三菱化学

CSR Report 2015

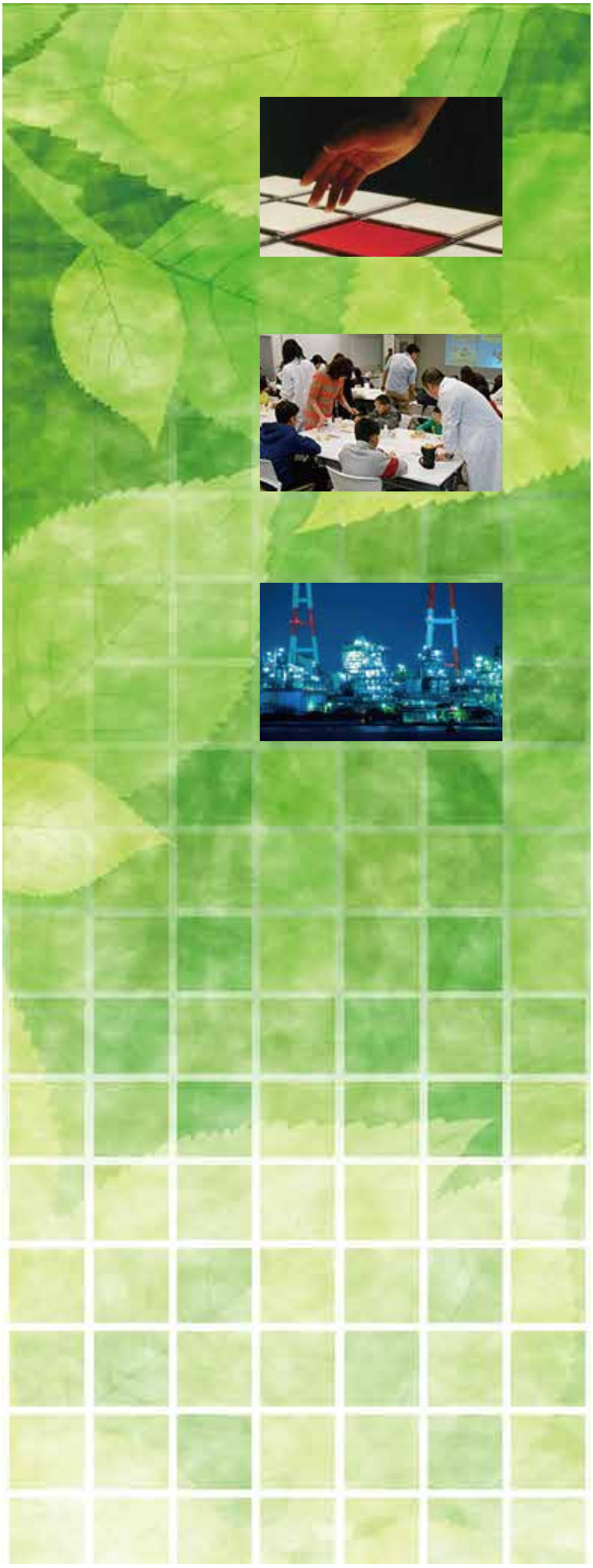
Corporate Social Responsibility Report

PDF Ver.

THE KAITEKI COMPANY Mitsubishi Chemical Holdings Group

Responsible Care®

INDEX



Editorial Policy

Mitsubishi Chemical issues the Mitsubishi Chemical CSR Report with the aim of reporting to all stakeholders on the initiatives to realize KAITEKI being undertaken as a member of the Mitsubishi Chemical Holdings Group.

The pages of the CSR Report 2015 are arranged based on Sustainability, Health and Comfort, the criteria by which we judge our business activities aimed at achieving KAITEKI, as well as the Management of Sustainability (MOS) indices that visualize the progress of these initiatives.

In the three sections for Management Structure, Responsible Care Activities (safety and disaster prevention, occupational health and safety, environmental conservation, quality assurance and chemical products management) and Together with Stakeholders, measures that form the foundation to support innovative technologies and products are also featured.

CSR Report

To disclose the CSR information to a greater number of stakeholders while at the same time considering the environment, we have changed the reporting method since fiscal 2010 from printed reports to website-based publication.

The website offers CSR Report 2015 (PDF version so the entire CSR information can be downloaded) and the CSR Report 2015 Data Section that compiles detailed data on safety, the environment and society.

Reporting period

Fiscal 2014 (April 2014 to March 2015)
* Part of the contents also relates to fiscal 2015

Scope covered in the Report

The scope covered in the Report is Mitsubishi Chemical Corporation and domestic and overseas Group companies. However, the scope for compiling performance data related to RC activities is limited to Mitsubishi Chemical (including Group companies located on the same premises of Mitsubishi Chemical production bases), and those companies implementing Mitsubishi Chemical Group RC Activities that are subsidiaries of Mitsubishi Chemical as stipulated by the Japanese Companies Act (domestic). The scope of social skills data includes employees of Mitsubishi Chemical Corporation (including employees transferred to Group companies).

Referenced guidelines

Ministry of the Environment: Environmental Reporting Guidelines 2007
Global Reporting Initiative (GRI): Sustainability Reporting Guidelines (Ver. 3.1)
Ministry of the Environment: Environmental Accounting Guidelines 2005

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Disclaimer

This report contains not only past and present facts about the Mitsubishi Chemical Group, but also forecasts related to social situations, business plans, policies and estimates of their outcomes. These forecasts and estimates are assumptions or judgments based on the information available at the time of statement. As such, there are possibilities that the future social situations and outcomes of business activities could differ from the forecasts and estimates.

Message from the CEO

By orchestrating the strengths of chemistry, we contribute to resolving environmental and social issues through the realization of *KAITEKI*.

Hiroaki Ishizuka
Representative Director, Member of the Board,
President and Chief Executive Officer
Mitsubishi Chemical Corporation

Our society today is confronting global issues, including climate change, environmental concerns, population growth and progression of the aging society coupled with an uneven distribution of energy, food and water. We have now reached a major turning point.

As an operating company of the Mitsubishi Chemical Holdings Group (MCHC Group), Mitsubishi Chemical Corporation (MCC) is not only seeking to solve these social issues but is also seeking to contribute to the sustained growth of people, society, and the Earth, in other words, the realization of *KAITEKI*. It is therefore pushing forward initiatives in each of the performance products and industrial materials domains based on its molecular and functional design technologies that have been nurtured over many years and epitomize the "Power of Chemistry".

＊ *KAITEKI* is an original concept proposed by the MCHC Group that signifies "a sustainable condition which is comfortable for people, society and the Earth, transcending time and generations."

Progress of business activities aimed at the realization of *KAITEKI*

The MCC Group sets Sustainability, Health and Comfort as the decision criteria for its corporate activities, and having established contribution to the realization of *KAITEKI* through its corporate activities as a social responsibility, it is developing a diverse range of businesses.

APTSIS 15, the medium-term management plan to be completed this fiscal year covering the period from April 2011 to March 2016, has identified organic photovoltaic (OPV) modules and materials, organic photo semi-conductors, agribusiness solutions, and sustainable resources as next-generation growth businesses, and LED lighting and materials and lithium-ion battery materials as growth businesses. Each of these businesses is consistent with the three criteria of its corporate activities, Sustainability, Health and Comfort, and is expected to contribute significantly to solving social issues and to drive the MCC Group's sustainable development. In each of these businesses, particular emphasis will be placed on further honing key materials and technological capabilities, the core strengths of the MCC Group. At the same time, we will channel our energies toward swiftly securing stable profits in each business while undertaking proper and appropriate investments and entering into collaborations with best-fit partners. In fiscal 2014, we started several verifying tests for OPVs. For organic light emitting diode (OLED) lighting modules, we enhanced color rendering properties and lifespan, as well as collaborating with Pioneer Corporation on the mass production of OLED lighting modules, and reduced their cost, for which we received a special award at the ECHO CITY Product Awards 2014. Regarding sustainable resources, the bio-based engineering plastic DURABIO™ was used in automotive interiors and a grade was developed that can be used for exteriors. We also developed the world's first bio-based polycarbonatediol and began worldwide market development and sales. In agribusiness solutions, we increased the number of installation examples of fully artificial light-type plant factories, while demand remained firm for LED lighting and materials and lithium-ion battery materials for automotive use. Consequently, we have accumulated steady results.

Growth businesses, such as specialty chemicals, polyvinyl alcohol/ethylene-vinyl alcohol copolymers and performance polymers, are widely used across a broad range of industries and are aiming for further profit. And cash-generating businesses, such as food ingredients and carbon products, are responsible for creating a stable profit base. Both of the above businesses made steady progress as a whole. In the specialty chemicals, as seen in the example of MCC's emulsion business being merged with its Group companies to best generate the MCC Group synergies, we will continue to shift to high-performance and high value-added products and further improve our strength of differentiation and competitiveness.

With the objective of conducting stable management, we have attempted to shift to a corporate structure that is less affected by complex and cyclical changes highly dependent on the external environment. The key initiative for this shift is the restructuring of the petrochemicals business. Meanwhile, the consolidation of the ethylene center will soon be completed, as we discontinued one ethylene production facility of MCC Kashima Plant in May 2014, and plan to functionalize only one ethylene production facility in Mizushima area in April 2016. In the terephthalic acid business and the phenol and polycarbonate business, we are continuing to improve the sales terms and thoroughly reduce costs at overseas facilities. We will carry out these measures with strong leadership which is committed to achieving our objectives in this field.

Manufacturing based on safety and reliability is fundamental to a company to survive

The MCC Group places the utmost importance on manufacturing that is based on safety and reliability in our efforts to fulfill its corporate social responsibility through corporate activities geared toward realizing *KAITEKI*.

Since the fire at our Kashima Plant in 2007, which led to the loss of precious lives, we have taken steps to further raise awareness and adhere strictly to a policy that places an absolute premium on safety through to the present day. To this end, we are engaged in education focusing on areas that help improve employee mindsets and conducted training of risk prediction. Moreover, we have taken steps to verify and share a variety of accident and incident data within the Group.

As the Chief Executive Officer, I will repeatedly declare that safety is our top priority and that we will conduct rigorous compliance. Moving forward, the MCC Group will continue to promote safety and compliance as its most important values. With this in mind, we will allocate sufficient resources to the field of industrial safety. This will include human resource development as well as capital investment in an effort to maintain and improve our ability to ensure security and safety.

Creating an environment in which employees can make the most of their capabilities

Our employees are both the cornerstone and wellspring for our abilities to pursue sustained development and to bring the *KAITEKI* concept to fruition worldwide. With increased globalization today, we think it is important that every individual employee becomes a driving force for change as a top professional in their position. We encourage each employee to exert their individuality, respect each other, and grow to become personnel that can truly flourish globally. Based on this understanding, the MCC Group is making efforts to create a workplace environment and foster culture that enables each and every employee to work with vigor and enthusiasm, and to continuously develop and grow. This includes hiring and utilizing diverse human resources, upgrading and expanding our education and training systems, and promoting work-life balance.

Recognizing its purpose and mission within the international community, the MCC Group will work together with all stakeholders and continue on the path toward the realization of *KAITEKI* under the corporate brand of "THE KAITEKI COMPANY" that MCHC upholds.

As we work toward achieving our established goals, we kindly request the continued support and understanding of all stakeholders.

- The Mitsubishi Chemical Group's Corporate Social Responsibility
- Responsible Care (RC) Activities
- Compliance
- Special Feature: Initiatives for the Realization of *KAITEKI* and Laying a Foundation for the Future
- Together with Employees

The Mitsubishi Chemical Group's Corporate Social Responsibility

The Mitsubishi Chemical Group aims to realize *KAITEKI* as a member of the Mitsubishi Chemical Holdings Group

The Mitsubishi Chemical Holdings Group's aspiration

By contributing to resolving environmental and social issues, we will build a sustainable society together with stakeholders toward the realization of *KAITEKI*

(1) Vision

KAITEKI means "a sustainable condition which is comfortable for people, society and the Earth, transcending time and generations." It is an original concept of the Mitsubishi Chemical Holdings Group (MCHC Group) that proposes a way forward in the sustainable development of society and the planet, in addition to serving as a guide for solving environmental and social issues. To realize this vision, the MCHC Group engages in corporate activities that provide products, technologies and services based on the comprehensive capabilities of the Group in the Performance Products domain, Health Care domain and Industrial Materials domain, with chemistry as the basis of our activities.

(2) Our approach to solving environmental and social issues

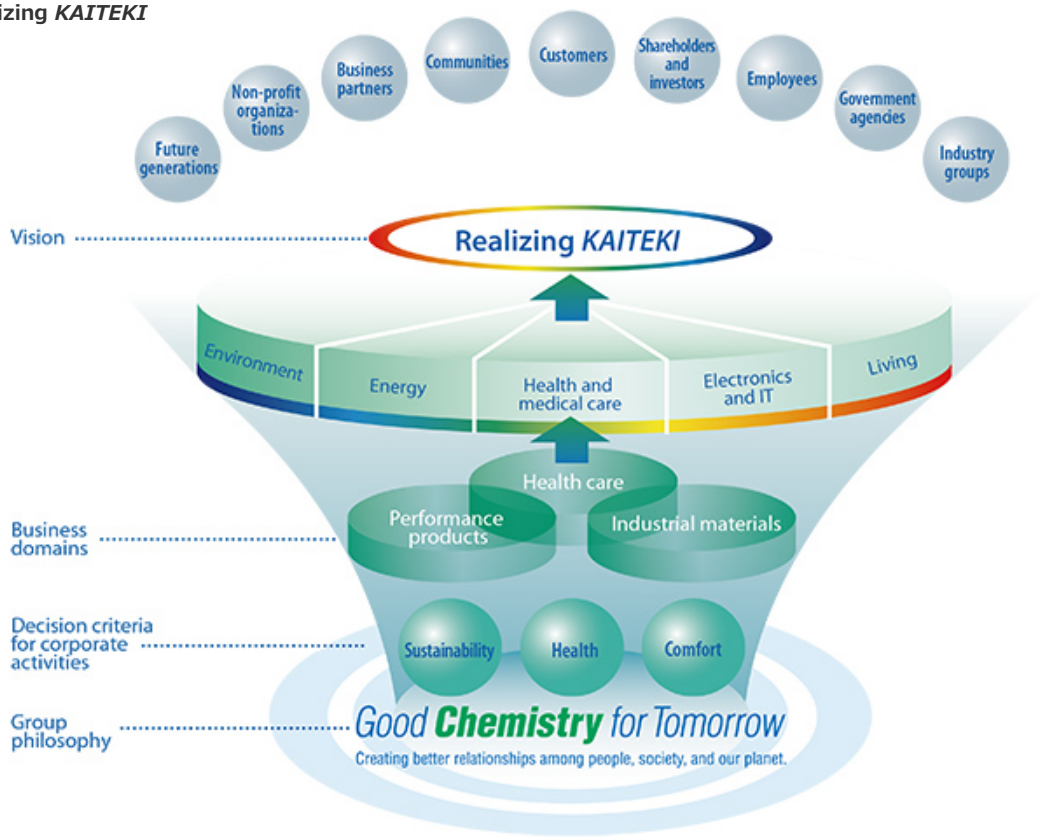
The human race has advanced to where it is today as a result of diverse economic activities as well as scientific and technological progress. However, we have fallen out of balance with the global environment, and are confronted by complex problems spanning from climate change to natural resource/energy depletion and an uneven distribution of food and water. While addressing these global issues, we are being asked by society to contribute to the fields of healthcare and medicine, and to explore ways to improve convenience and advance technology in coexistence with the planet.

In light of these social needs, the MCHC Group aims to achieve sustainable development through systems that recycle materials derived from natural resources, use natural energy sources, support healthcare beyond the treatment of illnesses, and solutions that satisfy diverse values.

(3) Harmonious relationships with stakeholders

The MCHC Group considers its stakeholders to include all the people who support our corporate activities: our customers, shareholders and investors, communities, employees and business partners, as well as society, and even the Earth, which is the foundation of our lives. To realize sustainable development among people, society and the Earth, working in concert and engaging in dialog with our stakeholders is indispensable to jointly identify issues and set targets for the short, medium and long terms, and gear our corporate activities to their fulfillment. As part of such activities, MCHC declared our commitment to the United Nations Global Compact in May 2006.

