>	40.5	43.3	40.7	41.7	
<b>Number of New Employees</b>	64	47	106	161	
<b>Number of People Resigning</b>	104	38	63	38	
<b>Number &amp; Percentage of Unionized Employees</b>	4,086 70.1%	3,773 78.2%	1,884 66%	2,508 79.0%	
<b>Layoffs</b>	0	0	0	0	

## Diversity

	Mitsubishi Chemical	Mitsubishi Tanabe Pharma	Mitsubishi Plastics	Mitsubishi Rayon
<b>Percentage of Female</b>	10.30	19.8	11.50	13.9
<b>Percentage of Female Managers*</b>	5.30	8.02	1.10	3.79
<b>Percentage of Persons with Disabilities*</b>	2.09	1.97	1.84	1.85
<b>Number of People Rehired Post-Retirement</b>	455	193	119	225

\*Figures contain data of selected group companies.

## Work-life balance

	Mitsubishi Chemical	Mitsubishi Tanabe Pharma	Mitsubishi Plastics	Mitsubishi Rayon
<b>Number of Employees Taking Childcare Leave*</b>	72 Male : 10 Female : 62	81 Male : 2 Female : 79	12 Male : 0 Female : 12	19 Male : 1 Female : 18
<b>Number of Employees Taking Nursing Care Leave</b>	0	0	0	0
<b>Acquisition Rate of Paid Holidays</b>	65.7	54.0	56.2	76.7

\*Figures contain data of selected group companies.

## Occupational health

	Mitsubishi Chemical	Mitsubishi Tanabe Pharma	Mitsubishi Plastics	Mitsubishi Rayon
Health Examination Response Rate	99.70	100.0	98.9	99.9
Frequency of Injuries Resulting in Lost Work Time (per million hours)	0.08	0.57	0.13	0.58

## Other

	Mitsubishi Chemical	Mitsubishi Tanabe Pharma	Mitsubishi Plastics	Mitsubishi Rayon
Number of Employees Taking Volunteer Leave	121	70	39	15

# Group Information

## [Overview]

<b>Company name</b>	Mitsubishi Chemical Holdings Corporation
<b>Established</b>	October 3, 2005
<b>President</b>	Yoshimitsu Kobayashi
<b>Paid-in capital</b>	¥50.0 billion
<b>Listings</b>	Tokyo Stock Exchange, Osaka Securities Exchange
<b>Activities</b>	Management of Group companies (development of Group strategies, allocation of financial resources, etc.)
<b>Business domains</b>	Performance products, health care, and industrial materials
<b>Consolidated net sales</b>	¥3,208.2 billion
<b>Consolidated operating income</b>	¥130.6 billion
<b>Group employees</b>	53,979
<b>URL</b>	<a href="http://www.mitsubishichem-hd.co.jp/">http://www.mitsubishichem-hd.co.jp/</a>

(All figures are for the year ended March 2012.)

Mitsubishi Chemical Holdings Corporation (MCHC) is developing businesses in the areas of performance products, health care and industrial materials. Through the decision criteria for our corporate activities : Sustainability, Health, and Comfort, we will seek to achieve *KAITEKI* based on "Good Chemistry," with its limitless potential and expansion.

## [History]

<b>October, 2005</b>	Mitsubishi Chemical Holdings jointly established by Mitsubishi Chemical and Mitsubishi Pharma by means of a stock-for-stock exchange
<b>October, 2007</b>	Mitsubishi Plastics becomes wholly owned subsidiary Mitsubishi Tanabe Pharma formed from merger of Tanabe Seiyaku and Mitsubishi Pharma
<b>April, 2008</b>	New Mitsubishi Plastics established to integrate functional product businesses
<b>April, 2009</b>	The <i>KAITEKI</i> Institute established
<b>March, 2010</b>	Mitsubishi Rayon becomes consolidated subsidiary
<b>November, 2010</b>	Mitsubishi Chemical Holdings America, Inc. established
<b>January, 2011</b>	Mitsubishi Chemical Holdings (Beijing) Co., Ltd. established
<b>June, 2012</b>	MCFA Inc. becomes wholly owned subsidiary

## [Group Motto]

# APTSIS

Mitsubishi Chemical Holdings Group Member will,  
Under a mission to contribute to our Group,  
Strive to provide safety and comfort, be environmentally  
conscious, and improve human health  
To win further trust worldwide.

### Agility

Be alert, act quickly

### Principle

Sharing theories, principles  
and ideals

### Transparency

Transparency, accountability and  
compliance

### Sense of Survival

A sense of being on the verge, a sense of crisis

### Internationalization

Enhancing our performance within the global market

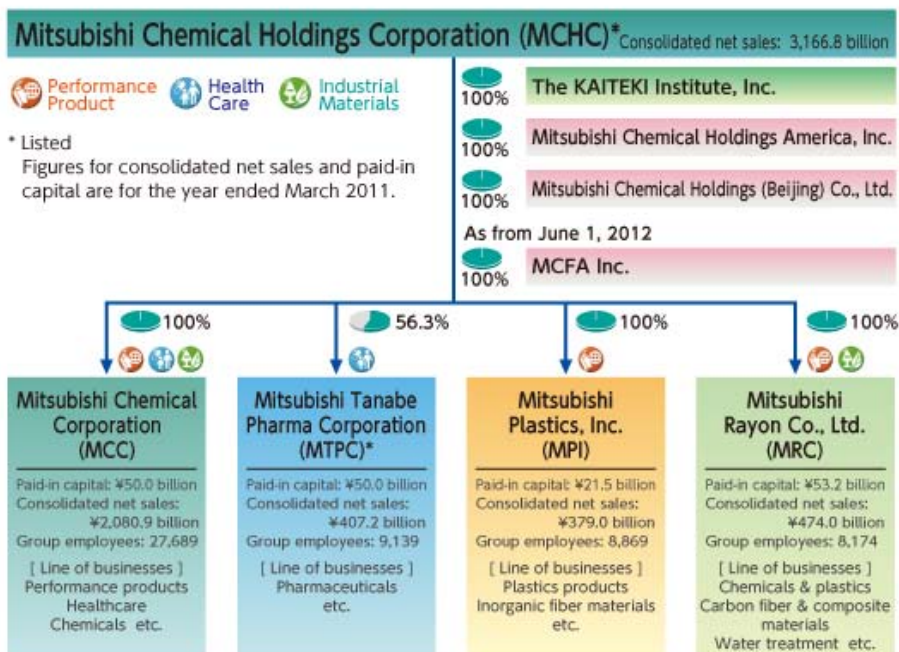
### Safety, Security & Sustainability

Ensuring safety in manufacturing, trust in quality,  
information security and environmental consciousness