● Realizing *KAITEKI*



Philosophy Regarding Enhancing Corporate Value

KAITEKI Management: Management to broadly raise corporate value through realization of *KAITEKI*

The word "chemistry" has a secondary meaning, referring to the compatibilities, relationships and connections between objects, between people and between people and objects. The MCHC Group includes these meanings in the Group philosophy of Good Chemistry for Tomorrow, and working for the realization of *KAITEKI* promotes corporate activities to create better relationships among people, society, and our planet. Based on this philosophy, the MCHC Group has debated "What is the Good Chemistry that the future requires?" In other words, the MCHC Group discussed what businesses it needs to develop for the future. The MCHC Group therefore set Sustainability, Health and Comfort as three decision criteria for corporate activities.

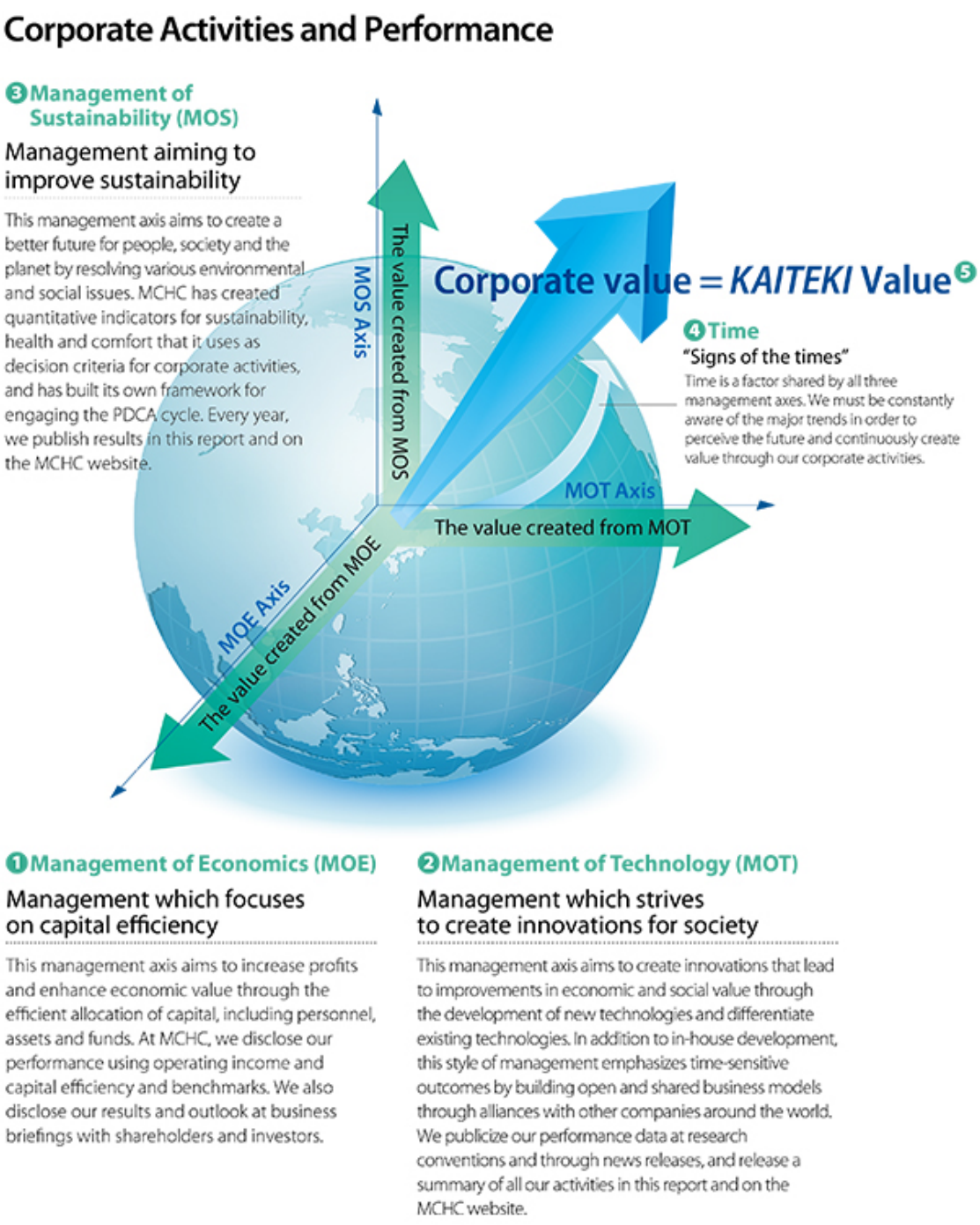
The MCHC Group decided that a different set of values and management methods were needed for it to advance corporate activities with a view to solving environmental and social issues, while comparing the Group philosophy and decision criteria for corporate activities.

As a result, we created our own management method based on three management axes: Management of Economics, which aims to increase economic value by focusing on capital efficiency, Management of Technology, which aims to foster innovation that leads to higher economic and social value, and Management of Sustainability, which aims to enhance social value through improvements in sustainability. Management along these three axes is implemented systematically with an awareness of major trends and opportunities throughout time. *KAITEKI* Management is the name we have given to this unique management method for lifting corporate value from a broad-based perspective.

Enhancing corporate value

The MCHC Group defines corporate value as the sum total of value created through the three axes of *KAITEKI* Management, a broader meaning than the traditional definition of corporate value that focuses on economic value. We refer to this as *KAITEKI* Value, and all of the MCHC Group's corporate activities target enhancement of *KAITEKI* Value. We are committed to advancing corporate activities toward the realization of *KAITEKI*, or the creation of a sustainable condition for people, society and the Earth.

MCHC's *KAITEKI* Management



Working to bring the *KAITEKI* concept to fruition, we put in place MOS Indices to better visualize management aimed at enhancing sustainability for people, society, and the Earth. We aim to increase *KAITEKI* value by setting targets based on these indices and implement action plans accordingly. From the three perspectives of Sustainability, Health, and Comfort, positioned as the MCHC Group's decision criteria for its corporate activities, the MOS Indices are important for the Group as a whole and are comprised of activity items that make a large contribution to sustainability. For these MOS Indices, we set targets to achieve by 2015 and monitor the progress we make toward the achievement of *KAITEKI* as the ultimate goal. Monitoring of the MOS Indices is undertaken once a year and the results are reported in the *KAITEKI* Report of the MCHC Group.

As its initiative for achieving *KAITEKI*, the Mitsubishi Chemical Group will continue working to achieve its targets by fiscal 2015 regarding the MOS Indices of the MCHC Group. We position our corporate social responsibility (CSR) activities as part of these activities, which are aimed at realizing *KAITEKI*.

● **MCHC Group MOS Indices (Targets to achieve by the end of fiscal 2015)**[*1]

Targets that must be achieved	Achieve zero occurrences of serious accidents and compliance violations
Sustainability [Green] Index	**S-1: Contribute to reducing environmental impact through products and services**
	S-1-1: Reduce environmental impact by 30% from fiscal 2005 levels
	S-1-2: Generate reduction of CO_2 emissions by 3.5 megatons through products
	S-2: Take actions against the depletion of natural resources and implement energy-saving initiatives
	S-2-1: Procure reusable materials equivalent to 10,000 tons of heavy oil in fiscal 2015
	S-2-2: Reduce cumulative rare metal usage by 1,200 tons through improving processes and innovating products
	S-2-3: Generate resources and power savings of ¥8.8 billion
	S-2-4: Provide 900 million tons of reusable water through our products
	S-3: Contribute to solving social and environmental issues through supply chain management
	S-3-1: Achieve 80% purchased items surveyed for toxic substances
	S-3-2: Achieve 90% purchasing of raw materials and packaging according to CSR guidelines
Health Index	**H-1: Contribute to medical treatment**
	H-1: Increase the index performance derived by the degree of difficulty to treat diseases multiplied by the number of administered patients by 50% (compared with fiscal 2009)
	H-2: Contribute to improvements of QOL
	H-2: Increase contribution to QOL improvements by 70% (compared with fiscal 2009)
	H-3: Contribute to early detection and prevention of diseases
	H-3-1: Increase the index of vaccine treatment by 17% (compared with fiscal 2009)
	H-3-2: Increase the number of people taking diagnostic tests by 26% (compared with fiscal 2009)
Comfort Index	**C-1: Deliver products (development and manufacturing) for comfortable lifestyle**
	C-1-1: Increase sales of comfort-oriented products by ¥400 billion (compared with fiscal 2010)
	C-1-2: Increase the new product ratio from 16% to 30%
	C-2: Improve stakeholder satisfaction
	C-2-1: Improve third-party corporate assessments
	C-2-2: Achieve targets for employee-related indexes
	C-2-3: Improve customer satisfaction to 80% or more
	C-3: Earn recognition of corporate trust
	Reduce safety accidents

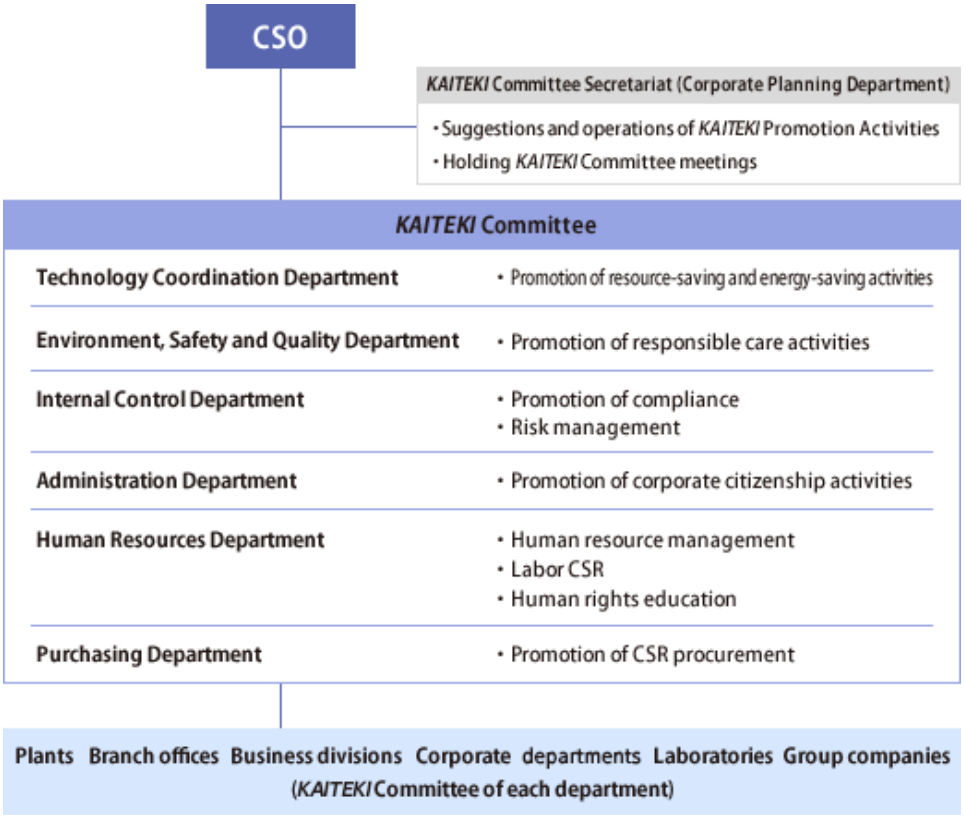
	Reduce environmental accidents
	Reduce claims to products
	Reduce the lost-time injuries frequency rate
	Assess product safety according to GPS for 70% of products

*1 ▸ MCHC's MOS Indices

Organization for promoting *KAITEKI*

At the Mitsubishi Chemical Group (MCC Group), we created the role of Chief Sustainability Officer (CSO) in 2011 as a measure for building an organizational structure aimed at achieving *KAITEKI*. We have also set up under the CSO a MCC *KAITEKI* Committee that consists of members of key business divisions and corporate departments (Technology Coordination Department, Environment, Safety and Quality Department, Internal Control Department, Administration Department, Human Resources Department, Purchasing Department). The *KAITEKI* Committee deliberates and makes decisions on the policies of activities for making progress toward the ultimate goal of achieving *KAITEKI* through cooperation within the overall MCC Group (*KAITEKI* Promotion Activities). In fiscal 2014, Committee meetings were held on seven occasions.

Organization for *KAITEKI* Promotion Activities



KAITEKI promotion activities in fiscal 2014

Achieving *KAITEKI* is enabled through all business activities. We believe that our ultimate goal is to create a corporate culture that encourages each employee to think about what can be achieved for *KAITEKI* and plan, implement, and examine actions for achieving it.

KAITEKI Promotion Activities implemented by the Mitsubishi Chemical Group in fiscal 2014 were the continuation of the activities begun in fiscal 2011 aimed at publicizing and encouraging the use of *KAITEKI* Management and the MOS Indices. The specific activities included monitoring the MOS Indices of each department and area in order to confirm progress regarding the promotion of *KAITEKI*. This monitoring encompassed the MOS Indices of 8 plants, 3 branch offices, 6 business divisions, 3 corporate divisions, and 11 affiliates. Moreover, public relations activities through an in-house newsletter and the intranet help raise awareness and understanding of *KAITEKI* among all employees.

Targets, Results, and Assessments for Fiscal 2014

The MCHC Group aims to achieve *KAITEKI*, or a truly sustainable society. For this purpose, the Mitsubishi Chemical (MCC) Group defines its targets for individual fiscal years, and the results of our efforts are incorporated into the challenges and targets for the following fiscal year. Through this process, the MCC Group manages the progress toward its goals.

Click here for a full download of the tables (PDF:99KB)

Targets, Results, and Assessments for Fiscal 2014 (1)

Priority Challenges for Fiscal 2014	Targets for Fiscal 2014	Results in Fiscal 2014	Assessment	Link
Promoting *KAITEKI*				
Disseminating and promoting *KAITEKI* management and the MOS Indices	Continue expanding the *KAITEKI* promotion system to plants in the Group.	■Held *KAITEKI* Committee meetings 7 times.	★★★	Find out more
	Continue expanding *KAITEKI* promotion initiatives to plants and Group companies, and continue disseminating them to all employees.	■Confirmed progress achieved in promoting the *KAITEKI* concept, through monitoring of MOS Indices of 8 plants, 3 branch offices, 6 business divisions, 3 common divisions and 11 affiliated companies in the Group. ■Implemented public relations activities through an in-house newsletter and the intranet. ■Provided *KAITEKI* training.	★★★	Find out more
Risk Management				
Addressing grave risks	Implement countermeasures to respond to the following priority risks: ・Ensure safety during manufacturing and transport.	■Promoted deciding the divisions responsible for priority risks. ■Held the Risk Management Committee (2 times yearly).	★★★	Find out more