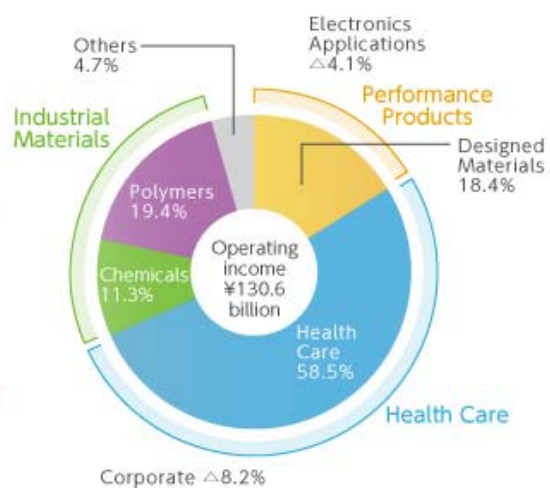
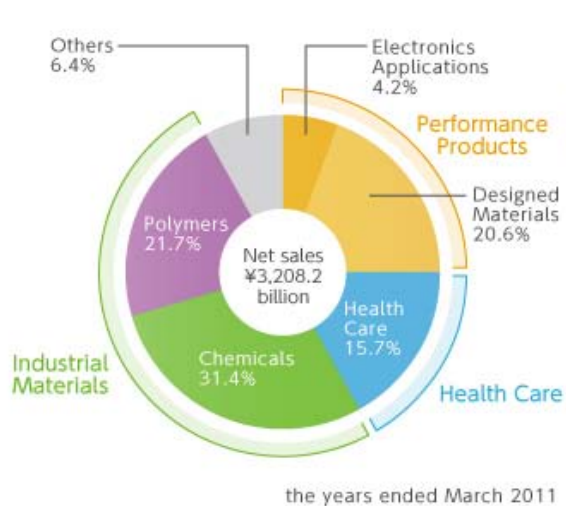
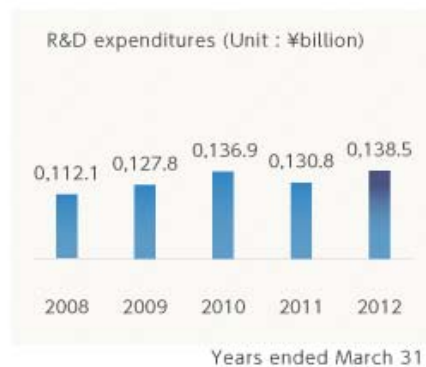
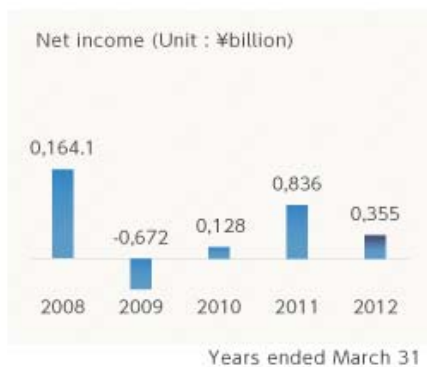
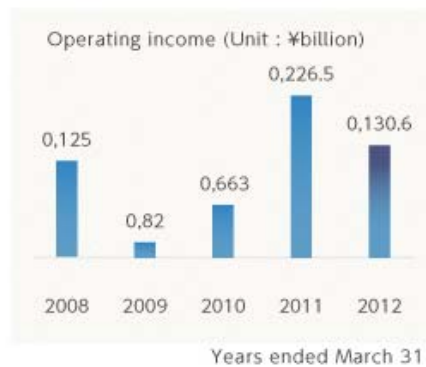
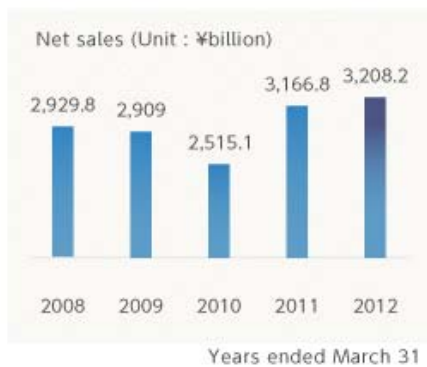
apt(Adjective) Appropriate

-sis(suffix) From, Greek, indicates that something is a behavior, process, status, condition, etc.

## [Organization]

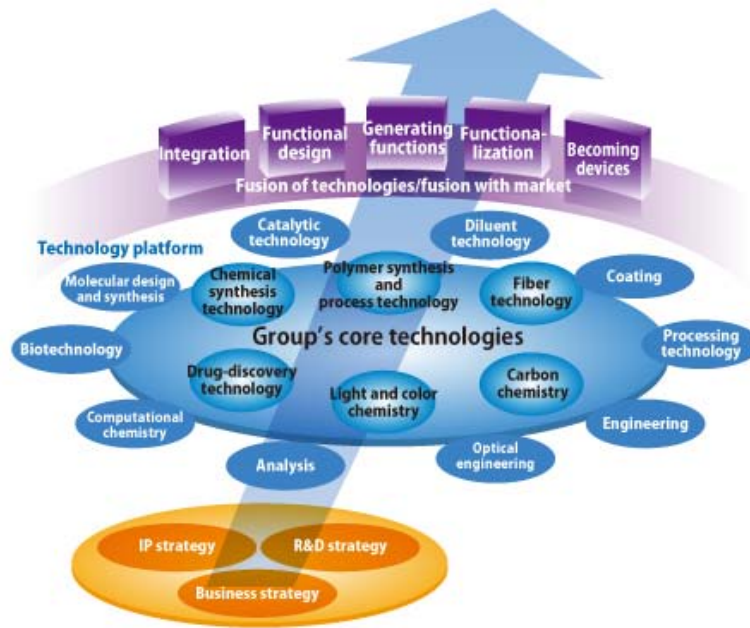


## [Financial Highlights] (Consolidated)

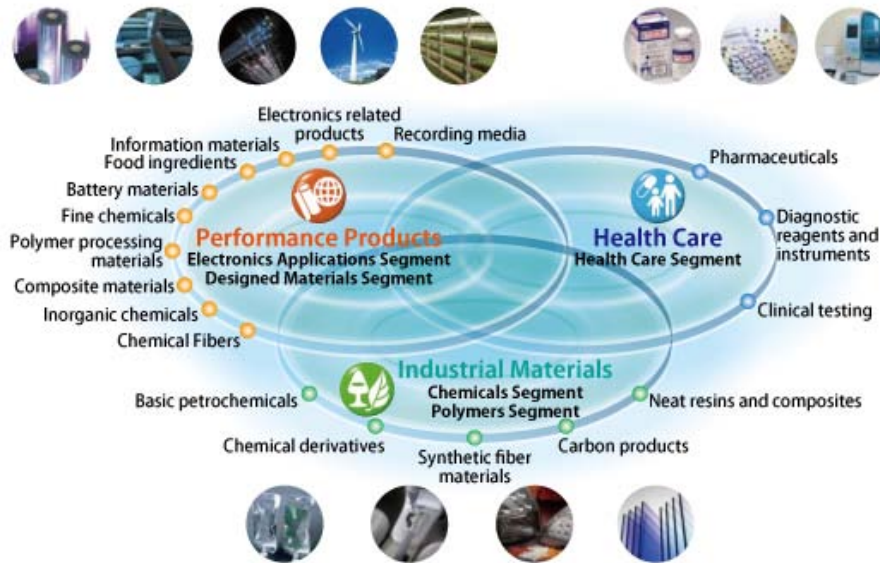




[R&D]