	・Business continuity. ・Overseas business opportunities. ・Information security. ・Serious compliance violations. ・Fears of social risk.	■Individual examples: ・Further strengthened responses to transport safety accidents. ・Responded to cyber security (collaborate with industry organizations). ・Utilized the internal control standards package in other countries, etc.		
	Continue strengthening the framework for promoting internal control to Group companies overseas.	■Implemented the following at bases in various countries in collaboration with MCHC: ・Conducted various types of training in Europe, the U.S., China and the rest of Asia. ・Newly introduced a hotline in Taiwan. ・Disseminated and ensured rigorous compliance with global anti-bribery policies. ・Strengthened pre-departure training for overseas assignments (Asian region), etc. ■Maintained and improved contact systems during emergencies.	★★★	Find out more
Formulating and putting into effect Business Continuity Management System (BCMS)	Maintain and operate company-wide BCMS. Formulate specific BCPs for key products.	■Sequentially formulated the basic plan and basic action plan, which form a specific BCP for MCC key products.	★★★	Find out more
Compliance				
Increasing compliance awareness	Continue implementing compliance training. ・Further improve compliance awareness	■Japan Carried out group training to promote rigorous dissemination	★★★	Find out more

	in oversea Group companies. ・Raise awareness and understanding of the importance of compliance issues and risks.	of compliance for mainly middle managers, as well as conducted online training for all employees. ■Overseas Provided various types of training in Europe, north, central and south America, China, Southeast Asia, India, Taiwan and Australia (group training, online training, etc.). ■Important Compliance and Risk Issues Held lectures on the latest trends in global bribery risk.		
	Continue implementing monitoring for compliance. ・Continue conducting compliance perception surveys in Japan and overseas and analyze. ・Make greater use of survey results.	■Conducted compliance perception survey. Conducted surveys of employees in Japan and some overseas Group companies, yielding roughly 23,000 responses. ■Utilized compliance perception survey results Gave feedback on survey results to all domestic and overseas companies and used this for improvement measures.	★★★	Find out more
Process Safety and Disaster Prevention				
Preventing facility-related accidents	Achieve the status of zero serious facility-related accidents.	■Achieved the zero serious facility-related accident target. However, there were some non-serious facility-related accidents.	★★	Find out more
	Take measures to prevent recurrence of accidents and serious troubles.	■Utilized information on past accidents. Through horizontal development based on case studies from MCC	★★	Find out more

		and other companies, continued measures to prevent reoccurrence of similar accidents. ■ Conducted accident drills. Continued implementing more practical drills (at all MCC sites) including drills for situations not previously informed, drills for when disasters occur at multiple sites simultaneously, joint drills with Mitsubishi Chemical Logistics, etc.		
	Take action to prevent accidents and serious troubles.	■ Implemented manufacturing risk assessment ・When starting manufacturing of a new product, or when changing manufacturing substances handled, manufacturing equipment, or manufacturing procedures, performed secure safety assessment (SA) and took steps to prevent accidents by reducing risk, etc. ・Performed safety reviews (SRs) on a scheduled and unscheduled basis. ■ Developed systems to improve risk assessments for manufacturing processes ・Continuous training for employees to improve risk assessments, more SAs and SRs ・OJT for HAZ Chart analysis, process safety training ・More SAs, SRs by SR leaders	★★	Find out more

		・Continued to train chemical process safety engineers (CPSEs) at all MCC sites ■Passed on technical traditions ・Expanded database on technical handover, continued use of database ■Shared data needed for operational and facility management ・Continued facility management review between facility management department, operational management department, and safety management department ■Improved earthquake measures ・Ensured designs are quake resistant and evaluated earthquake resistance of essential equipment, drew up improvement plans for items needing response and implemented earthquake-resistance measures.		
Occupational Safety and Health				
Preventing occupational accidents	Achieve zero serious occupational accidents (requiring stopping operations for four or more days). Don't allow the rate of lost worktime injuries go above 0.1.	■Serious occupational accidents: 9 (including 2 overseas), so target missed. ■The rate of lost worktime injuries: 0.29 (Japan), so target missed.	★	Find out more
	Consider and implement measures to prevent action-related accidents. (Increase awareness for front-line professionals.)	■Investigated cause of accidents and implemented measures to prevent their reoccurrence.	★★	Find out more

		■Ran program to share examples of accidents.		
	Ensure rigorous safety management at work of construction.	■Reduced risk by implementing risk assessments on work of construction (SAs for work construction), highlighted safety matters in more detail through joint briefings on work safety with partner companies.	★★★	Find out more
Managing occupational health	Implement activities to create healthy hearts and bodies.	■Held seminars on mental health. ■Continued specific health guidance programs.	★★★	Find out more

Targets, Results, and Assessments for Fiscal 2014 (2)

Priority Challenges for Fiscal 2014	Targets for Fiscal 2014	Results in Fiscal 2014	Assessment	Link
Environmental Safety				
Preventing environmental accidents and problems	Continue achieving zero environmental accidents.	■Had no environmental accidents, met the target.	★★★	Find out more
Reducing chemical emissions	Reduce emissions of PRTR-regulated substances and VOCs.	■PRTR-regulated substance emissions increased by 20 tons from fiscal 2013 levels. ■Reduced VOC emissions by 65% from the fiscal 2000 level.	★★★	Find out more
Reducing landfill disposal	Promote a plan toward zero emissions.	■The landfill disposal rate generated emissions of 2.5% thereby failing to attain the zero emissions target.	★	Find out more
Global warming countermeasures	Implement energy conservation measures in the manufacturing process.	■On MCC's non-consolidated basis, attained an unit energy consumption index of	★★★	Find out more

		105 (100 in fiscal 2005), a decrease of 3pts from the preceding fiscal year. ■ Reduced greenhouse gas emissions by 1,900,000 tons year on year, totaling a 27% reduction from fiscal 2005 on a Groupwide basis. ■ Improved equipment and optimized operating conditions at large petrochemical plants, resulting in reduction of steam energy consumption equivalent to around 35,000 tons of CO_2.		
	Reduce unit energy consumption in transit by 5% between 2010 and 2015 (reduce unit energy consumption in transit by an annual average of at least 1%).	■ Increased unit energy consumption by 2.9% compared to fiscal 2013 and by an average of 0.3% over the past five years (MCC's non-consolidated basis).	★	Find out more
Chemical Management and Quality Assurance				
Complying with regulations on chemicals and improving management	Strengthen compliance with international and domestic regulations on chemicals. Make further improvements in chemicals management. Further compliance with GHS (product labeling, labeling of containers in the workplace). Continuous SDS maintenance information updates and revision. Improve information management systems.	■ Developed and operated chemical safety database to provide and share latest regulatory information in Japan and overseas and ensured dissemination of regulatory compliance. ■ Held monthly internal seminars to provide basic understanding of knowledge and regulatory trends in Japan and overseas related to chemicals management. ■ Classified all MCC products using GHS classifications, displayed all labels and	★★★	Find out more

		are displaying at internal workplaces. ■ Held basic training sessions internally on SDS production and continued supporting similar efforts overseas. ■ Built and are operating K-Mates, a comprehensive chemicals management system to manage data related to chemical products.		
	Strengthen risk assessments and their information distribution.	■ For GPS activities, performed risk assessments for 18 substances and made public 34 safety summaries (in Japanese and English) by end of fiscal 2014.	★★★	Find out more
Providing safe and secure products	Continue improving the reliability of quality data. Continue enhancing means of tracking information on controlled chemical substances subject contained in individual products.	■ Utilized quality assurance guidelines for monitoring, etc. ■ Proactively and candidly provided opinions on chemSHERPA through JAMP.	★★★	Find out more
Common Responsible Care (RC) Matters				
Running an RC system across the MCC Group	Improve the level of Group-wide RC activities. Continue implementing Safety Day programs. Conduct RC audits.	■ Held five RC information-sharing sessions within the Group to exchange information. ■ Implemented Safety Day programs across the MCC Group. ■ Implemented RC audits (at seven MCC sites, five Group companies in Japan, three Group companies overseas).	★★★	Find out more

● **Targets, Results, and Assessments for Fiscal 2014 (3)**

Priority Challenges for Fiscal 2014	Targets for Fiscal 2014	Results in Fiscal 2014	Assessment	Link

Complying with Subcontractor Act				
Complying with the Subcontractor Act	Continue holding internal workshops and encourage employees to proactively attend outside lectures. Continue conducting audits of purchasing departments at plants.	■Held internal workshops and actively encouraged employees to attend outside lectures. ■Audited purchasing departments at plants.	★★★	Find out more
CSR Procurement				
CSR Procurement	Visit and communicate with business partners based on the CSR questionnaire. Share the MCHC Group Charter of Corporate Behavior policies with business partners.	■Conducted visits to business partners (including explanations of the CSR questionnaire and "Developing Cooperative Business Practices with Suppliers and Business Partners Guidebook"). ■Created the "Developing Cooperative Business Practices with Suppliers and Business Partners Guidebook", ■Held a briefing for business partners, gave an overview of *KAITEKI* management and the guidebook, and distributed the guidebook.	★★★	Find out more
Human Resources Development				
Fostering the next generation of executives	Participate in efforts to foster the next generation of executives and restructure MCC management training through the business leadership program (updated edition) at MCHC and improve the programs as necessary.	■Participated in the business leadership program at MCHC. ■Participated in efforts to improve the business leadership program at MCHC. ■Restructured management program details and implemented them.	★★	Find out more
Cultivating global human resources	Utilize a global human resource development scheme.	■Ran the Overseas Business Challenge System (four people in the previous fiscal	★★	Find out more

		year, five new people) and Overseas General Study Program (three people in the previous fiscal year, three new people). ■Ran Short-Term Overseas Training (held the Shuttle Learning Program jointly with Mitsubishi Plastics, Inc.) ■Participated in MCHC programs about different cultures.		
Offering opportunities to take on challenges and boost awareness	Implement programs for in-house open recruitment, in-house free agencies, in-house internships, and career counseling.	■Nos. undertaking programs: 4 people for in-house open recruitment, 1 in-house free agency, and 20 people received career counseling.	★★	Find out more
Developing the Organization and its Culture				
Helping various human resources show their strengths	Implement various measures promoting diversity. Facilitate a greater awareness of the importance of promoting diversity. Implement activities promoting female workers exhibiting their strengths.	■Held diversity training (total of 40 times) ■Target: Females ・Decided on nurturing policy for all female managers. ・Increased the ratio of female managers to 6.3%, a 0.5% increase compared to fiscal 2013. ■Target: Foreign nationals ・Established a support system for the retention of foreign national employees. ・Hired four new graduates of foreign nationality. ■Target: People with disabilities ・An employment rate of 2.28%, attaining the statutory rate for disability employment.	★★	Find out more
	Continue recruiting foreign nationals as employees.			Find out more
	Continue helping people with disabilities fulfill their capabilities.			Find out more

Supporting a Work-life Balance				
Promoting reduction in total working hours	Continue reducing overtime and holiday work hours and eliminate excessive work hours by raising work efficiency.	■Obeyed to a system requiring advance permission for overtime and holiday work and promoting people to leave work early. ■Average overtime work hours for general employees (ordinary daytime workers): 20.4 hrs (Reduction of 1.1 hours compared to fiscal 2013). ■The rate of paid leave taken: regular daytime workers, 82%.	★★	Find out more
Human Rights Measures				
Educating and raising awareness of human rights	Establish the Human Rights and Diversity Promotion Committee and promote awareness of human rights and diversity within the MCC Group. Work toward global standards of human rights. Ensure a better understanding of human rights issues, including burakumin discrimination, and eliminate prejudice. Prevent sexual harassment, abuse of authority, and other forms of harassment at workplace.	■Established the Human Rights and Diversity Promotion Committee. ■Held 446 group training sessions attended by 8,925 employees. ■Provided in-house intranet training (E-training) on human rights to 15,802 employees.	★★	Find out more
Identifying Problems				
Implementing employee surveys	Implement employee surveys and incorporate such findings into various management measures.	■Drew on the findings of fiscal 2013 surveys in pursuing initiatives that included continuing the top message distribution, holding programs to enhance management	★★★	Find out more

		capacity for managers who organize, and promoting operational efficiencies. ■Conducted surveys with responses from 20,576 employees in fiscal 2014, accounting for 91% of the Group-wide workforce. ■Expanded overseas Group company survey to the U.S.		
Labor-Management Relations				
Building productive labor-management relations	Maintain and improve labor-management relations and increase the depth of labor-management communications.	■Lively exchanges of opinion at management and labor committee meetings. ■Shared management information at appropriate timing.	★★★	Find out more
Corporate Citizenship Activities				
Engaging in corporate citizenship activities in the areas of cultivating future generations, communicating with local communities, and providing support for the reconstruction of the Tohoku region.	Continue corporate citizenship activities in the areas of cultivating future generations, communicating with local communities, and supporting activities for the reconstruction of the Tohoku region. Continue providing employees with information about volunteering	■Support activities for Tohoku reconstruction (implemented as MCHC Group activities) ・Held Let's Go to Tokyo event: Worked with NPO to provide opportunity to visit Tokyo for primary school children and a guardian from Otsuchi Town, Kamaishi City of Iwate prefecture. ・Held an exhibition of products from three prefectures in Tohoku (Iwate, Miyagi, Fukushima) in our head office building. ■Cultivating future generations ・Held science experiment workshops for	★★★	Find out more

		children who will be responsible for future generations (at each site). ・Co-sponsored the Mitsubishi Chemical Junior Designer Award (MCJDA). ■Communication with local communities ・Accepted trainees from overseas (as part of our collaboration with the Kitakyushu International Techno-cooperative Association or (KITA). ■Communicated to employees through the corporate citizenship activities database about volunteering information, volunteering records and experiences.		

The Mitsubishi Chemical Group (MCC Group) aims to achieve *KAITEKI* through its corporate activities. We provide diverse products and services that contribute to the sustainable development of society, the affluent and vibrant lives of people, and coexistence with the planet.

These products and services have been developed for the purpose of contributing to the three decision criteria for our corporate activities; Sustainability, Health and Comfort. We developed the foundation on which stands the "Power of Chemistry," as represented by molecular and functional design technologies, and high value-added technologies that have been nurtured over many years.

In this special feature, we introduce our products, which contribute to the realization of *KAITEKI*, and introduce the development of our bio-based products that make a significant contribution to coexistence with the planet. Moreover, we will also introduce how we are laying a foundation for the future toward the realization of *KAITEKI* by describing the orchestration initiative on the R&D frontlines, what the MCC Group thinks human resources ought to be.

＊ *KAITEKI* is an original concept proposed by the Mitsubishi Chemical Holdings Group (MCHC Group) that signifies “a sustainable condition which is comfortable for people, society and the Earth, transcending time and generations.”

1 MCC Group products that realize *KAITEKI*

For the realization of *KAITEKI*, the MCC Group provides products and services that contribute to environmental preservation, resource recycling, and the healthy and comfortable lives of people based on its broad technological base developed over many years. This special feature introduces, as part of our efforts, products that "contribute to reducing our environmental impact," "contribute to tackling the depletion of resources," and "contribute to the comfortable lives of people."

- Contribution to reducing our environmental impact (Sustainability)
- Contribution to tacking the depletion of resources (Sustainability)
- Contributing to comfortable lifestyles (Comfort)

2 Development of Biomass Use in the MCC Group

To realize *KAITEKI*, the MCC Group has designated progression of a shift to using sustainable resources as a priority issue. In this feature, we will introduce the outline of the business strategy, the development and market deployment of products made from biomass and initiatives aimed at taking the next step further on.

- The MCC Group’s business strategy for products using biomass feedstock
- DURABIO™, bio-based engineering plastic
- BENEBiOL™, bio-based polycarbonatediol
- Toward the next step

3 Laying a Foundation for the Future

We introduce how the MCC Group is laying a foundation for the future through our R&D and ideal human resources.

- Orchestrating the Group strengths in R&D toward realizing *KAITEKI*
- Main fiscal 2014 R&D results
- Ideal human resources

Special Feature

Initiatives for Realizing *KAITEKI* and Laying a Foundation for the Future

1 MCC Group products that realize *KAITEKI*

Contribution to reducing our environmental impact (Sustainability)

The Mitsubishi Chemical Group (MCC Group) is working on two initiatives to reduce the CO_2 emissions that are thought to be the cause of global warming: reducing emissions at the manufacturing stage, and providing products and materials with good energy efficiency to our customers and encouraging them to use those, thereby reducing the total CO_2 emissions.

Sustainability Lithium-ion battery materials that contribute to the dissemination of eco-friendly automobiles

Through the supply of key materials, contribute to solve environmental and energy issues

Lithium-ion batteries (LiBs) are compact and can achieve high capacity. The demand for these batteries, which are essential for mobile devices such as smartphones and tablets, is continuing to grow. Demand increased steadily for high-performance batteries for eco-friendly automobiles such as hybrid vehicles and fully electric vehicles and expectations have also grown towards larger size products like residential energy storage batteries and industrial power storage batteries. MCC is responding to increasingly sophisticated customer needs based on its high technical capabilities, which comprehensively cover all processes from materials development to safety evaluation. By supplying key materials for LiBs based on their global supply chain network, we contribute to efficient energy use and a reduction of environmental burden.

Key LiB materials (electrolyte, anode material)

▸ Lithium-ion battery materials

batteries

Sustainability Organic photovoltaics, a groundbreaking technology for solar cells

Helping solve energy problems by commercializing innovative solar cells

MCC is utilizing organic compound technologies to work on the commercialization of organic photovoltaics (OPVs), which are printed organic thin-film solar cells that have considerably different properties than traditional solar cells.