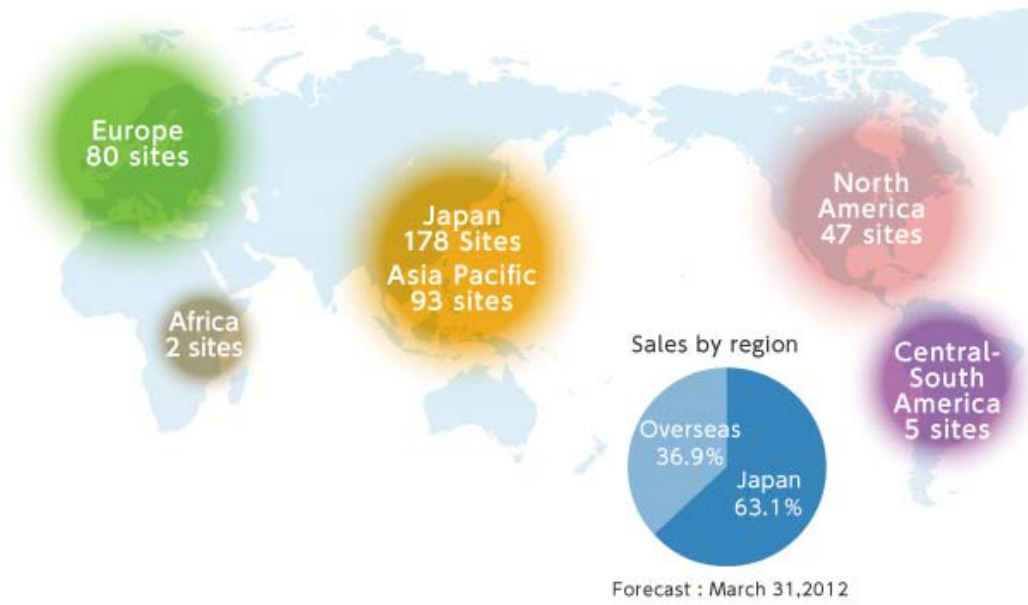


[Business domains]



[Global Network]

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Operations in over 30 countries worldwide

## Third-Party Opinion

Kazutaka Okubo  
Certified Public Accountant  
(Managing Director, Ernst & Young ShinNihon  
Sustainability Institute Co., Ltd. Partner, Ernst & Young  
ShinNihon LLC



Mitsubishi Chemical Holdings Corporation (MCHC) aims to perform *KAITEKI* Management, which MCHC has advocated to the world by basing its corporate activities on three criteria for determining sustainability (the environment and resources), health, and comfort under its Group philosophy. To realize *KAITEKI*, MCHC approaches management by balancing a four-dimensional axis, which is created by adding Management of Sustainability (MOS) indexes that bring the view of *KAITEKI* for society and communities to traditional management indexes. In the current fiscal year, it is to MCHC's credit that it has made progress in its efforts to address social issues by clarifying its approach to the issues so as to resolve the relationships between the MOS indexes and social agendas, set its own agenda, and incorporate external opinions. In particular, the positioning of the MOS Axis in management has been clarified by explaining the scheme of *KAITEKI* and initiatives toward *KAITEKI* in an easy-to-understand manner in the special feature and showing the relationships between the MOS Axis and value creation. It is notable that this has also been made clear by practical reporting, such as indicating specific approaches and specific efforts for social agendas through MCHC's core business, by covering its efforts in the MOS Axis as important topics in which the Mitsubishi Chemical Holdings Group as a unit is striving to increase common values in an integrated manner.

As a challenge for the future, it is necessary to go further with regard to a method of identifying social issues and responding to them. In particular, with the establishment of ISO26000, there is a need to disclose how an organization is dealing with what social issues. It is important, therefore, to identify core challenges to deal with specifically and to reveal the process of addressing them with whom (with which stakeholders). MCHC would be recommended to indicate agendas that are clearly demonstrated as specific social issues to address as the MOS Axis that *KAITEKI* Management targets and to put them into practice. For example, it is desirable to show how to deal specifically with important social issues such as participation in communities and responding to developments from a supply chain standpoint, while mentioning such areas as a human-rights issue and fair business practice.

Generally, this report is very comprehensive, given that the process to increase the corporate value of MCHC is clearly and specifically stated by incorporating the promotion of corporate social responsibility (CSR) into management strategies through the practice of *KAITEKI* Management. To add further value to the report, it is important to incorporate a perspective that considers how to address what social issues and with whom, as well as how to give back to society the results that MCHC has achieved. It is hoped that MCHC will pursue its efforts from a standpoint even more entrenched in society by viewing specific social issues in relation to its management issues and working to solve them, while involving various stakeholders.

# Response to Opinions Received

## Response to Opinions Received



Shigeru Tsuyuki  
Chief SUSTAINABILITY Officer  
Deputy Chief Executive Officer  
Member of the Board  
Mitsubishi Chemical Holdings Corporation

We appreciate your understanding and encouragement of our pursuit of *KAITEKI* value, which Mitsubishi Chemical Holdings Corporation (MCHC) has defined as its social responsibility and which it has strived to achieve.

The most important point with this year's report is that results for the MOS indexes have been reported for the first time, making it possible to measure the efforts of MCHC to represent the progress with MOS. We have sought to disclose the PDCA (plan, do, check, act) cycle for all items as clearly as possible, including those that showed progress and those that were insufficient. By sharing the processes and results with our stakeholders and continuing dialogues, we believe we can further consolidate our efforts toward *KAITEKI*. New measures being planned and executing for the dialogues include questionnaires distributed among our customers and business partners and the establishment of the new showroom *KAITEKI* SQUARE, along with the holding of symposiums open to the public concerning MOS, as well as holding opinion exchange meetings and developing promotional tools to help employees of our Group put *KAITEKI* into practice. We hope these occasions would enable us to confirm the direction of our pursuit of *KAITEKI* value and consistency with the viewpoints of the general public, as well as to identify new issues.

The concept of *KAITEKI* was derived from discussions on how we should use the strength of MCHC to solve medium- to long-term social issues. As has been suggested, there are areas in which our company could further excel, if we looked broadly at the value chain of chemical industries from the perspective of realizing *KAITEKI*. One example is the development and market launch of organic thin-film solar cells, lithium-ion battery materials, and other products, which are mentioned in this report, with the aim of solving issues associated with the environment and new energy. We could pursue these businesses we have started from even broader social viewpoints, to develop expanded systems that encompass power generation, storage, and conservation.

We believe the *KAITEKI* value that MCHC targets could serve not only as a compass for our employees, but also as a concept showing the directions to be pursued for the future society. We will continue pursuing *KAITEKI* value together with our stakeholders, with the hope of resolving social issues and achieving a sustainable society.

# Feedback

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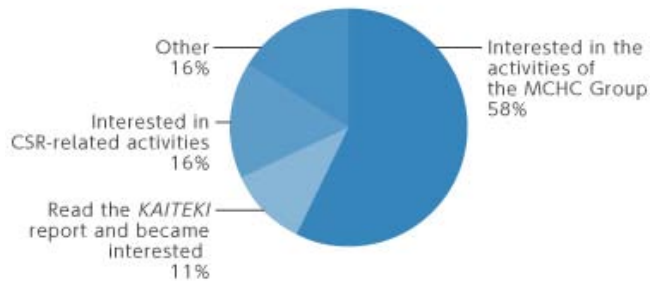
Thank you for your valuable feedback regarding the 2011 CSR Report. The feedback you have provided will guide us in our future activities for realizing *KAITEKI*.

The results of the questionnaire are presented below.

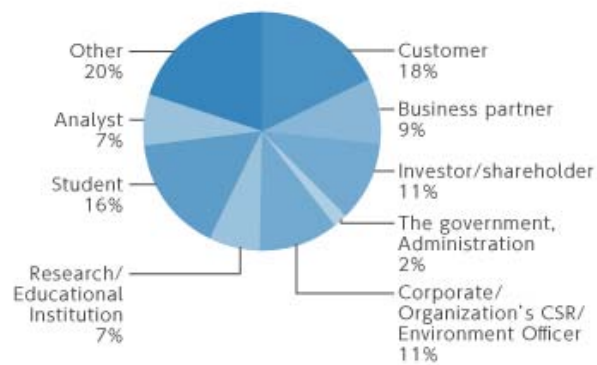
## Results of the Questionnaire Regarding *KAITEKI* Report 2011

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### Q1 : Purpose of visiting this page



### Q2 : Your position



## Feedback Received for the Questionnaire on the 2011 CSR Report (an extract)

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Social Responsibility shows a clear corporate philosophy, and I have high expectations for seeing it put into practice.

(Government/administrator)

Unique products should be disclosed to developers in various professions in order to amass their ideas on different ways to apply them, and application would be possible in all areas if there were staff members who could provide consultation for developers' requests. (Customer)

Japanese companies are slow at commercialization, perhaps because they only want things that are perfect. Even an outstanding product cannot arouse dreams unless it is launched in a timely manner. While dreamless Japanese products are increasing, solar power generation and LED lighting are products that can arouse dreams. At any rate, I hope products will be launched.

(Research/educational institute)

The businesses and directions being pursued are terrific, but performance in terms of share price has been insufficient. As a supporter of your company I regret this situation. Please try to raise the image of your company among the general public and become Japan's leading chemical manufacturer in terms of share price as well.(Investor)

AQSOA really made a powerful impression. I hope to receive complete details from a representative. (Customer)

I want us to all be able to join our abilities for achieving *KAITEKI*. (Employee)

Thank you for your valuable feedback.

# GRI Guidelines Reference Table

- This Reference Table specifies reports relevant and related to each indicator shown in the GRI Sustainability Reporting Guideline G3.1, based on the Company's interpretation.
- Reference is principally made to the contents of the CSR Report 2012 and other related pages on the corporate website.

\* The relevant pages link to the PDF files.

## 1.Strategy and Analysis

Item	Indicator	Contents	Page	GC Principles	ISO26000
1.1	Statement from the most senior decision-maker of the organization (e.g., CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy.	<a href="#">Message from the President</a>	<a href="#">P.2-3</a>		6.2 Organizational governance
1.2	Description of key impacts, risks, and opportunities.	<a href="#">Message from the President</a> <a href="#">Toward the Realization of KAITEKI/ MOE Axis</a>  <a href="#">MOT Axis</a>	<a href="#">P.2-3</a> <a href="#">P.6-23</a>		6.2 Organizational governance

## 2.Organizational Profile

Item	Indicator	Contents	Page	GC Principles	ISO26000
2.1	Name of the organization.	<a href="#">Group Information</a>	<a href="#">P.101-105</a>		
2.2	Primary brands, products, and/or services.	<a href="#">Group Information</a> <a href="#">Group Businesses</a>	<a href="#">P.101-105</a>		
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	<a href="#">Group Information</a> <a href="#">Group Outline</a>	<a href="#">P.101-105</a>		6.2 Organizational governance
2.4	Location of organization's headquarters.	<a href="#">Group Information</a>	<a href="#">P.101-105</a>		
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	<a href="#">Global Network</a>	<a href="#">P.101-105</a>		
2.6	Nature of ownership and legal form.	<a href="#">Group Information</a>	<a href="#">P.101-105</a>		
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	<a href="#">Group Information</a> <a href="#">Global Network</a> <a href="#">Globalization and Response to Domestic Issues</a>	<a href="#">P.101-105</a>		

2.8	<p>Scale of the reporting organization, including:</p> <ul style="list-style-type: none"> <li>• Number of employees;</li> <li>• Number of operations</li> <li>• Net sales (for private sector organizations) or net revenues (for public sector organizations);</li> <li>• Total capitalization broken down in terms of debt and equity (for private sector organizations); and</li> <li>• Quantity of products or services provided</li> </ul>	<a href="#">Communication with Investors and Analysts</a> <a href="#">Group Information</a> <a href="#">Financial data</a>	<a href="#">P.54-91</a> <a href="#">P.101-105</a> <a href="#">P.94-100</a>		
2.9	<p>Significant changes during the reporting period regarding size, structure, or ownership including:</p> <ul style="list-style-type: none"> <li>• The location of, or changes in operations, including facility openings, closings, and expansions; and</li> <li>• Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations).</li> </ul>	<a href="#">Group Information</a>	<a href="#">P.101-105</a>		
2.10	Awards received in the reporting period.	<a href="#">Evaluation by outside parties</a>	<a href="#">P.92-93</a>		

### 3. Report Parameters

Item	Indicator	Contents	Page	GC Principles	ISO26000
Report Profile					
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	<a href="#">Editorial Policy</a>	<a href="#">Editorial Policy</a>		
3.2	Date of most recent previous report (if any).	<a href="#">Editorial Policy</a>	<a href="#">Editorial Policy</a>		
3.3	Reporting cycle (annual, biennial, etc.)	<a href="#">Editorial Policy</a>	<a href="#">Editorial Policy</a>		
3.4	Contact point for questions regarding the report or its contents.	<a href="#">Editorial Policy</a>	<a href="#">Editorial Policy</a>		
Report Scope and Boundary					
3.5	<p>Process for defining report content, including:</p> <ul style="list-style-type: none"> <li>• Determining materiality;</li> <li>• Prioritizing topics within the report; and</li> <li>• Identifying stakeholders the organization expects to use the report.</li> </ul>	<a href="#">Editorial Policy</a>	<a href="#">Editorial Policy</a>		
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers).	<a href="#">Editorial Policy</a>	<a href="#">Editorial Policy</a>		



3.7	State any specific limitations on the scope or boundary of the report.	<a href="#">Social data</a>	<a href="#">P.94-100</a>		
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	Not applicable			
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report.	<a href="#">Financial data</a>	<a href="#">P.94-100</a>		
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods).	<a href="#">Editorial Policy</a>	<a href="#">P.94-100</a>		
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	<a href="#">Editorial Policy</a>	<a href="#">P.94-100</a>		
GRI Content Index					
3.12	Table identifying the location of the Standard Disclosures in the report.	GRI Guidelines Reference Table			
Assurance					
3.13	Policy and current practice with regard to seeking external assurance for the report. If not included in the assurance report accompanying the sustainability report, explain the scope and basis of any external assurance provided. Also explain the relationship between the reporting organization and the assurance provider(s).	<a href="#">Third-party Opinion</a>	<a href="#">P.106-107</a>		

## 4. Governance, Commitments, and Engagement

Item	Indicator	Contents	Page	GC Principles	ISO26000
Governance					
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	<a href="#">KAITEKI/Project Organizational Structure Corporate Governance Internal Control / Risk Management / Compliance</a>	<a href="#">P.6-23</a> <a href="#">P.54-91</a>	1 – 10	6.2 Organizational governance
4.2	Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organization's management and the reasons for this arrangement).	<a href="#">Corporate Governance</a>	<a href="#">P.54-91</a>	1 – 10	6.2 Organizational governance