Film-type OPV module

The most prevalent kind of solar cell today is polycrystalline silicon, which uses glass substrates so the panels are rigid and heavy, restricting where they can be installed. MCC-developed film-type OPVs are manufactured lighter and more flexible by printing organic semiconducting materials on thin substrates such as plastic film and metal foil so they are thin and sheet-shaped. In 2008, MCC began in earnest to work on developing OPVs and improving their photoelectric conversion efficiency and increasing the size of the modules. From August 2015, we launched test marketing and strive for market deployment.


ZEB with film-type OPV units installed on the external walls, Taisei Corporation (Verification test now under way)

Film-type OPVs have flexible and light characteristics, furthermore it has superior design characteristics. For example it has variations in size and color

tone and can be see-through, and therefore it enables diverse applications on the external walls and windows of buildings that are completely different from conventional applications.

In May 2014 MCC installed the external building wall unit developed together with Taisei Corporation that generates electricity using OPV units in the building that Taisei Corporation was constructed as it works toward realizing an urban Zero Energy Building (ZEB), and commenced verification tests (implemented as a NEDO* project called Guidance and Technical Development Project for the Practical Application of Organic Photovoltaics).

To realize ZEB in urban buildings, it is essential to effectively utilize surfaces such as walls and windows in addition to the roof in order to ensure a greater amount of electricity generation.

In order to install solar units on the external walls of buildings, it is not merely a matter of how the solar cell's function, but the ease of construction (lightweight, thinness) and designability (size, color, etc.) are also important. After installation, the ease of maintenance is also necessary and there are great expectations of OPVs as materials that can respond to these needs. Going forward, we will proceed with verification tests aimed at the practical application of OPVs as "external wall units that generate electricity."

* NEDO: New Energy and Industrial Technology Development Organization

What is a zero energy building?

According to a study group of the Ministry of Economy, Trade and Industry in 2009, it is assumed that a zero energy building is "a building that consumes zero or nearly zero energy on an annual net basis by reducing primary energy consumption in the building through enhanced energy efficiency performance of the building envelope and facilities, networking of neighboring buildings, on-site utilization of renewable energy, and so on." Globally too, in regions with a good climatic environment and a comparatively small energy load, there are many examples of buildings that can secure sufficient power generation using solar panels by creating large roof area, and it is thought to be very difficult to realize such buildings in urban areas.

▸ OPV

Sustainability Needle coke that contributes to the recycling of industrial materials

Refining steel scrap with world-first coal-chemical production technologies

Steel is a material that can be used again and again. We recycle steel by smelting, refining, and recovering steel scrap from automobiles and building materials in an electric arc furnace. Petroleum-based needle coke had mainly been used as a primary raw material in the electrodes of these electric arc furnaces before MCC became the first company in the world to successfully produce coal-based needle coke in 1979.

Needle coke

Coal-based needle coke that MCC developed is produced from coal tar which appears during coke production. In recognition of this accomplishment, MCC was awarded the 27th Okochi Memorial Production Prize, a prestigious prize to remarkable contributions in production engineering and implementation of sophisticated production technologies in Japan. There are only a few companies around the world that can produce coal-based needle coke. To address growing demand for needle coke, in November 2012, MCC established a joint venture with Posco Chemtech Co., Ltd for the production and sale of needle coke in South Korea and licensed the technology to the joint venture. In April 2013, we held the groundbreaking ceremony for the manufacturing

Electrodes for electric arc furnaces

facility and we have proceeded with the construction with the aim of starting operation during 2015.

Needle coke offers high durability in high temperatures, a smaller thermal expansion coefficient, and slower rate of consumption. MCC will continue to contribute to a resources-saving society by using technologies to change coal, which has a more stable supply than petroleum, for which there are fears of depletion, into an advanced material.

- Needle coke

Special Feature

Initiatives for Realizing *KAITEKI* and Laying a Foundation for the Future

1 MCC Group products that realize *KAITEKI*

Contribution to tackling the depletion of resources (Sustainability)

The major raw materials of the plastics and other chemical products provided by the Mitsubishi Chemical Group (MCC Group) are depletable resources that only exist on the Earth in limited amounts such as petroleum, coal, and natural gas. We believe that the problem of the depletion of resources is a social issue that we must give priority to in order to maintain the sustainability of manufacturing and fulfill our responsibility to provide products in the future, so we are working to switch to "sustainable" raw materials that can be produced repeatedly with solar energy.

Sustainability DURABIO™, a transparent bio-based engineering plastic

Helping to realize a sustainable carbon society through the development of innovative bio-based materials

DURABIO™ is a transparent bio-based engineering plastic* made from plant-derived isosorbide. This material combines the lightweight and workability properties of plastics with the transparency and optical features of glass, boasts outstanding impact, heat, and weather resistance along with easy coloring properties. Adoption of DURABIO™ is increasing for automotive interiors, and we will introduce some of examples in the feature "Developments of biomass use in the MCC Group".

* Engineering plastic: This is the general name for plastic materials that are developed for applications that require particularly high durability and heat resistance. In addition to their use in mobile phones, computers and other electronic equipment, as an optical and energy-related material as well as an alternative material to high-performance glass, engineering plastics are being applied across a wide range of industries encompassing automobiles, aircraft, solar cells, and medical equipment.

▸ DURABIO™

Sustainability Carbon black derived from sustainable plant oil

Supprting comfortable and safe driving performance and contributing to the promotion of the carbon recycling society

Carbon black is a fine particle of carbon and a large amount of carbon black is used mainly in tires for its excellent rubber reinforcement properties. It accounts for one-fourth of a tire's weight and tires are black because of the black color of carbon black. Furthermore, as a black pigment it is used in printing inks, colored resins, paints, toner, and other applications. Moreover, it is used in antistatic films, packaging containers, and other products.

Carbon black

Carbon black has been produced while controlling its various properties through the incomplete combustion of depletable resources such as coal-derived and petroleum-derived heavy oil and gas. However, as a part of our efforts to switch raw materials to plant-derived resources, we have successfully mass-produced carbon black from plant oil by applying the technologies for producing high-performance carbon black that we have developed in-house.

We commenced trial production at Kurosaki Plant (Kitakyushu City) in December 2010, and started supplying to its first customers in July 2013. Going forward we will closely monitor the growth of the market while considering expansion of our production system and continue working toward a switch to sustainable raw materials.

- Carbon black

Special Feature

Initiatives for Realizing *KAITEKI* and Laying a Foundation for the Future

1 MCC Group products that realize *KAITEKI*

Contributing to comfortable lifestyles (Comfort)

In order to contribute to Comfort, one of the judgment criteria for the corporate activities of Mitsubishi Chemical Holdings Corporation, the Mitsubishi Chemical Group (MCC Group) is providing products in a variety of domains that make the lifestyles of people convenient, secure, safe, and comfortable.

Comfort YUPO™, resin-based synthetic paper that opens up new possibilities

Lifestyles are enriched with the development of water-resistant synthetic paper that can be used outdoors

The synthetic paper, YUPO™, is used for printed materials displayed outdoors, which includes the timetables at railway stations, the banners in stores, and election campaign posters. Moreover, YUPO™ is used for the moisture-proof labels of containers and products that require refrigeration. YUPO™ is manufactured and marketed by the MCC Group company, Yupo Corporation, which maintains a leading share of the global market for synthetic paper.

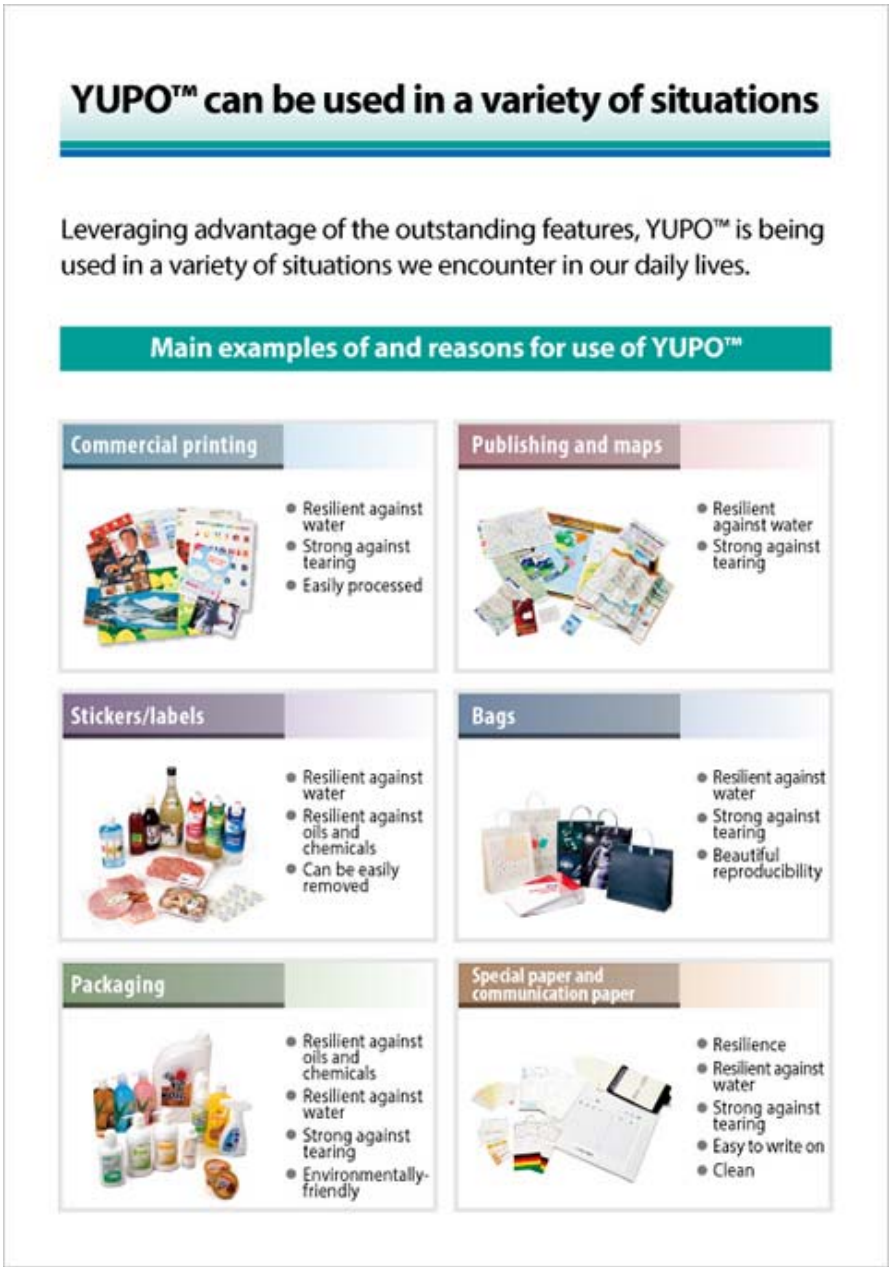
YUPO™ is manufactured by adding additives to the main ingredient of polypropylene (PP), stretching the material into a film shape. It is stretched so that innumerable micro-voids* occur inside the film. As a result light is diffused by YUPO™ which achieves the reflection-free high level of whiteness and opacity seen in laminated paper. It is also just as easy to print or write on as paper. Moreover, the product is light because the innumerable micro-voids reduce its specific gravity.

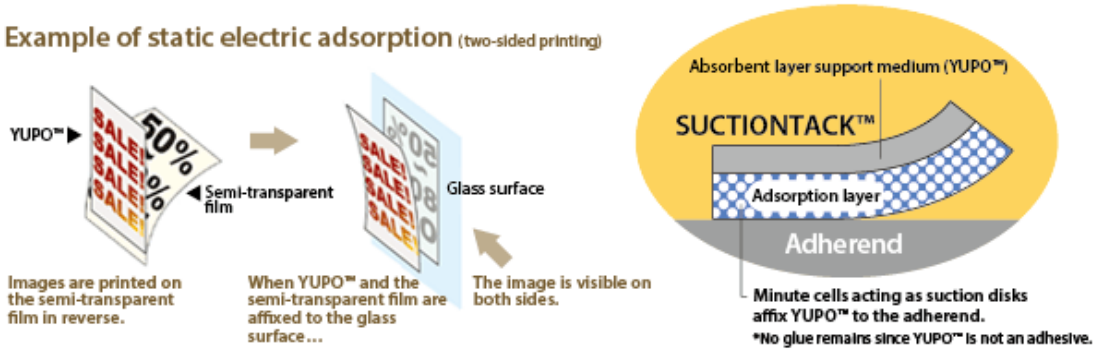
Resilient against water, YUPO™ largely retains its strength and shape even when wet. Among a host of additional features, this product is strong against pulling, tearing, and impact and can be used repeatedly. YUPO™ boasts a smooth surface, can be easily processed and worked, and does not easily degrade even when in contact with oils and chemicals. In addition to these outstanding properties, YUPO™ is distinguished by its environmental attributes. Easy to recycle, YUPO™ decomposes into carbon dioxide and water when incinerated, and is contributing to comfortable lifestyles through a wide variety of applications.

* Micro-voids: voids at the micron scale which occur internally when rubber, plastic, or certain other materials are expanded, contracted, or rolled

YUPO™ has a variety of grades to accommodate the different applications of our customers. For example, since 2005 we have been selling the slightly absorbing sheet SUCTIONTACK™ which can be easily applied and removed, and is made by putting a suction layer on one surface of YUPO™.

In addition to the features of YUPO™ as a synthetic paper, SUCTIONTACK™ has the feature that the minute cells in its suction layer act as suction cups, affixing the YUPO™ to the adherent. No adhesives are used so when SUCTIONTACK™ is removed no glue remains behind. Furthermore, the absorbent face absorbs all smooth surfaces including glass, steel, polyester, PP, and aluminum so it can be used for a wide range of applications including product signs, labels, sign displays, store decorations, teaching materials, and more.





The structure of SUCTIONTACK™

Store signs

Educational stickers

Warning stickers

Countertop stickers

▸ YUPO™

Comfort VELVE™, organic light emitting diode lighting modules that emit comforting natural light

Combining natural light with approachable light to encounter a new kind of lighting.

VELVE™ approachable light

Mitsubishi Chemical Corporation (MCC) and Pioneer Corporation jointly developed VELVE™, the world's first organic light emitting diode (OLED) lighting modules with a wet coating process for the light-emitting layer, and began mass production and shipment in March 2014.

OLED is organic electro-luminescence (EL) made from thin organic layers on glass or the like that emit light when current is applied. Light from OLED is emitted from the entire surface of the panel, as opposed to LED and fluorescent lighting that emit light from a single point or line. OLED lighting is thus able to create a more natural, non-glaring and softer light. OLED lighting does not have ultraviolet or infrared rays so it is gentle on the eyes, does not generate heat and can be used at close proximity to both people and products. These characteristics make it attractive in fields such as beauty and medical treatment.

Light from VELVE™ has a wavelength close to that of the sun's rays, so colors under it appear natural. Another characteristic is that it is a soft light when dispersed. As a result, even when seen directly it is not dazzling and there is little glare, which makes it an ideal light for beauty uses, and it is especially suited to use as front-on lighting for make-up application, showing the color of the skin. Furthermore, the thinness of VELVE™ enables it to be easily embedded in mirrors, so it is simple to design around and can be used in a comfortable make-up space, leading to an increase in the number of cases where it is used in bathroom vanity washstands and powder room vanities.

In addition, utilizing the characteristic of soft dispersion of light, in the medical field VELVE™ is being used in nurse lights, the portable lights that nurses carry around while doing nighttime rounds. Regular flashlights and LED penlights shine strong and blue in a direct line, creating the problem of waking sleeping patients when shone onto them. OLED lighting, however, tackles this problem by shining a soft light around the nurse and not affecting the patient's sleep. It also contributes to nurses' nighttime productivity.

Furthermore, with OLED lighting controlling the wavelength easily enables the creation of light lacking much of the blue said to have an arousal or stimulating effect. Utilizing this characteristic can lead to greater deployment for medical care uses.

People's encounters with the natural, approachable, new type of light from VELVE™ have already begun.