4.3	For organizations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members.	<a href="#">Corporate Governance</a>	<a href="#">P.54-91</a>	1 – 10	6.2 Organizational governance
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	<a href="#">Corporate Governance</a>	<a href="#">P.54-91</a>	1 – 10	6.2 Organizational governance
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	<a href="#">Corporate Governance</a>	<a href="#">P.54-91</a>	1 – 10	6.2 Organizational governance
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	<a href="#">Corporate Governance</a>	<a href="#">P.54-91</a>	1 – 10	6.2 Organizational governance
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity.	<a href="#">Corporate Governance</a>	<a href="#">P.54-91</a>	1 – 10	6.2 Organizational governance
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	<a href="#">Message from the President Mitsubishi Chemical Holdings' Social Responsibilities Toward the Realization of KAITEKI Initiatives Concerning Human Rights and Labor Corporate Citizenship Activities Group Information</a>	<a href="#">P.2-3</a> <a href="#">P.4-5</a> <a href="#">P.6-23</a> <a href="#">P.54-91</a> <a href="#">P.101-105</a>	1 – 10	6.2 Organizational governance
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	<a href="#">Toward the Realization of KAITEKI</a>	<a href="#">P.6-23</a>	1 – 10	6.2 Organizational governance
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	<a href="#">Toward the Realization of KAITEKI Corporate Governance</a>	<a href="#">P.6-23</a> <a href="#">P.54-91</a>	1 – 10	6.2 Organizational governance

Commitments to External Initiatives					
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	<a href="#">Risk Management Initiatives Aimed at Safety and the Environment</a> <a href="#">Initiatives for safety management regarding chemicals</a>	<a href="#">P.54-91</a>	7	6.2 Organizational governance
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	<a href="#">Basic approach to social responsibilities</a> <a href="#">Initiatives to reduce atmospheric and water pollution</a>	<a href="#">P.4-5</a> <a href="#">P.54-91</a>	1 – 10	6.2 Organizational governance
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization: <ul style="list-style-type: none"> <li>• Has positions in governance bodies;</li> <li>• Participates in projects or committees;</li> <li>• Provides substantive funding beyond routine membership dues; or</li> <li>• Views membership as strategic.</li> </ul>	<a href="#">Stakeholder Engagement</a> <a href="#">Corporate Citizenship Activities</a>	<a href="#">P.54-91</a>	1 – 10	6.2 Organizational governance
Stakeholder Engagement					
4.14	List of stakeholder groups engaged by the organization.	<a href="#">Communication with Shareholders and Investors</a> <a href="#">Communication with Customers and Business Partners</a> <a href="#">Initiatives Concerning Human Rights and Labor</a> <a href="#">Communication with Stakeholders</a> <a href="#">Third-party Opinion</a>	<a href="#">P.54-91</a> <a href="#">P.106-107</a>		6.2 Organizational governance
4.15	Basis for identification and selection of stakeholders with whom to engage.	<a href="#">Basic approach to social responsibilities</a> <a href="#">Communication with Shareholders and Investors</a> <a href="#">Communication with Customers and Business Partners</a> <a href="#">Our Basic Approach to Initiatives Concerning Human Rights and Labor</a> <a href="#">Corporate Citizenship Activities</a> <a href="#">Communication with Stakeholders</a>	<a href="#">P.4-5</a> <a href="#">P.54-91</a>		6.2 Organizational governance

4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	<a href="#">Communication with Shareholders and Investors</a> <a href="#">Communication with Customers and Business Partners</a> <a href="#">Communication with Stakeholders</a>	<a href="#">P.54-91</a>		6.2 Organizational governance
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	<a href="#">Third-party Opinion Response to Opinions Received</a> <a href="#">Feedback</a>	<a href="#">P.106-107</a> <a href="#">P.108-109</a>		6.2 Organizational governance

## 5. Management Approach and Performance Indicators

Item	Indicator	Contents	Page	GC Principles	ISO26000
<b>Economic</b>					
	Management Approach	<a href="#">KAITEKI Management MOE Axis</a>	<a href="#">P.6-23</a>	1, 4, 6, 7	6.2 Organizational governance 6.8 Community involvement and development
<b>Economic Performance Indicators</b>					
Aspect: Economic Performance					
CORE EC1.	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	<a href="#">Communication with Shareholders and Investors</a> <a href="#">Corporate Citizenship Activities</a> <a href="#">Financial data</a> <a href="#">Group Information</a> <a href="#">Corporate Auditors and the Board of Auditors</a>	<a href="#">P.54-91</a> <a href="#">P.101-105</a>		6.8 Community involvement and development 6.8.3 Issue 1 : Community involvement 6.8.7 Issue 5 : Wealth and income creation 6.8.9 Issue 7 : Social investment
CORE EC2.	Financial implications and other risks and opportunities for the organization's activities due to climate change.	<a href="#">Message from the President</a> <a href="#">Toward the Realization of KAITEKI</a>	<a href="#">P.2-3</a> <a href="#">P.6-23</a>	7	6.5.5 Issue 3 : Climate change mitigation and action
CORE EC3.	Coverage of the organization's defined benefit plan obligations.	—			
CORE EC4.	Significant financial assistance received from government.	<a href="#">The use of public programs and certification systems (financial support received from national and local governments)</a>	<a href="#">P.54-91</a>		
Aspect: Market Presence					
ADD EC5.	Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.	—		1	6.3.7 Issue 5 : Discrimination and vulnerable groups 6.4.4 Issue 2 : Conditions of work and social protection 6.8 Community involvement and development

CORE EC6.	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	—			6.6.6 Issue 4 : Promoting social responsibility in the value chain 6.8 Community involvement and development 6.8.5 Issue 3 : Employment creation and skills development 6.8.7 Issue 5 : Wealth and income creation
CORE EC7.	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation.	—		6	6.8 Community involvement and development 6.8.5 Issue 3 : Employment creation and skills development 6.8.7 Issue 5 : Wealth and income creation
Aspect: Indirect Economic Impacts					
CORE EC8.	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	<a href="#">Corporate Citizenship Activities</a>	<a href="#">P.54-91</a>		6.3.9 Issue 7 : Economic, social and cultural rights 6.8 Community involvement and development 6.8.3 Issue 1 : Community involvement 6.8.4 Issue 2 : Education and culture 6.8.5 Issue 3 : Employment creation and skills development 6.8.6 Issue 4 : Technology development and access 6.8.7 Issue 5 : Wealth and income creation 6.8.9 Issue 7 : Social investment
ADD EC9.	Understanding and describing significant indirect economic impacts, including the extent of impacts.	—			6.3.9 Issue 7 : Economic, social and cultural rights 6.6.6 Issue 4 : Promoting social responsibility in the value chain 6.6.7 Issue 5 : Respect for property rights 6.7.8 Issue 6 : Access to essential services 6.8 Community involvement and development 6.8.5 Issue 3 : Employment creation and skills development 6.8.6 Issue 4 : Technology development and access 6.8.7 Issue 5 : Wealth and income creation 6.8.9 Issue 7 : Social investment
<b>Environmental</b>					
	Management Approach	<a href="#">KAITEKI Management MOE Axis</a>	<a href="#">P.6-23</a>	7、 8、 9	6.2 Organizational governance 6.8 Community involvement and development

Environment Performance Indicators					
Aspect: Materials					
CORE EN1.	Materials used by weight or volume.	—		8	6.5 The Environment 6.5.4 Issue 2 : Sustainable resource use
CORE EN2.	Percentage of materials used that are recycled input materials.	—		8、 9	6.5 The Environment 6.5.4 Issue 2 : Sustainable resource use
Aspect: Energy					
CORE EN3.	Direct energy consumption by primary energy source.	<a href="#">Environmental data</a>	<a href="#">P.94-100</a>	8	6.5 The Environment 6.5.4 Issue 2 : Sustainable resource use
CORE EN4.	Indirect energy consumption by primary source.	—		8	6.5 The Environment 6.5.4 Issue 2 : Sustainable resource use
ADD EN5.	Energy saved due to conservation and efficiency improvements.	<a href="#">Environmental data</a>	<a href="#">P.94-100</a>	8、 9	6.5 The Environment 6.5.4 Issue 2 : Sustainable resource use
ADD EN6.	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	<a href="#">Pickup1 : Mitsubishi Chemical Corporation Initiatives to reduce greenhouse gas emissions</a> <a href="#">Environmental data</a>	<a href="#">P.24-53</a> <a href="#">P.94-100</a>	8、 9	6.5 The Environment 6.5.4 Issue 2 : Sustainable resource use
ADD EN7.	Initiatives to reduce indirect energy consumption and reductions achieved.	<a href="#">Initiatives for reducing power consumption in response to the power shortage following the Great East Japan Earthquake</a>	<a href="#">P.54-91</a>	8、 9	6.5 The Environment 6.5.4 Issue 2 : Sustainable resource use
Aspect : Water					
CORE EN8.	Total water withdrawal by source.	<a href="#">Environmental data</a>	<a href="#">P.94-100</a>	8	6.5 The Environment 6.5.4 Issue 2 : Sustainable resource use
ADD EN9.	Water sources significantly affected by withdrawal of water.	—		8	6.5 The Environment 6.5.4 Issue 2 : Sustainable resource use
ADD EN10.	Percentage and total volume of water recycled and reused.	—		8、 9	6.5 The Environment 6.5.4 Issue 2 : Sustainable resource use
Aspect: Biodiversity					
CORE EN11.	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	—		8	6.5 The Environment 6.5.6 Issue 4 : Protection of the environment & biodiversity, and restoration of natural habitats
CORE EN12.	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	—		8	6.5 The Environment 6.5.6 Issue 4 : Protection of the environment & biodiversity, and restoration of natural habitats

ADD EN13.	Habitats protected or restored.	—		8	6.5 The Environment 6.5.6 Issue 4 : Protection of the environment & biodiversity, and restoration of natural habitats
ADD EN14.	Strategies, current actions, and future plans for managing impacts on biodiversity.	<a href="#">Initiatives for biodiversity</a>	<a href="#">P.54-91</a>	8	6.5 The Environment 6.5.6 Issue 4 : Protection of the environment & biodiversity, and restoration of natural habitats 6.8.3 Issue 1 : Community involvement
ADD EN15.	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	—		8	6.5 The Environment 6.5.6 Issue 4 : Protection of the environment & biodiversity, and restoration of natural habitats
Aspect: Emissions, Effluents, and Waste					
CORE EN16.	Total direct and indirect greenhouse gas emissions by weight.	<a href="#">Initiatives to reduce greenhouse gas emissions</a> <a href="#">Environmental data</a>	<a href="#">P.54-91</a> <a href="#">P.94-100</a>	8	6.5 The Environment 6.5.5 Issue 3 : Climate change mitigation and action
CORE EN17.	Other relevant indirect greenhouse gas emissions by weight.	—		8	6.5 The Environment 6.5.5 Issue 3 : Climate change mitigation and action
ADD EN18.	Initiatives to reduce greenhouse gas emissions and reductions achieved.	<a href="#">Initiatives to reduce greenhouse gas emissions</a> <a href="#">Environmental data</a>	<a href="#">P.54-91</a> <a href="#">P.94-100</a>	7, 8, 9	6.5 The Environment 6.5.5 Issue 3 : Climate change mitigation and action
CORE EN19.	Emissions of ozone-depleting substances by weight.	—		8	6.5 The Environment 6.5.3 Issue 1 : Prevention of pollution
CORE EN20.	NO, SO, and other significant air emissions by type and weight.	<a href="#">Environmental data</a>	<a href="#">P.94-100</a>	8	6.5 The Environment 6.5.3 Issue 1 : Prevention of pollution
CORE EN21.	Total water discharge by quality and destination.	<a href="#">Environmental data</a>	<a href="#">P.94-100</a>	8	6.5 The Environment 6.5.3 Issue 1 : Prevention of pollution
CORE EN22.	Total weight of waste by type and disposal method.	<a href="#">Environmental data</a>	<a href="#">P.94-100</a>	8	6.5 The Environment 6.5.3 Issue 1 : Prevention of pollution
CORE EN23.	Total number and volume of significant spills.	<a href="#">Environmental data</a>	<a href="#">P.94-100</a>	8	6.5 The Environment 6.5.3 Issue 1 : Prevention of pollution
ADD EN24.	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.	<a href="#">Environmental data</a>	<a href="#">P.94-100</a>	8	6.5 The Environment 6.5.3 Issue 1 : Prevention of pollution

ADD EN25.	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.	—		8	6.5 The Environment 6.5.3 Issue 1 : Prevention of pollution 6.5.4 Issue 2 : Sustainable resource use 6.5.6 Issue 4 : Protection of the environment biodiversity, and restoration of natural habitats
Aspect: Products and Services					
CORE EN26.	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	<a href="#">Initiatives Aimed at Safety and the Environment</a> <a href="#">Environmental data</a>	<a href="#">P.54-91</a> <a href="#">P.94-100</a>	7, 8, 9	6.5 The Environment 6.5.4 Issue 2 : Sustainable resource use 6.6.6 Issue 4 : Promoting social responsibility in the value chain 6.7.5 Issue 3 : Sustainable consumption
CORE EN27.	Percentage of products sold and their packaging materials that are reclaimed by category.	—		8, 9	6.5 The Environment 6.5.3 Issue 1 : Prevention of pollution 6.5.4 Issue 2 : Sustainable resource use 6.7.5 Issue 3 : Sustainable consumption
Aspect : Compliance					
CORE EN28.	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.	—		8	6.5 The Environment
Aspect : Transport					
ADD EN29.	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	<a href="#">Initiatives to reduce greenhouse gas emissions</a>	<a href="#">P.54-91</a>	8	6.5 The Environment 6.5.4 Issue 2 : Sustainable resource use 6.6.6 Issue 4 : Promoting social responsibility in the value chain
Aspect : Overall					
ADD EN30.	Total environmental protection expenditures and investments by type.	—		7, 8, 9	6.5 The Environment
<b>Social Performance Indicators</b>					
<b>Labor Practices and Decent Work</b>					
	Management Approach	<a href="#">KAITEKI Management MOS Axis</a>	<a href="#">P.6-23</a>	1, 3, 6	6.2 Organizational governance 6.4 Labour Practices 6.3.10 Issue 8 : Fundamental principles and rights at work
<b>Labor Practices and Decent Work Performance Indicators</b>					
Aspect: Employment					
CORE LA1.	Total workforce by employment type, employment contract, and region, broken down by gender.	<a href="#">Group Information Social data</a>	<a href="#">P.101-105</a> <a href="#">P.94-100</a>		6.4 Labour Practices 6.4.3 Issue 1 : Employment and employment relationships