Make-up mirrors


Bathroom vanity washstands


Toilet lighting


Nurse light

▸ VELVE™

Comfort RYOTO™ sugar ester, food emulsifier that contributes to the world's food industry

Supporting lifestyles abundant in food by developing safe food ingredients

Sugar ester is an emulsifier for food made from plant-derived fatty acids and sucrose. It is used in a wide variety of processed foods, such as canned coffee and other beverages, whipped cream and other dairy products, and cake, chocolate and other sweets. Sugar ester helps food taste better and improves convenience. In recent years, the use of sugar ester has expanded around the world, especially in Asia. This business continues growing to contribute to *KAITEKI* through the world's food domain.


RYOTO™ sugar ester is used in foods like these

The MCC Group has produced and sold RYOTO™ sugar ester food-grade emulsifier around the world for more than 40 years through its subsidiary Mitsubishi-Kagaku Foods Corporation. By thoroughly ensuring safety in its product development and production, The MCC Group has won the leading share of the world market. We contribute to the world's food industry as RYOTO™ sugar ester is broadly used in foods around the world.

▸ RYOTO™ sugar ester

Comfort MCC's fully artificial light-type plant factory Plant Plant™

Growing vegetables for a better world

The MCC Group's fully artificial light-type plant factory Plant Plant™ can be installed in all kinds of locations, including cold, desert, and urban environments. Being indoors, the crops are unaffected by the weather and seasons, so they can be stably cultivated all year round. This is the groundbreaking systems that don't just grow plants, but grow them in as environmentally-friendly a manner as possible, drawing on our expertise as a comprehensive chemical manufacturer. It can efficiently cultivate baby greens and other plants by using stacked growing racks installed indoors to implement hydroponic cultivation that perfectly controls conditions such as light, temperature, and humidity. Plants are cultivated in an enclosed space without the use of agri-chemicals, so harvested vegetables can be eaten without washing them first. Currently, we are developing baby greens mix containing many special nutrients and minerals in the aim of producing healthy foods that are also tasty.


Plant Plant™

▸ Plant Plant™

Comfort ZELAS™ is a high performance polymer exhibiting excellent potential for medical applications

Providing ZELAS™ products that are safe and reliable, directly addressing the medical needs.

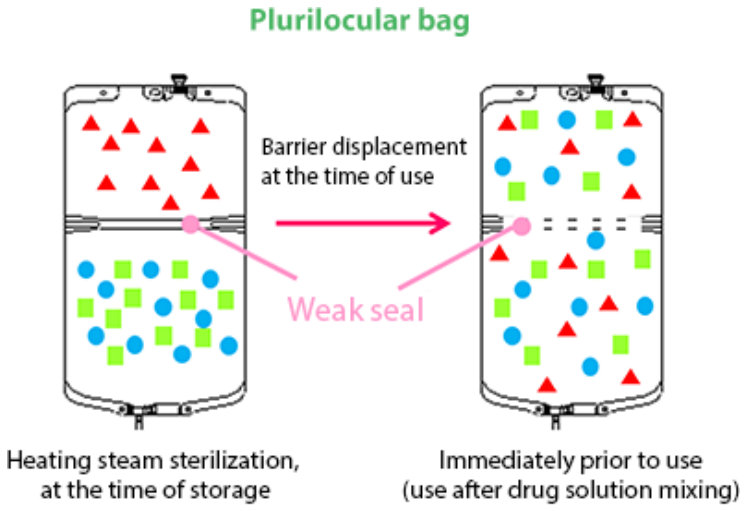
A wide range of medical-use plastics are used in medical devices, and MCC has been developing and supplying a variety of products for the medical industry. ZELAS™, an olefin-based thermoplastic elastomer, is attracting most major medical device producers particularly for use in infusion bags.


ZELAS™ peritoneal dialysis solution bag

Taking into consideration its easy handling as well as infusion efficiency, bags have become popular among infusion containers for a capacity of 1 liter or more. These infusion bags are normally comprised of multiple layers in the form of the outer core and inner layer to meet the requirements of various criteria, such as bag making properties, post-sterilization transparency , flexibility, impact resistance, and high cleanliness. ZELAS™ offers various grades to satisfy the requirements of each layer and facilitate the development of excellent infusion bags that match bag making machines. ZELAS™ is distinguished by its suitability for multichamber bags. It can contribute to easily peelable performance, by optimizing the heat sealing process at the time of bag-making, which enables separately kept solutions to be mixed before use. Medical device suppliers appreciate and have already adopted this remarkable technology for various products.

MCC will innovate technologies continuously for diversified and unmet needs, and will contribute to further developments in the medical application field.

▸ ZELAS™



Comfort LINKLON™ and OLEFISTA™ materials for photovoltaic systems that exhibit outstanding heat resistance

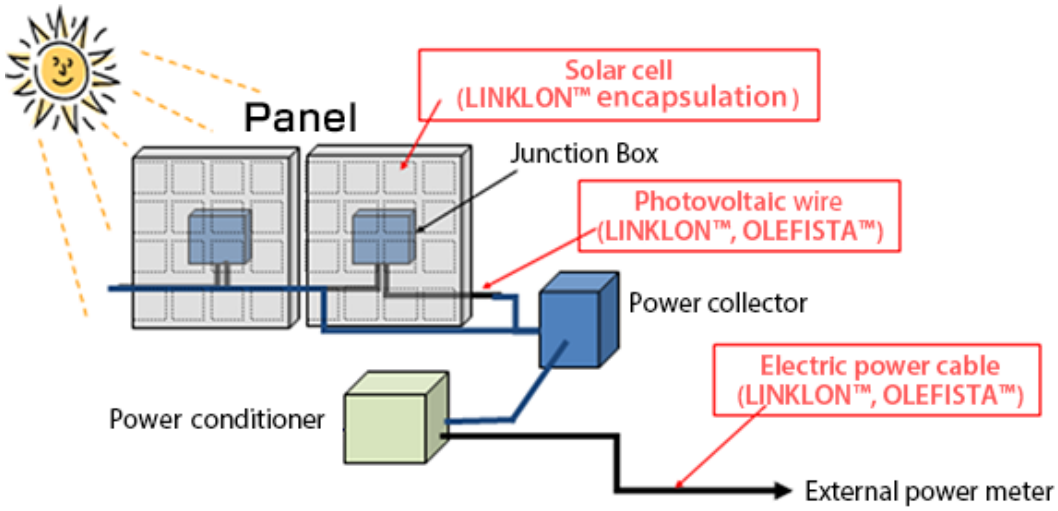
Leveraging our comprehensive capabilities to create sustainable energy

Photovoltaic systems have proliferated as a clean and sustainable energy source. MCC has developed LINKLON™ and OLEFISTA™ for use as materials in these photovoltaic systems, which are required to be highly durable and weather-proof. LINKLON™ is a silane crosslinkable polyolefin resin with heat, abrasion and chemical resistance that makes it suitable for use in applications that demand long-term durability, such as electric power cable insulation and solar panel encapsulation. OLEFISTA™ is a halogen-free flame retardant polyolefin resin used in applications that require heat and flame resistance, such as sheathing for electric power cables.


OLEFISTA™ is used in sheathing for electric power cables.

MCC contributes to the creation of sustainable energy by leveraging the comprehensive capabilities of the Group in the development of core technologies and materials used in photovoltaic systems.

Photovoltaic system



- LINKLON™
- OLEFISTA™

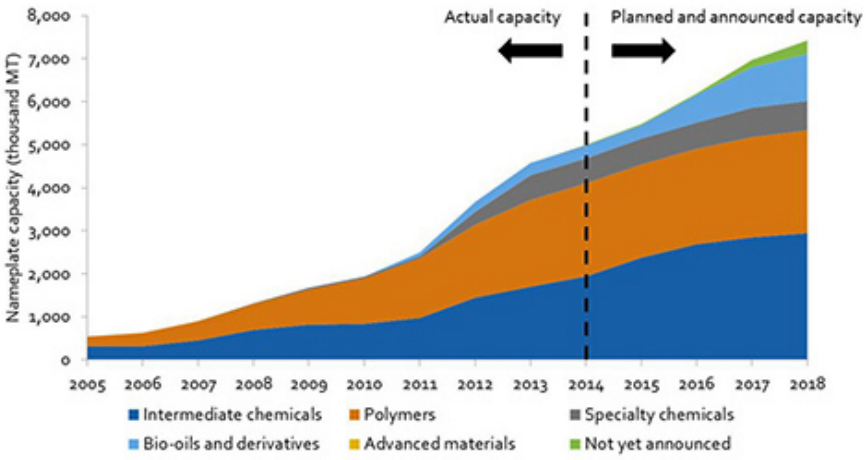
Special Feature | Initiatives for Realizing *KAITEKI* and Laying a Foundation for the Future

2 Development of Biomass Use in the MCC Group

The MCC Group's business strategy for products using biomass feedstock

Among the substances with which we have a close relationship in our daily lives, carbon is an important element for fundamental structure of life and energy sources. On the other hand, carbon is also said to have significantly harmful effects on the global environment in the form of carbon dioxide. As a chemicals manufacturer we consider our responsibility is to use carbon in an advanced manner, so as the Mitsubishi Chemical Holdings Group moves toward the realization of *KAITEKI*, we will not merely consume finite fossil fuels but develop technologies and businesses using sustainable materials including biomass from plants. We believe that we can not only utilize sustainable materials to relieve the environmental burden created through our industrial activities or products, we can also use the capabilities possessed by biomass feedstock to provide products that result in better lives for everyone. Furthermore, the effective use of a variety of sustainable materials will bring stability to corporate activities previously dependent on fossil fuels. This will surely be a positive outcome for all stakeholders.
Currently, research institutions and companies all over the world are vigorously engaged in development in this field. The market is gradually expanding as several pioneering products have emerged. The graph below shows an estimate of achieving a CAGR of 11% from 2014 to 2018. Biomass feedstock can be produced in various parts of the world. This advantage will surely form multipolar and sustainable economic zones that reduce energy consumed through transportation of feedstock and products without being influenced by the intentions of a limited number of countries in the future.

● Breakthroughs in the Production of Intermediate Chemicals Yield an 11% CAGR* From 2014 to 2018



* CAGR = Compound Annual Growth Rate

Source: Lux Research, Inc.

Firstly, we, Mitsubishi Chemical Corporation, would like you to know about biomass-based products and the benefits of the end products that used them. Therefore we have proposed to the market DURABIO™, BENEBiOL™ and BioPBS™, etc. which are high-performance products using biomass feedstock. Embedding these products in the market will build a value chain from biomass materials to customers and form the foundation for building business developments going forward. Eventually, to build a product lineup that answers our customers' request, we adopt the standpoint that we will need to rebuild our own business structure.
On the following pages we introduce DURABIO™ and BENEBiOL™, in addition to initiatives toward the next step.

Special Feature

Initiatives for Realizing *KAITEKI* and Laying a Foundation for the Future

2 Development of Biomass Use in the MCC Group

DURABIO™, bio-based engineering plastic

Helping to realize a sustainable carbon society through the development of innovative bio-based materials

DURABIO™, developed by Mitsubishi Chemical Corporation (MCC), is a bio-based engineering plastic made from plant-derived isosorbide. It features excellent performance as it offers higher resistance to impact, heat, and weather than conventional engineering plastics. Additional benefits include its transparency and ease of coloring – DURABIO™ can be simply mixed with pigment to create glossy, high reflective surfaces – as well its hardness, enhancing durability and scratch resistance. These advantages eliminate the need for a coating process, thereby reducing emissions of volatile organic compounds (VOCs) from paints.

Drawbacks associated with existing plastics made from plant-derived materials include their sensitivity to heat. Problems concerning workability, durability and impact resistance also limit the potential of conventional products. To overcome these drawbacks, leveraging its proprietary technologies of molecular configuration design, catalytic, and other technologies, MCC has developed a material that can come with glossy surfaces simply by blending and molding the raw materials. This new material barely yellows after long-term exposure to ultra-violet rays so DURABIO™ can be used in solar cell panels installed outdoors. Taking full advantage of its potential to deliver bright color tones, this new product is also anticipated to see wide-ranging use.

In fiscal 2013, DURABIO™ was the first plant-based engineering plastic adopted for the colored interior panels of HUSTLER, a new model compact car by Suzuki Motor Corporation, and the colored panels have been well received as fashionable with a sense of fun. Moreover, adoption of DURABIO™ is becoming more widespread as a result of improving the grade, and in fiscal 2014 it was selected for the interior design components of the new model passenger vehicle Roadster, by Mazda Motor Corporation, and the colored interior panels of Suzuki's new model compact car, the Alto Lapin.

New model Alto Lapin

Photo courtesy of Suzuki Motor Corporation
Interior color panels (indicated with arrows) made of a new grade of DURABIO™ used in Suzuki's new Alto Lapin X grade

Partner's Voice

Suzuki Motor Corporation
Component Engineering Development Group 4
Tomoko Fukuda

When we were first introduced to DURABIO™, I was impressed with its high glossiness and mirror finishing. We were the first experience to apply the production process of directly adding color to the raw material for finishing instrument panels used in the cabin interior, but the development team at MCC was wonderful at helping us work through many issues, resulting in a great product with appealing design characteristics. Colored panels made from DURABIO™ have attracted attention inside my company as well, raising the possibility of DURABIO™ being used in more vehicle models. I look forward to MCC coming up with new ideas for materials that create new value added in automobiles.

DURABIO™ was awarded the 14th Green and Sustainable Chemistry Award (GSC) by the Minister of Economy, Trade and Industry for being a chemical used as a renewable resource, which in addition to reducing the burden on the environment, enhanced product performance provided high added value.

The voluntary group Green Sustainable Chemistry Network, set up in March 2000, established the GSC Awards to contribute to the promotion of chemicals and chemical technologies that would support a sustainable society by presenting them with awards from the Minister of Economy, Trade and Industry for a record of contributing to the development of industrial technology.

At the GSC award ceremony (July 7, 2015)
Photo courtesy of the Japan Association for Chemical Innovation

MCC currently has a production capacity of 5,000 tons/year, but plans to rapidly expand that to 16,000 tons/year and expand uses from automobiles to a wide array of uses including displays for smartphones and sound barrier wall on expressways. Looking ahead, MCC will continue R&D into high performance products and manufacturing of products that are highly added-value and easy on the environment.

▸ DURABIO™

* Engineering plastic: This is the name given to a plastic material developed for uses requiring particularly high levels of durability and heat resistance. It has been adopted for numerous industrial uses including in electronic machinery for mobile phones, computers and more, optical and energy-related materials, as a substitute material for highly functional glass, automobiles, aircraft, solar batteries, medical equipment and more.

Special Feature

Initiatives for Realizing *KAITEKI* and Laying a Foundation for the Future

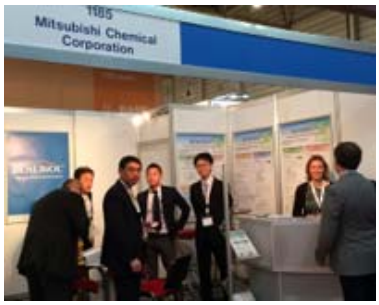
2 Development of Biomass Use in the MCC Group

BENEBiOL™, bio-based polycarbonatediol

MCC has developed the world's first bio-based high-performance polycarbonatediol

Mitsubishi Chemical Corporation (MCC) has developed the world's first bio-based polycarbonatediol, a type of high-performance polyols, and has begun market development and sales globally under the brand name BENEBiOL™ from April 2015.
Polycarbonatediol has superior durability, so it can be used for automotive interior materials, exterior coating and as resin coatings for electronic devices. Recently, its demand has expanded due to its use as a raw material in environmentally friendly water-based urethane resin. MCC produces the new polycarbonatediol BENEBiOL™ employing proprietary technologies that use raw materials from renewable plants. BENEBiOL™ has superior mechanical properties, flexibility at low temperatures, chemical resistance, abrasion resistance and high hardness.

From April 14 to 16, 2015, MCC displayed the new product BENEBiOL™ at the polyurethane exhibition UTECH Europe 2015 in Maastricht, the Netherlands. Many people were interested in BENEBiOL™ as it is bio-based and possesses an unprecedented structure, and almost 100 people visited the booth. BENEBiOL™ attracted considerable interest, including immediate requests for a sample.



Polyurethane exhibition
A scene from UTECH Europe 2015

Special Feature

Initiatives for Realizing *KAITEKI* and Laying a Foundation for the Future

2 Development of Biomass Use in the MCC Group

Toward the next step

We advance the development of DURABIO™ and BENEBiOL™ as pioneer products to make them convenient for customers. Following these products, we are also focusing on development of valuable products in parallel.
Our basic point of view is developing key technologies for establishing a value chain from biomass feedstock to customers, and continuing a stable business. Technologies necessary for the value chain are realized not only by our own knowledge of petrochemicals and biotechnology, but by technologies and engineering drawn from a wide array of fields. Consequently, we promote active collaboration with superior technologies from around the world and are not bound to using only our own technologies.
For example, we are working on technologies that make a product from non-food agricultural waste. The product is currently made from foods such as starch and sugar. In this field, one issue is how to convert materials that are hard to convert into property that we can use easily with low energy and with low environment impact.
Molecules created by living organisms are not easily obtained by processes using fossil materials. We are also aiming to produce chemicals with up-to-date functions or high functions by effectively using the structure and combination of molecules unique to this biomass feedstock. DURABIO™ mentioned above is a good example. In up-to-date chemical production processes, we make full use of our knowledge, the chemical conversion method (chemical catalyst processes) and the bioconversion method (fermentation processes, mainly), which are arranged appropriately.
Furthermore, collaboration with marketing sections is indispensable to ascertain information what kind of functions customers at the end of the value chain desire. That's why we orchestrate our actions with the MCHC Group to improve the infrastructure of market development and technological development simultaneously to be able to realize supply of the products the market seeks using biomass. In the future, we will anticipate customer demand and continue to propose eco-friendly, valuable, and highly functional products to our customers.

▸ 3. Laying a Foundation for the Future: Orchestrating the Group strengths in R&D toward realizing *KAITEKI*

Special Feature

Initiatives for Realizing *KAITEKI* and Laying a Foundation for the Future

3 Laying a Foundation for the Future

In the previous chapter, we introduced how Mitsubishi Chemical Corpration (MCC) provides diverse products and services that contribute to the sustainable development of society, the affluent and vibrant lives of people, and coexistence with the planet. To make further progress toward the future with the products and services we present, R&D activities are important, as they are for our objective of realizing *KAITEKI*. Furthermore, all employees, not just those from R&D divisions, need to have a strong awareness of realizing *KAITEKI* as they go about their daily duties. The following focuses on laying a foundation for the future and introduces our initiatives for orchestration on the R&D frontlines, as well as describing the ideal human resources sought by the MCC Group for the realization of *KAITEKI*.

Orchestrating the Group strengths in R&D toward realizing *KAITEKI*

As we noted at the provions chapter 2. Development of Biomass Use in the MCC Group: The MCC Group's business strategy for products using biomass feedstock, Mitsubishi Chemical Group Science and Technology Research Center, Inc. aims to utilize even more advanced biomass and is engaged in researching technologies to produce chemical products using combinations of bioconversion methods and chemical conversion methods from materials (inedible biomass such as agricultural waste) that do not compete with food. We heard from two researchers specializing in each field about the orchestration of these activities.

Mitsubishi Chemical Group Science and Technology Research Center
Synthesis Laboratory
Functional Catalyst Group
Kiminori Kawakami

Mitsubishi Chemical Group Science and Technology Research Center
Biotechnology Laboratory
Biochemicals Group
Shuichi Yunomura

Currently, you are both involved in developing chemical products using inedible biomass as a raw material, but was there a foundation that led to that initiative?

* Examinations into combinations of chemical conversion methods and bioconversion methods have been going on for a long time, including targets like pharmaceutical intermediate production processes using highly selective enzyme reactions. Once we had achieved commercialization of a particular product, we turned our attention to the thinking about the next target we should tackle and came up with this theme through a sense of survival.

When producing chemical products using biomass feedstock does it require technologies different from conventional ones?

* Compared to petrol-based materials symbolized by naphtha, biomass feedstock has higher oxygen content, so they mainly need a reductive chemical conversion. And there are many functional groups that come from oxygen, so functional group selectivity is important, and also there is a need to envisage technologies different to those used with conventional fossil technologies. On the other hand, with bioconversion methods, there are many problems that arise unexpectedly simply through the smallest change to conditions, and that in itself requires an accumulation of many technologies.

Your specializations are highly divergent. If there have been any things that were bothersome or good in the development process, please tell us about them.

* The terms we each used were different, so we really struggled at first. For example, concerning the index used to show yields in relation to chemical reaction efficiency, the assumptions made when calculating differ between chemistry and biology, so there were discrepancies. However, as a result of the laboratories drawing closer to reach a deeper mutual understanding, we could ask about things we didn't understand, teach each other, and by repeating these joint meetings, move ahead with deepening our comprehension. As a result, we broadened each other's perspective.

That is a true orchestration. Please tell us about your projected developments going forward, as well as your respective ambitions.

* We want to draw up a plan for the verification of inedible biomass materials in areas near where it is produced, and verify that technology. Our objective is to complete a business gathering a variety of technologies ranging from the procurement of raw materials through to product shipment. Of course, this is not going to be a simple substitution of petroleum-based raw materials, but we want to send out to the market products with characteristics that can only be achieved through biomass feedstock. Moreover, based on the core technologies we have cultivated, we want to find the next target without having to take a break. Thinking on a global scale, we want to succeed in business using these products as well as working to realize a sustainable carbon society.

In the laboratory

The MCC Group’s business strategy for products using biomass feedstock

Main fiscal 2014 R&D results

Realizing *KAITEKI* involves more than simply utilizing biomass, and so R&D activities are moving ahead in a variety of fields.

Major Technology Development Results

Phosphors	Continued development of high luminescence yellow phosphors. Two new products launched onto market. Fluoride complex red phosphors for high color reproduction displays developed and launched.
Zeolite separation membranes	Participated in national project for natural gas separation, plan to build testing plant at the Kurosaki Plant.
Isosorbide polymers	Commercial plant operations were steady. This material, which has already been employed in the Suzuki Motor Corporation's Hustler, was selected for use in the interior design components and colored interior panels of Mazda Motor Corporation's Roadstar and Suzuki's Alto Lapin
Polycarbonatediols	Developed the world's first bio-based polyol, and has begun market development and sales globally from April 2015.
Professional disks	Concluded a manufacturing license agreement in April 2014 with Sony Corporation to produce a dedicated professional disk for the XDCAM system used in the broadcasting industry. Sales were launched in the second half of 2014.
Post Cu/Low-k CMP advanced cleaning solutions	Developed and launched sales of a new grade of the alkaline-based advanced cleaning solution.
High-grade needle cokes	Testing pilot production prototypes were confirmed through the exhibition of high performance by domestic and foreign carbon electrode manufacturers. Currently, customers are conducting mass production trials.

Major awards received

Year Award Received	Award	Awarded for	Conferred by
FY 2014	**The Minister of Economy, Trade and Industry Award at 14th Green & Sustainable Chemistry Awards**	Development and commercialization of transparent engineering plastic using plant-based feedstock	Japan Association for Chemical Innovation
	ECHO CITY Product Awards 2014 Special Award	OLED lighting module VELVE™	Nikkei Business Publications, Inc.

Ideal human resources

The MCC Group considers the following three items to constitute an ideal human resource concerning the employees given the task of realizing *KAITEKI*.

Ideal human resources
(1) Be first-class professionals in your respective positions and capacities.
(2) Be a driving force for change (Grasp changes keenly and take on challenges without fear of failure)
(3) Become global human resources (Understand and put into practice diversity.)

The following is an extraction from the greeting the Company president gave at the fiscal 2015 entrance ceremony for new MCC recruits.

April 1, 2015

As a Professional, Be a Driving Force for Change
To all our new employees, I would like you to become first-class professionals in your respective positions and capacities. Manufacturers are involved with people from a variety of departments, and if any particular function is defective, a company cannot become strong. Regardless of the division to which you are assigned and irrespective of the work you have to do, do your best and become a top professional. And I would also like you to become a driving force for change in each division. The chemical industry, with chemistry-based technologies at its core, is an industry that provides society with new products and creates new value, and its destiny is to continue changing in accordance with the times. Take on challenges without fear of failure and understand that it is your role to continue to give the Company opportunities to change.

Become Globally Successful Human Resources
Having a global outlook means thinking of diversity. In addition to having advanced language capabilities as a method of communication, you should understand, recognize, accept and respect diverse cultures, values and beliefs. And on top of that, I want you to be people who engage in business inside and outside of Japan. Everyone, please allow your personalities to flourish, respect each other and grow into human resources who can truly succeed globally.

We use these various opportunities to deliver messages about ideal human resources, and strive to disseminate them among employees.

- Message from the CEO
- Together with Employees

Management Structure

Basic concept

As a member of the Mitsubishi Chemical Holdings (MCHC) Group, the Mitsubishi Chemical Group follows the basic guidelines for management of the Group determined by Mitsubishi Chemical Holdings Corporation, and shares the management guidelines and management strategies of the Group determined by MCHC. Mitsubishi Chemical Corporation also upholds the Group policies and rules determined by MCHC to ensure that it fulfills its corporate social responsibility in areas such as Internal Controls, Risk Management, and Compliance (compliance with laws and Charter of Corporate Behavior), and actively pursues management initiatives to enhance corporate value as a core operating company of the MCHC Group.

To MCHC Management Plan page

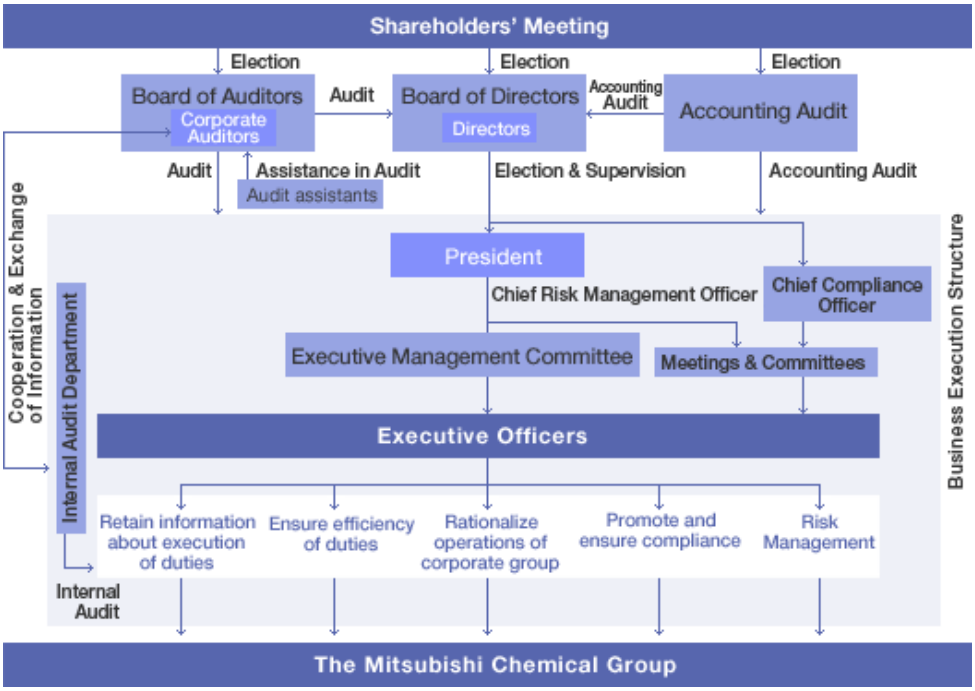
Management Structure

Corporate Governance

The Mitsubishi Chemical Group's top priorities for corporate governance are to ensure fast and efficient decision-making and business execution, clarify management responsibilities, ensure compliance, and strengthen risk management.

Mitsubishi Chemical Corporation (MCC) operates a basic corporate governance structure outlined in the chart below. The Company has rationalized managerial decision-making and execution, separating the executive and management functions through adoption of the executive officer system, and making provision in internal rules for deliberative and decision-making bodies such as the Board of Directors and the authority attached to various positions.

Corporate Governance Structure of the Mitsubishi Chemical Group (as of June 23, 2015)



Board of directors

As a general rule, the Board of Directors meets once a month. The Board makes decisions on important managerial matters and basic matters concerning Group management, as well as auditing the execution of duties by Directors, in accordance with the Regulations of the Board of Directors and other relevant regulations. The six directors (four of whom concurrently serve as executive officers) form a management structure that can adapt quickly to a changing environment and, to further clarify the managerial responsibilities and role of each Director, the term of office for a Director is one year. Candidates for Director are selected by the Board of Directors from among those human resources with the right skills and qualities to realize the management philosophy of the Mitsubishi Chemical Group and fulfill its social responsibility, are proposed at the Shareholders' Meeting, and are elected through a shareholders' resolution.

Executive management committee

The Executive Management Committee assists the President in making decisions, deliberating important matters

concerning business execution such as the investment and financing of MCC and the Mitsubishi Chemical Group. Any important managerial matters deliberated by the Executive Management Committee are executed pursuant to a resolution of the Board of Directors.

As a general rule, the Executive Management Committee meets twice a month. The committee is comprised of the President, Directors, Executive Officers responsible for divisions and departments, and Corporate Auditors.

Corporate auditors

MCC has Corporate Auditors to audit and supervise its activities. Besides attending meetings of the Board of Directors and other important meetings and committees, the Corporate Auditors verify information contained in reports from Directors and other relevant parties, investigate the status of the Company's business and property, and audit the execution of duties by Directors. Moreover, MCC does not have a Board of Auditors, but has a Corporate Auditors Liaison Committee, which holds meetings attended on a voluntary basis for coordination and cooperation among Corporate Auditors. As a general rule, Corporate Auditors meet once a month at the Corporate Auditors Liaison Committee to discuss and agree on important matters concerning audits such as audit plans and the like. As of the end of June 2015, MCC has four Corporate Auditors, including one external auditor. Corporate Auditors, the Accounting Auditor and Audit Office cooperate closely when performing audits, exchanging opinions on their respective audit processes and audit results.

Meetings, etc.

The Company has a number of committees and meetings, including the Compliance Promotion Committee, the Risk Management Committee and the RC (Responsible Care) Promotion Meeting. Important matters are referred or reported to the Board of Directors or the Executive Management Committee.

Moreover, MCC employees form the Mitsubishi Chemical Labor Union Federation. Twice a year, the Company holds a central management conference for labor and management, giving both sides the opportunity to discuss management issues. Management headed by the President and union members led by the Labor Federation Central Executive Committee Chairman attend the conference and share their opinions candidly and honestly.

Management Structure

Internal Controls

Basic policy and status of system introduction

Mitsubishi Chemical Corporation (MCC) strives to strengthen and thoroughly implement its internal control system based on the basic policies decided by the Board of Directors. The Board of Directors inspects the implementation status of these basic policies at the end of every fiscal term and revises any specifics of the policies as needed.

Under APTSIS 15, the new five-year mid-term management plan which started in April 2011, Mitsubishi Chemical Holdings Corporation (MCHC) is promoting the development of strategies for priority areas in global operations, targeting an overseas sales ratio of at least 45%. As part of this, MCHC established wholly owned subsidiaries, setting up Mitsubishi Chemical Holdings America, Inc. (MCHA) in the United States in November 2010, Mitsubishi Chemical Holdings (Beijing) Co., Ltd. (MCHB) in China in January 2011, and Mitsubishi Chemical Holdings Europe GmbH (MCHE) in Europe in November 2012. In this manner, every effort is being made to build risk management and compliance structures, and to develop and strengthen integrated management structures for each area that encompasses a broad range of activities, including the management, supervision and guidance of internal audit structures.

Coordinating with MCHC's subsidiaries in each area, MCC is working hard to further bolster its internal control initiatives taking into consideration the local conditions of each Group company.

Taking into account the results of past evaluations of internal control system implementation and operating status, the Company will continue to conduct these evaluations with the aim of making them more efficient and effective and to further improve internal control systems and standardize procedures to raise procedural efficiency and promote rationalization.