CORE LA2.	Total number and rate of new employee hires and employee turnover by age group, gender, and region.	<a href="#">Social data</a>	<a href="#">P.94-100</a>	6	6.4 Labour Practices 6.4.3 Issue 1 : Employment and employment relationships
ADD LA3.	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation.	<a href="#">Aspect: Labor/Management Relations</a>	<a href="#">P.54-91</a>		6.4 Labour Practices 6.4.3 Issue 1 : Employment and employment relationships 6.4.4 Issue 2 : Conditions of work and social protection
CORE LA15.	Return to work and retention rates after parental leave, by gender.	—			6.4 Labour Practices 6.4.4 Issue 2 : Conditions of work and social protection
Aspect: Labor/Management Relations					
CORE LA4.	Percentage of employees covered by collective bargaining agreements.	<a href="#">Social data</a>	<a href="#">P.94-100</a>	1, 3	6.3.10 Issue 8 : Fundamental principles and rights at work 6.4 Labour Practices 6.4.3 Issue 1 : Employment and employment relationships 6.4.4 Issue 2 : Conditions of work and social protection 6.4.5 Issue 3 : Social dialogue
CORE LA5.	Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements.	<a href="#">Initiatives Concerning Human Rights and Labor</a>	<a href="#">P.54-91</a>	3	6.4 Labour Practices 6.4.3 Issue 1 : Employment and employment relationships 6.4.4 Issue 2 : Conditions of work and social protection 6.4.5 Issue 3 : Social dialogue
Aspect : Occupational Health and Safety					
ADD LA6.	Percentage of total workforce represented in formal joint management?worker health and safety committees that help monitor and advise on occupational health and safety programs.	<a href="#">Social data</a>	<a href="#">P.94-100</a>	1	6.4 Labour Practices 6.4.6 Issue 4 : Health and safety at work
CORE LA7.	Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender.	<a href="#">Social data</a>	<a href="#">P.94-100</a>	1	6.4 Labour Practices 6.4.6 Issue 4 : Health and safety at work
CORE LA8.	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	<a href="#">Employee Health</a>	<a href="#">P.54-91</a>	1	6.4 Labour Practices 6.4.6 Issue 4 : Health and safety at work 6.8.3 Issue 1 : Community involvement 6.8.4 Issue 2 : Education and culture 6.8.8 Issue 6 : Health
ADD LA9.	Health and safety topics covered in formal agreements with trade unions.	—		1	6.4 Labour Practices 6.4.6 Issue 4 : Health and safety at work
Aspect : Training and Education					
CORE LA10.	Average hours of training per year per employee by gender, and by employee category.	—			6.4 Labour Practices 6.4.7 Issue 5 Human development and training in the workplace

ADD LA11.	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	<a href="#">Towards Becoming a Corporate Group Enlivened by Its Human Resources</a>	<a href="#">P.54-91</a>		6.4 Labour Practices 6.4.7 Issue 5 : Human development and training in the workplace 6.8.5 Issue 3 : Employment creation and skills development
ADD LA12.	Percentage of employees receiving regular performance and career development reviews, by gender.	<a href="#">Human Resource Assessment and Development</a>	<a href="#">P.54-91</a>		6.4 Labour Practices 6.4.7 Issue 5 : Human development and training in the workplace
<b>Aspect : Diversity and Equal Opportunity</b>					
CORE LA13.	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.	<a href="#">Social data</a>	<a href="#">P.94-100</a>	1, 6	6.3.7 Issue 5 : Discrimination and vulnerable groups 6.3.10 Issue 8 : Fundamental principles and rights at work Labour Practices 6.4 Labour Practices 6.4.3 Issue 1 : Employment and employment relationships
<b>Aspect : Equal Remuneration for Women and Men</b>					
CORE LA14.	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation.	—		1, 6	6.3.7 Issue 5 : Discrimination and vulnerable groups 6.3.10 Issue 8 : Fundamental principles and rights at work Labour Practices 6.4 Labour Practices 6.4.3 Issue 1 : Employment and employment relationships 6.4.4 Issue 2 : Conditions of work and social protection
<b>Human Rights</b>					
	Management Approach	<a href="#">KAITEKI Management MOS Axis</a>	<a href="#">P.6-23</a>	1, 2, 3, 4, 5, 6	6.2 Organizational governance 6.3 Human Rights 6.3.3 Issue 1 : Due Diligence 6.3.4 Issue 2 : Human rights risk situations 6.3.6 Issue 4 : Resolving grievances 6.6.6 Issue 4 : Promoting social responsibility in the value chain
<b>Human Rights Performance Indicators</b>					
<b>Aspect : Investment and Procurement Practices</b>					
CORE HR1.	Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening.	—		1, 2, 3, 4, 5, 6	6.3 Human Rights 6.3.3 Issue 1 : Due Diligence 6.3.5 Issue 3 : Avoidance of complicity 6.6.6 Issue 4 : Promoting social responsibility in the value chain

CORE HR2.	Percentage of significant suppliers, contractors, and other business partners that have undergone human rights screening, and actions taken.	—		1、 2、 3、 4、 5、 6	6.3 Human Rights 6.3.3 Issue 1 : Due Diligence 6.3.5 Issue 3 : Avoidance of complicity 6.4.3 Issue 1 : Employment and employment relationships 6.6.6 Issue 4 : Promoting social responsibility in the value chain
ADD HR3.	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	<a href="#">Respect for Human Rights</a>	<a href="#">P.54-91</a>	1、 2、 3、 4、 5、 6	6.3 Human Rights 6.3.5 Issue 3 : Avoidance of complicity
Aspect : Non-discrimination					
CORE HR4.	Total number of incidents of discrimination and corrective actions taken.	—		1、 2、 6	6.3 Human Rights 6.3.6 Issue 4 : Resolving grievances 6.3.7 Issue 5 : Discrimination and vulnerable groups 6.3.10 Issue 8 : Fundamental principles and rights at work 6.4.3 Issue 1 : Employment and employment relationships
Aspect : Freedom of Association and Collective Bargaining					
CORE HR5.	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights.	—		1、 2、 3	6.3 Human Rights 6.3.3 Issue 1 : Due Diligence 6.3.4 Issue 2 : Human rights risk situations 6.3.5 Issue 3 : Avoidance of complicity 6.3.8 Issue 6 : Civil and political rights 6.3.10 Issue 8 : Fundamental principles and rights at work 6.4.3 Issue 1 : Employment and employment relationships 6.4.5 Issue 3 : Social dialogue
Aspect : Child Labor					
CORE HR6.	Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor.	<a href="#">Compliance</a> <a href="#">Respect for Human Rights</a>	<a href="#">P.54-91</a>	1、 2、 5	6.3 Human Rights 6.3.3 Issue 1 : Due Diligence 6.3.4 Issue 2 : Human rights risk situations 6.3.5 Issue 3 : Avoidance of complicity 6.3.7 Issue 5 : Discrimination and vulnerable groups 6.3.10 Issue 8 : Fundamental principles and rights at work 6.6.6 Issue 4 : Promoting social responsibility in the value chain