Management Structure

Risk Management

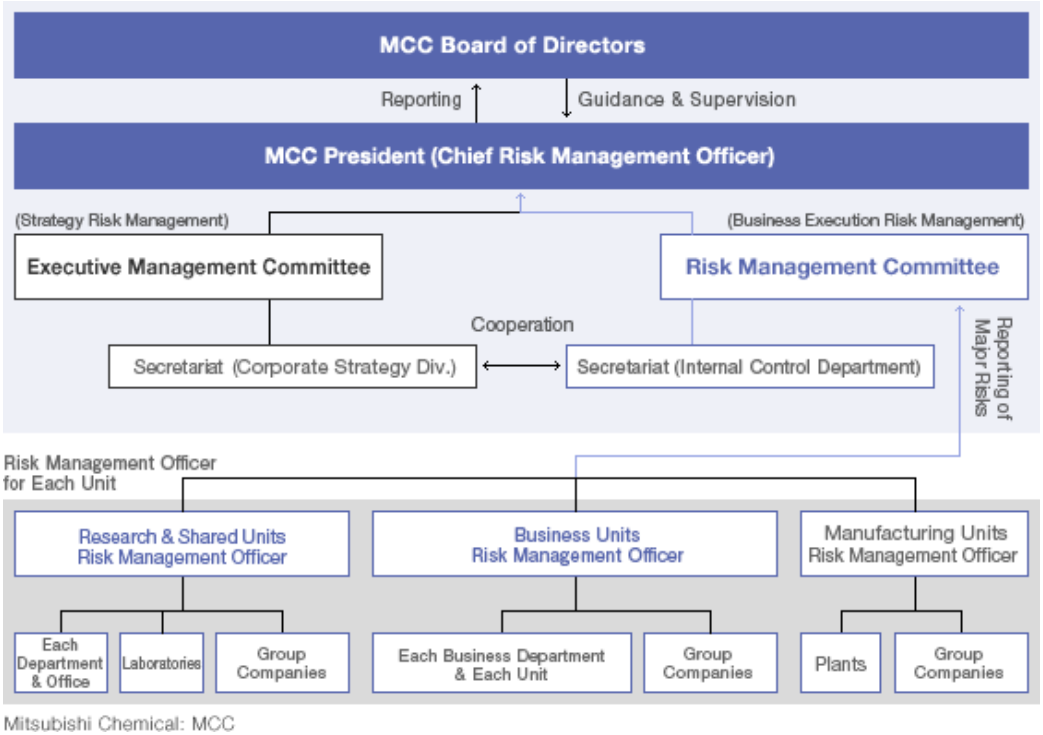
Policy Basic policy

The Mitsubishi Chemical (MCC) Group conducts business and operations based on the Mitsubishi Chemical Holdings (MCHC) Risk Management Policy. The MCC Group always accurately recognizes and evaluates risks that could have a significant impact on the Group, responds to risks appropriately, and acts fundamentally to minimize the impact of the risks on society and the MCC Group, including stakeholders.

Policy Risk management structures

The MCC Group has set up a risk management structure headed by the President as the Chief Risk Management Officer. The Chief Risk Management Officer develops the risk management system of the MCC Group and works to ensure that it operates and manages risk appropriately and smoothly. Meanwhile, the officers in charge of each of business, research, technology, sales, corporate divisions and others, develop and operate the risk management systems of their assigned divisions or the MCC Group companies, and provide them with guidance and oversee their risk management. The Risk Management Committee, established to support the Chief Risk Management Officer as a supplementary decision-making organ, meets to regularly confirm the operations of the risk management system of the MCC Group, and deliberates on important matters relating to the development and operation of the risk management system, of management objectives as regards grave risks, risk countermeasures, and other matters. The Risk Management Committee regularly reports to the MCC Board of Directors and the MCHC Chief Risk Management Officer regarding the operation status of the risk management system, including its response to grave risks facing the Group. The Risk Management Committee also monitors the risk management systems at each MCC Group company in order to share any necessary information laterally with other similar Group companies concerning risks that it discovers, and its responses to these.

Risk Management Structure of the MCC Group



Mitsubishi Chemical: MCC

Policy Identification of grave risks

At least once a year, each Mitsubishi Chemical Corporation (MCC) business division and each MCC Group company identifies and assesses the newly identified and continued risks it is facing, formulates risk countermeasures and responds to them after assigning an order of priority.

Risks are identified in three categories: external risks from sources like natural disasters, market trends and legal and regulatory changes; business process risks from sources such as production, financing, and marketing activities; and internal risks from sources like governance and human resource factors. Each risk is then assessed in terms of its degree of social impact, for example, economic loss, human loss, or decline in public trust, and of its frequency, and these assessments are reflected in the risk countermeasures.

In addition, since fiscal 2010, priority risks that are deemed to require attention from a management perspective or in light of changing social conditions are being confirmed and verified for their content and countermeasures by the Risk Management Committee.

In fiscal 2014, among those risks that were identified, as risks that were shared throughout the Company, we addressed on a priority basis safety risks at the time of production and transport of chemical products, business continuity risks for key products, risks related to serious compliance violations and overseas business development, and information management risks. Moreover, while collaborating with MCHC, we channeled our energies toward responding to overseas emergencies, maintaining information security management systems, strengthening internal controls in sales divisions in light of international trends concerning corruption and antitrust laws, and constructing a business continuity management system. Furthermore, the status of implementation was reported to MCHC.

In fiscal 2015, we will continue to identify grave risks while evaluating those risks that need to be addressed on a priority basis from the view point of social risks that reflect the changing social situation. We will more closely monitor these risks in cooperation with the divisions in charge.

Policy Formulating and putting into effect a Business Continuity Management Systems (BCMS)

MCC took steps to formulate a Business Continuity Plan (BCP) to minimize the impact on its customers and business partners while ensuring ongoing business and a quick restoration of operations in the unlikely event of a natural disaster or a major accident.

Specifically, we drew up a countermeasures manual to minimize damage by an earthquake with its epicenter in the Tokyo metropolitan area, in which social concern is growing, or a new infectious disease, and formulated BCPs to enable departments to continue important operations during such crises. Moreover, based on the lessons we learned from the Great East Japan Earthquake in March 2011 about systems to confirm employees' safety and to enable communication, we are overhauling our BCPs. Among work that the head office ordinarily performs, we are investigating alternative arrangements for the continuation of important business matters and the review of BCP to maintain and continue key product businesses, even in the event that our head office suffers an earthquake with its epicenter in the Tokyo metropolitan area or Nankai Trough as is predicted. Currently, we are developing a Companywide system based on the MCC Group's BCMS Manual and derived from ISO 22301, the international standard for Business Continuity Management Systems (BCMS). We are moving ahead with building a system that will fulfill our social responsibilities to supply key products that have a major impact on society.

Looking ahead, the MCC Group will operate even stronger BCMSs by conducting inspections through training and other means.

Management Structure Compliance

Recognizing "Compliance" (compliance with laws and corporate ethics) as fundamental to business survival, the Mitsubishi Chemical (MCC) Group is working to strengthen compliance as one of our top priority management issues.

Accordingly, the MCC Group has in place a Compliance Promotion Program that comprises among other things basic regulations concerning compliance, structures for compliance promotion, education and training programs, auditing and monitoring systems as well as an employee consultation and reporting hotline. Based on this program, the MCC Group works to ensure appropriate operations and management.

Our goal is to live up to the expectations of the relevant stakeholders by maintaining a strong sense of corporate social responsibility, ensuring strict compliance in our day-to-day operations, and providing valuable goods and services to society.

Compliance Promotion Program

Basic Regulations	Mitsubishi Chemical Holdings Group Charter of Corporate Behavior
	Mitsubishi Chemical Holdings Group Compliance Promotion Policy
	MCC Group Compliance Promotion Policy
Structures for Promotion	Chief Compliance Officer (CCO)
	MCC Compliance Promotion Committee
	Chief Promotion Officer, Promotion Leader, Promotion Officer
Education and training programs	A variety of compliance seminars and periodic interviews, etc.
Auditing and monitoring systems	Compliance audits, Employee surveys, etc.
Employee hotline	Advice and hotline for employees
Response to breaches	Investigation of each cause, the handling of each issue in-house, internal disclosure, efforts to put in place measures aimed at preventing a recurrence

Regular inspection by MCC Compliance Promotion Committee

Mitsubishi Chemical Corporation: MCC

Fostering compliance awareness in Japan and overseas

We continue to conduct a variety of training and education activities in Japan and overseas in order to further instill awareness of compliance throughout the Company.

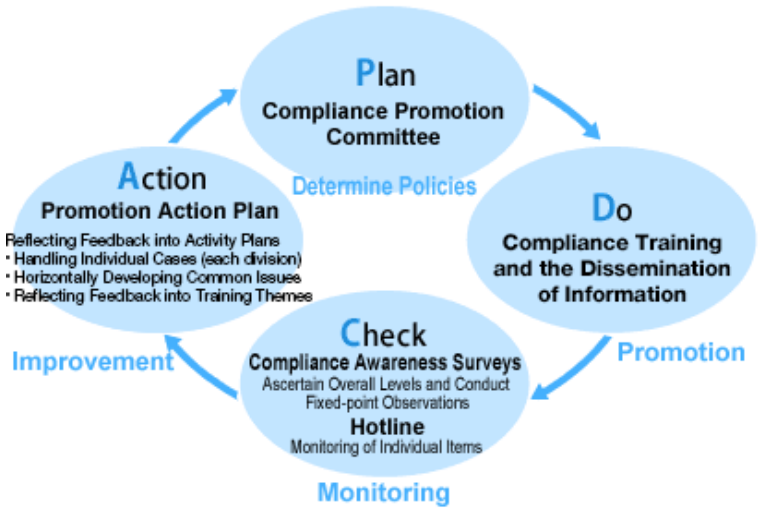
In fiscal 2014, we took steps to upgrade and bolster various training programs in accordance with guidelines determined by the Compliance Promotion Committee.
In Japan, we conducted training for compliance promotion officers including Group companies as well as compliance promotion leaders that allowed participants think anew about the importance and difficulties of compliance. In addition to compliance online training for the benefit of all employees, we placed particular attention to newly implemented online training for

A seminar in India

management employees.
From an overseas perspective, steps were taken to coordinate with Mitsubishi Chemical Holdings Corporation (MCHC) and we conducted training and education in countries around the world. For example, local training in Chinese and English was undertaken while working closely with the compliance promotion leaders and promotion officers of the Group companies in Taiwan, Singapore, Thailand, Indonesia, and India, with 476 managerial-level employees attending training sessions from a total of 20 Group companies. In particular in fiscal 2014, we aimed to improve awareness and knowledge based on the main themes of antitrust laws and antibribery measures. In China, we conducted local training for compliance officers at Group companies.
Moreover, we undertook Internet training for the 17 Group companies and 1,156 employees in the Asia/Oceania region.
Furthermore, in fiscal 2014 we put in place a consultation and reporting system by establishing an external hotline for Group companies in Taiwan. Going forward, we plan to gradually expand this environment to the other Group companies in China and southeast Asia.

In addition to these initiatives, to check the development of a compliance culture, we conducted our compliance perception survey among employees of MCC and domestic group companies, receiving responses from some 20,500 employees. Similarly, we conducted our compliance perception survey among employees of the overseas Group companies, using questionnaires prepared in Chinese, Indonesian, Thai and English, and received replies from some 2,470 employees. A detailed analysis was undertaken of the results of surveys and questionnaires. This analysis is fed back to all those concerned and the details reflected in training program themes going forward to instill awareness of compliance.
Looking at continued compliance initiatives until now, we believe that "improvement of knowledge and awareness," "a working environment with good communication," and "the management of superiors" are important for firmly establishing compliance. Accordingly, we will continue to further strengthening our training and other efforts in this area.

The PDCA Flow



Management Structure Basic Regulations

The Mitsubishi Chemical Group works to promote compliance based on Mitsubishi Chemical Holdings Group Charter of Corporate Behavior, a compliance regulation shared by members of the Mitsubishi Chemical Holdings Group. Overseas, the Mitsubishi Chemical Group is translating into local languages the Mitsubishi Chemical Holdings Group Charter of Corporate Behavior, which serves as the basic regulations, and the codes of conduct compatible with individual countries' laws and social norms.

Mitsubishi Chemical Holdings Group Charter of Corporate Behavior

Based on our Group philosophy, "Good Chemistry for Tomorrow-Creating better relationships among people, society, and our planet," we shall contribute to the realization of *KAITEKI* through our corporate activities. The term *KAITEKI* signifies achieving true sustainability where we create comfort for people as well as for society and the Earth.
To this end, we shall act based on the concept of MOS (Management of Sustainability) with sound ethics and good common sense in every aspect of our corporate activities as outlined below, to ensure sustained development as a corporate group that engenders society's trust.

Awareness and Responsibility

We shall contribute to the realization of *KAITEKI* through our business with a keen sense of corporate social responsibility, based on the fundamental understanding that the foundation of our corporate activities is society's trust and confidence in us.

Accountability and Transparency

We shall, recognizing the importance of accountability in corporate activities, preserve transparency in such activities, disclose information appropriately, and always maintain a stance of openness, both internally and externally.

Legal Compliance and Fairness, Equitability, and Integrity

We shall comply with laws and international standards and shall hold ourselves to the highest ethical conduct at all times. In addition, we shall always adopt an attitude of fairness, equitability, and integrity towards customers, business partners, shareholders, government agencies, local communities, and other stakeholders. This attitude shall also apply to our dealings with each other.

Valuing Stakeholders

We shall respect and communicate closely with all stakeholders including customers, suppliers, shareholders, business partners, government agencies, local communities, and employees, and consider the outcomes of such communication in our corporate activities.

Respecting Human Rights

We shall respect the dignity and rights of all people, and shall not discriminate against people unfairly on the basis of race, sex, religion or other protected status. We shall also expect our suppliers and other contractors to refrain from any infringement of human dignity and rights or discriminatory practices.

Employment and Labor

We shall not engage in any form of forced, compulsory, or child labor, and shall require our suppliers and other contractors to adhere to the same standards. Mitsubishi Chemical Holdings Group managers at all levels shall respect human diversity and create working environments where employees can exercise their abilities to the utmost in safe and healthy settings, in order to make optimal use of human resources. Managers shall build sound relations with employees through close dialogue, and shall respect employees' rights, including freedom of association and the right to collective bargaining.

Environment and Safety

We shall strive to reduce environmental impact and protect the environment and ecosystems in our operations, in addition to supplying environmentally friendly products and services. Recognizing that the health and safety of our employees and communities in which we do business form the foundation for the very existence of our company and that we have a corporate social responsibility to assure the health and safety of others, we shall continue to ensure safe business activities.

Fair Business Practices

We shall conduct business fairly and sincerely, adhering to ethical principles and refraining from unfair trade practices and any form of bribery or corruption, to contribute to sound social and economic development through fair competition in the market. We shall refuse to work with any group, organization or individual engaged in unlawful activities, and under no circumstances shall we have any relations with anti-social influences.

Customer Satisfaction

We shall constantly strive to satisfy our customers by keeping the promises made in contracts with them, doing our utmost to ensure the safety and quality of the products and services we supply, and engaging in dialogue and R&D.

Information Management

We shall, in the course of our corporate activities, maintain appropriate records and make reports as required by law and regulation. We shall manage information carefully to prevent leakage of confidential data relating to customers, business partners, or our own business.

Science and Technology

We shall advance R&D by bringing together outstanding researchers from Japan and overseas, and contribute to the realization of *KAITEKI* through innovation. We shall recognize the importance of our own and others' intellectual property rights and respect such rights.

Community Involvement

We shall contribute broadly to society through our businesses. In addition, we shall respond to the desires and expectations of local communities by enhancing our understanding of their cultures and customs and acting as a good corporate citizen.

Shared Standards

Mitsubishi Chemical Holdings Group managers shall recognize their responsibility to embody the spirit of this charter and shall ensure that employees are fully aware of its content. We shall expect our suppliers and other business partners to share all the standards set out in this charter, including but not limited to standards relating to human rights, employment, and labor.

<Appendix>

1. This charter shall apply to all members of the following companies:
   (1) Mitsubishi Chemical Holdings Corporation
   (2) Mitsubishi Chemical Holdings Corporation subsidiaries (the juridical person, the management of which is controlled, or, the majority of all votes in which are owned, directly or indirectly, by Mitsubishi Chemical Holdings Corporation)
   (3) Companies where Mitsubishi Chemical Holdings Corporation is otherwise deemed to directly or indirectly take a leadership role on the grounds of its shareholding ratio, involvement in personnel management, etc.
2. This charter shall be revised or repealed by resolution of the Mitsubishi Chemical Holdings Corporation board of directors. Note, however, that minor changes may be decided by the president of Mitsubishi Chemical Holdings Corporation.