Aspect : Forced and Compulsory Labor					
CORE HR7.	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor.	<a href="#">Compliance</a> <a href="#">Respect for Human Rights</a>	<a href="#">P.54-91</a>	1, 2, 4	6.3 Human Rights 6.3.3 Issue 1 : Due Diligence 6.3.4 Issue 2 : Human rights risk situations 6.3.5 Issue 3 : Avoidance of complicity 6.3.7 Issue 5 : Discrimination and vulnerable groups 6.3.10 Issue 8 : Fundamental principles and rights at work 6.6.6 Issue 4 : Promoting social responsibility in the value chain
Aspect : Security Practices					
ADD HR8.	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	—		1, 2	6.3 Human Rights 6.3.5 Issue 3 : Avoidance of complicity 6.4.3 Issue 1 : Employment and employment relationships 6.6.6 Issue 4 : Promoting social responsibility in the value chain
Aspect : Indigenous Rights					
ADD HR9.	Total number of incidents of violations involving rights of indigenous people and actions taken.	—		1, 2	6.3 Human Rights 6.3.6 Issue 4 : Resolving grievances 6.3.7 Issue 5 : Discrimination and vulnerable groups 6.3.8 Issue 6 : Civil and political rights 6.6.7 Issue 5 : Respect for property rights
Aspect : Assessment					
CORE HR10.	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments.	—			6.3 Human Rights 6.3.3 Issue 1 : Due Diligence 6.3.4 Issue 2 : Human rights risk situations 6.3.5 Issue 3 : Avoidance of complicity
Aspect : Remediation					
CORE HR11.	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms.	—			6.3 Human Rights 6.3.6 Issue 4 : Resolving grievances
Society					
	Management Approach	<a href="#">KAITEKI Management</a> <a href="#">MOS Axis</a>	<a href="#">P.6-23</a>	10	6.2 Organizational governance 6.6 Fair Operating Practices 6.8 Community involvement and development

Social Performance Indicators					
Aspect: Local Communities					
CORE SO1.	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	—			6.3.9 Issue 7 : Economic, social and cultural rights 6.8 Community involvement and development 6.8.3 Issue 1 : Community involvement 6.8.9 Issue 7: Social investment
CORE SO9.	Operations with significant potential or actual negative impacts on local communities.	<a href="#">Initiatives Aimed at Safety and the Environment</a>	<a href="#">P.54-91</a>		6.3.9 Issue 7 : Economic, social and cultural rights 6.5.3 Issue 1 : Prevention of pollution 6.5.6 Issue 4 : Protection of the environment, biodiversity and restoration of natural habitats 6.8 Community involvement and development
CORE SO10.	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.	<a href="#">Initiatives Aimed at Safety and the Environment</a>	<a href="#">P.54-91</a>		6.3.9 Issue 7 : Economic, social and cultural rights 6.5.3 Issue 1 : Prevention of pollution 6.5.6 Issue 4 : Protection of the environment, biodiversity and restoration of natural habitats 6.8 Community involvement and development
Aspect: Corruption					
CORE SO2.	Percentage and total number of business units analyzed for risks related to corruption.	<a href="#">Risk Management</a>	<a href="#">P.54-91</a>	10	6.6 Fair Operating Practices 6.6.3 Issue 1 : Anti-corruption
CORE SO3.	Percentage of employees trained in organization's anti-corruption policies and procedures.	<a href="#">Compliance</a>	<a href="#">P.54-91</a>	10	6.6 Fair Operating Practices 6.6.3 Issue 1 : Anti-corruption
CORE SO4.	Actions taken in response to incidents of corruption.	—		10	6.6 Fair Operating Practices 6.6.3 Issue 1 : Anti-corruption
Aspect : Public Policy					
CORE SO5.	Public policy positions and participation in public policy development and lobbying.	<a href="#">Participation in international standards and public policy planning</a>	<a href="#">P.54-91</a>	1 – 10	6.6 Fair Operating Practices 6.6.4 Issue 2 : Responsible political involvement 6.8.3 Issue 1 : Community involvement
ADD SO6.	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	—		10	6.6 Fair Operating Practices 6.6.4 Issue 2 : Responsible political involvement 6.8.3 Issue 1 : Community involvement
Aspect: Anti-Competitive Behavior					
ADD SO7.	Total number of legal actions for anticompetitive behavior, anti-trust, and monopoly practices and their outcomes.	Not applicable			6.6 Fair Operating Practices 6.6.5 Issue 3 : Fair competition 6.6.7 Issue 5 : Respect for property rights

Aspect : Compliance					
CORE SO8.	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations.	—			6.6 Fair Operating Practices 6.6.3 Issue 1 : Anti-corruption 6.6.5 Issue 3 : Fair competition 6.8.7 Issue 5 : Wealth and income creation
Product Responsibility					
	Management Approach	<a href="#">KAITEKI Management</a> <a href="#">MOS Axis</a>	<a href="#">P.6-23</a>	1、 8	6.2 Organizational governance 6.6 Fair Operating Practices 6.7 Consumer Issues
Product Responsibility Performance Indicators					
Aspect: Customer Health and Safety					
CORE PR1.	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	<a href="#">Initiatives for safety management regarding chemicals</a>	<a href="#">P.54-91</a>	1	6.3.9 Issue 7 : Economic, social and cultural rights 6.6.6 Issue 4 : Promoting social responsibility in the value chain 6.7 Consumer Issues 6.7.4 Issue 2 : Protecting consumers' health & safety 6.7.5 Issue 3 : Sustainable consumption
ADD PR2.	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	—		1	6.3.9 Issue 7 : Economic, social and cultural rights 6.6.6 Issue 4 : Promoting social responsibility in the value chain 6.7 Consumer Issues 6.7.4 Issue 2 : Protecting consumers' health & safety 6.7.5 Issue 3 : Sustainable consumption
Aspect : Product and Service Labeling					
CORE PR3.	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	<a href="#">Initiatives for safety management regarding chemicals</a>	<a href="#">P.54-91</a>	8	6.7 Consumer Issues 6.7.3 Issue 1 : Fair marketing, factual and unbiased information and fair contractual practices 6.7.4 Issue 2 : Protecting consumers' health & safety 6.7.5 Issue 3 : Sustainable consumption 6.7.6 Issue 4 : Consumer service, support and complaint and dispute resolution 6.7.9 Issue 7 : Education and awareness

ADD PR4.	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.	—		8	6.7 Consumer Issues 6.7.3 Issue 1 : Fair marketing, factual and unbiased information and fair contractual practices 6.7.4 Issue 2 : Protecting consumers' health & safety 6.7.5 Issue 3 : Sustainable consumption 6.7.6 Issue 4 : Consumer service, support and complaint and dispute resolution 6.7.9 Issue 7 : Education and awareness
ADD PR5.	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	<a href="#">Initiatives to Achieve Social Justice through Procurement Showroom</a>	<a href="#">P.54-91</a>		6.7 Consumer Issues 6.7.4 Issue 2 : Protecting consumers' health & safety 6.7.5 Issue 3 : Sustainable consumption 6.7.6 Issue 4 : Consumer service, support and complaint and dispute resolution 6.7.8 Issue 6 : Access to essential services 6.7.9 Issue 7 : Education and awareness
Aspect : Marketing Communications					
CORE PR6.	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	<a href="#">Improving customer satisfaction – Customer Satisfaction Survey</a>	<a href="#">P.54-91</a>		6.7 Consumer Issues 6.7.3 Issue 1 : Fair marketing, factual and unbiased information and fair contractual practices 6.7.6 Issue 4 : Consumer service, support and complaint and dispute resolution 6.7.9 Issue 7 : Education and awareness
ADD PR7.	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.	—			6.7 Consumer Issues 6.7.3 Issue 1 : Fair marketing, factual and unbiased information and fair contractual practices 6.7.6 Issue 4 : Consumer service, support and complaint and dispute resolution 6.7.9 Issue 7 : Education and awareness
Aspect : Customer Privacy					
ADD PR8.	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	Not applicable		1	6.7 Consumer Issues 6.7.7 Issue 5 : Consumer data protection and privacy
Aspect: Compliance					
CORE PR9.	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	—			6.7 Consumer Issues 6.7.6 Issue 4 : Consumer service, support and complaint and dispute resolution