Management Structure Promotional Structures

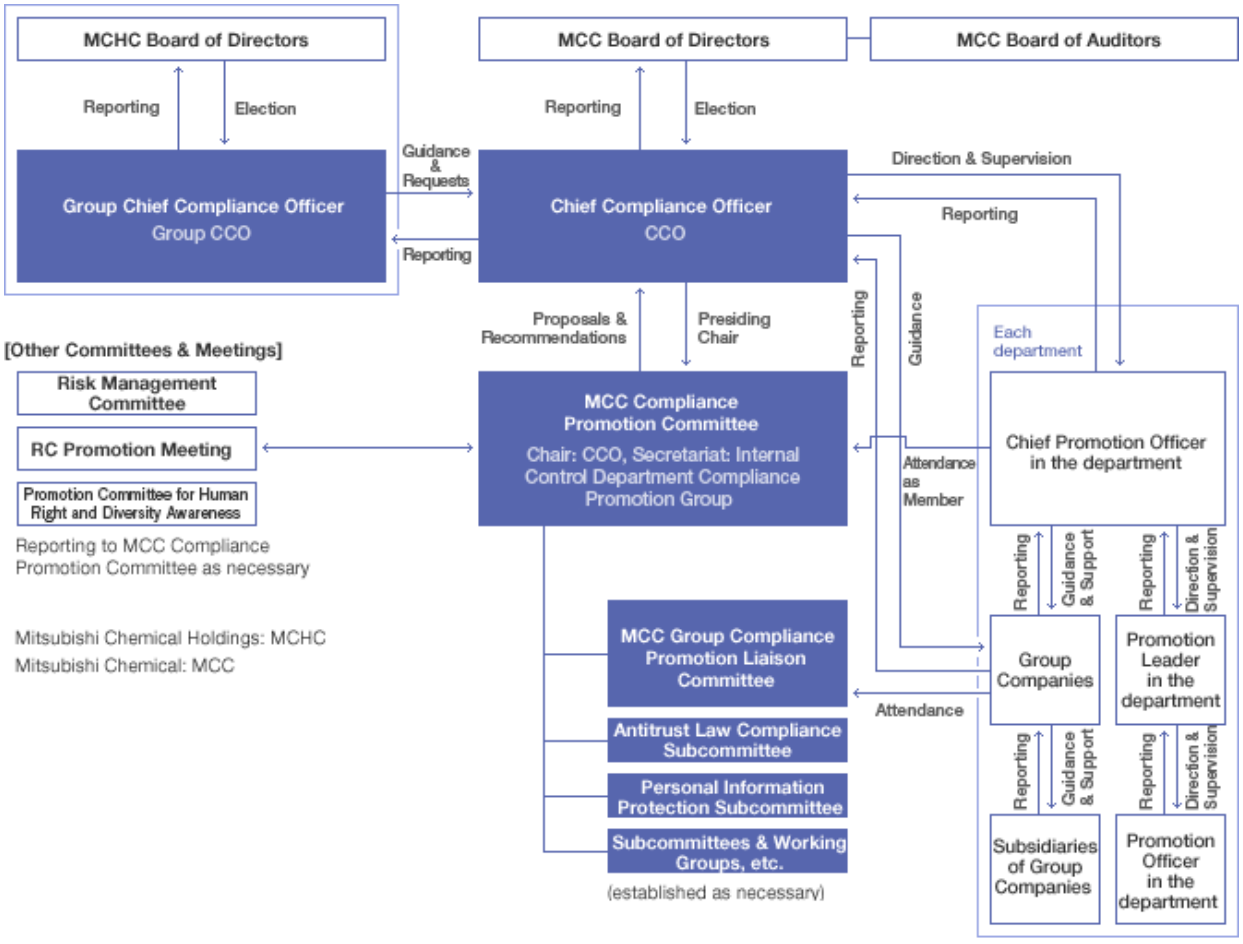
The Board of Directors of Mitsubishi Chemical Corporation (MCC) appoints the Chief Compliance Officer (CCO) for the MCC Group.

The CCO is appointed through a resolution by the MCC Board of Directors. The CCO has the authority to direct and supervise MCC departments and Group companies in matters relating to compliance, and chairs the Compliance Promotion Committee. The CCO also reports to the Board of Directors and Mitsubishi Chemical Holdings Corporation's (MCHC) CCO on the status of compliance and important issues faced by the MCC Group.

The Compliance Promotion Committee deliberates on matters such as the basic policy for development and operation of the MCC Group's Compliance Promotion Program and the performance of the program. It also makes necessary proposals and recommendations to the CCO. Chief promotion officers, promotion leaders, and promotion officers who are responsible for promoting compliance in each department on a daily basis are also appointed to every department. Their foremost mission is to ensure and promote compliance in their own departments.

Overseas, we are striving together with MCHC to develop and strengthen our compliance promotion structures and enhance related training programs in collaboration with Mitsubishi Chemical Holdings America Inc. (MCHA) in the U.S., Mitsubishi Chemical Europe GmbH. (MCHE) in Europe, Mitsubishi Chemical Holdings (Beijing) Co., Ltd. (MCHB) in China, and the Group companies designated as compliance promotion leaders by MCHC in Asia excluding China.

Compliance Promotional Structures of the Mitsubishi Chemical Group



Management Structure

Monitoring & Reporting

Auditing & Monitoring structures

Mitsubishi Chemical Corporation (MCC) gains an understanding of the status of compliance at individual workplaces by conducting an annual Control Self-Assessment (CSA), targeting each of MCC's departments, offices, branches, branch offices, and Group companies.

The MCC Group conducts an annual Employee Perception Survey and analyzes compliance-related items to ascertain the current situation and utilize initiating improvements.

Employees' hotline

The MCC Group has established an employees' hotline, providing employees with a way to contact the Internal Control Promotion Department or an outside lawyer to seek advice or report possible compliance violations. The Group has since been working to ensure that the hotline is operated properly and employees know about it.

Anyone seeking advice or reporting a possible compliance violation is assured that the information they provide will be treated confidentially, they will not be subjected to disadvantageous treatment, and their privacy and human rights will be protected. An investigative team acts upon the information provided. Any compliance problems identified are dealt with and resolved promptly under the direction of the CCO. In fiscal 2014, the hotline received 32 reports and inquiries, of which six were personnel-related, 12 were working environment-related, 4 were legislation-related and 10 related to other matters.

MCC is committed to making the hotline user-friendly, using a toll-free hotline number and following up with people if necessary for the purpose of checking if they have been properly protected.

Response to compliance violations

In the event of a compliance violation, an appropriate initial response is made to rectify or otherwise deal with the situation. In addition, an investigation to determine the cause of the violation is carried out and efforts to prevent a recurrence are made. Any employee who has committed a compliance violation is dealt with as necessary, possibly with disciplinary action in accordance with the Employee Work Regulations or other relevant regulations of the Group company to which the employee belongs. If it is deemed necessary to prevent a recurrence of the compliance violation, the CCO may disclose facts of cases and details of the disciplinary action within the Group, on condition that privacy and human rights are taken into consideration.

Management Structure

Intellectual Property Management

Intellectual property protection and prevention of infringements

Mitsubishi Chemical Corporation (MCC) will endeavor to develop innovative technologies, products and services and obtain intellectual property rights and commercialize them. In this process, we are taking steps to avoid infringing on intellectual property owned by other parties, including patents, utility models, designs, trademarks and copyrights, while legally protecting MCC's intellectual property.

To Intellectual Property page

Responsible Care (RC) Activities

Policy Basic approach

In our role as a chemical corporation group with established business bases within Japan and abroad and supplying diverse materials, products and systems to a wide range of industries, stably supplying products and ensuring their quality and safety, offering safe and hygienic work environments and promoting businesses with lower environmental load are among our most important social responsibilities.

Based on this philosophy, the Mitsubishi Chemical Group has participated in Responsible Care (RC) activities, which are self-initiated activities by the chemical industry for ensuring environmental conservation, health, and safety, since the foundation of the Japan Responsible Care Council in 1995. The five mainstay activities are process safety and disaster prevention, occupational safety and health, environmental preservation, quality assurance and chemical safety. By conducting activities that conform to the Mitsubishi Chemical Group RC Promotion Policy, we aim to build relations based on trust with the public and help in developing a sustainable society.

Mitsubishi Chemical Group RC Promotion Policy

1. **Environment and safety are core focuses of our business activities** Find out more
2. **Committed to customer confidence and quality assurance** Find out more
3. **Targeting zero accidents and workplace injuries** Find out more
4. **Working to minimize waste and harmful chemical substance emissions** Find out more
5. **Working to conserve resources and energy** Find out more
6. **Developing technologies and products that contribute to the environment and safety** Find out more
7. **Working to strengthen our public reputation** Find out more

Mitsubishi Chemical Group Companies Promoting RC Activities*

○ denotes subsidiaries of Mitsubishi Chemical as stipulated by the Japanese Companies Act, for which Group performance data are collected and published on the Social Responsibility page

● denotes (overseas) subsidiaries of Mitsubishi Chemical as stipulated by the Japanese Companies Act, for which Group performance data are collected on the Social Responsibility page

Unmarked companies indicate those outside the scope of Group performance data collection on the Social Responsibility page.

* To further ensure promotion of Responsible Care (RC) activities, among domestic and overseas Mitsubishi Chemical Group companies, principally companies with operating divisions that handle chemical products participate as Mitsubishi Chemical Group Companies Promoting RC Activities.

Performance Products domain

○Arkema Yoshitomi, Ltd.
○Japan Coating Resin Corporation
○Shinryo Corporation
○Nippon Kasei Chemical Co., Ltd.
○The Nippon Synthetic Chemical Industry Co., Ltd.
○Mitsubishi Chemical Analytech Co., Ltd.
○Mitsubishi-Kagaku Foods Corporation
○Mitsubishi Kagaku Media Co., Ltd.
●Changshu MC Ionic Solutions CN Co., Ltd.
●MC Ionic Solutions UK, Ltd.
●MC Ionic Solutions US, Inc.
●Mitsubishi Chemical Infonics Pte Ltd.
●Mitsubishi Kagaku Imaging Corporation
●Qingdao Anode Kasei Co., Ltd.
●Tai Young Chemical Co., Ltd.
●Tai Young High Tech Co., Ltd.
●Resindion SRI

Industrial Materials domain

○Echizen Polymer Co., Ltd.
○M Commerce Co., Ltd.
Kashima-Kita Electric Power Corporation
KASHIMA Power Corporation
○The Kansai Coke and Chemicals Co., Ltd.
J-Plus Co., Ltd.
TM Air Co., Ltd.
○Japan Polyethylene Corporation
○Japan Polychem Corporation
○Japan Polypropylene Corporation
○Japan Unipet Co., Ltd.
Mitsubishi Engineering-Plastics Corporation
YUPO Corporation
○RHOMBIC CORPORATION
●Beijing Ju-Ling-Yan Plastic Co., Ltd.
●MCC Advanced Polymers (Ningbo) Co., Ltd.
●Mitsubishi Chemical India Private Ltd.
●Pt. Mitsubishi Chemical Indonesia
●Mitsubishi Chemical Performance Polymers, Inc.
●Mitsubishi Chemical Performance Polymers (China) Co., Ltd.
●Mitsubishi Chemical Performance Polymers (Thailand) Co., Ltd.
●Mitsubishi Chemical Polimeros de Desempenho Ltda.
●Ningbo Mitsubishi Chemical Co., Ltd.
●MCPP (Changshu) Co., Ltd
Sam Nam Petrochemical Co., Ltd.
Sam Yang Kasei Co., Ltd.

Others

○Mitsubishi Chemical Engineering Corporation
○Mitsubishi Chemical Group Science and Technology Research Center, Inc.
○Mitsubishi Chemical High-Technica Corporation
○Mitsubishi Chemical Logistics Corporation

Responsible Care Activities **RC Management**

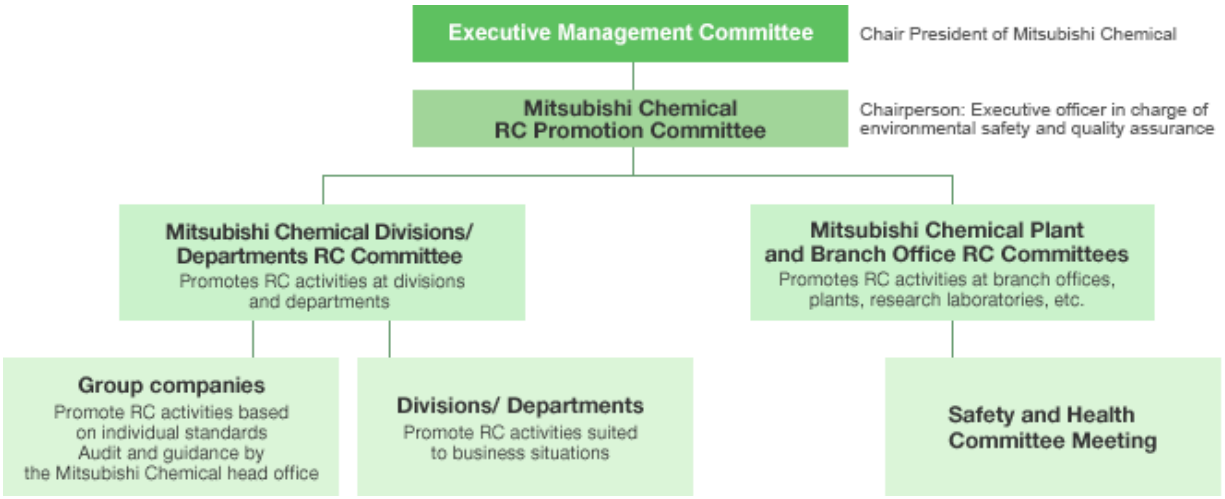
Policy Responsible Care (RC) activity promotion organization

The Responsible Care action plans for Mitsubishi Chemical Corporation (MCC) and the MCC Group are deliberated on and decided in the Executive Management Committee chaired by the MCC President and attended by the executive officers in charge of manufacturing, research, operations and common divisions every year. The draft Responsible Care action plans for the Executive Management Committee agenda are deliberated on and decided in the Mitsubishi Chemical RC Promotion Committee, chaired by an executive officer in charge of environmental safety and quality assurance, with those attending meetings including heads of manufacturing, research, operations and common divisions. Finally, on the basis of the Responsible Care action plan decided by the Executive Management Committee, the respective MCC divisions and Group companies draw up their own action plans for engaging in Responsible Care initiatives, tailored to their operational specifics, industries and business segments.

This framework for promoting Responsible Care practices is used by the MCC Group and MCC in their efforts to check that Plan–Do–Check–Act (PDCA) cycle procedures are applied to Responsible Care initiatives and in ensuring that improvements are implemented as needed.

RC activities of the Mitsubishi Chemical Group

● **RC promotion organization at Mitsubishi Chemical and the Mitsubishi Chemical Group**



Fiscal 2014 Mitsubishi Chemical Corporation Group Responsible Care action plan

Security, safety, environmental protection, and quality assurance

Continuation of RC activities to eliminate weaknesses in each workplace

1. The design of measures to prevent recurrence of accidents and serious trouble (their effectiveness and acceptability)
2. Measures to prevent accidents and serious trouble beforehand, and their firm establishment in the corporate culture
3. Raising the awareness of employees as professionals in the front line workplaces (establish awareness of responsible actions)

Chemicals management

Thorough implementation of chemicals management based on risk assessments

1. Meeting the requirements of chemical substance regulations and strengthening management of chemical substances (strengthen overseas response)
2. Strengthening of information management systems (respond to laws, make information management more efficient)
3. Strengthening of risk assessments and information transmission (promote management of risk base)

Activities and Results

RC audit

Mitsubishi Chemical Corporation (MCC) performs RC audits of the business locations and plants of MCC and the MCC Group geared toward confirming the progress made by RC activities and ensuring their ongoing improvement.

In fiscal 2014, MCC conducted Responsible Care audits at seven business locations. The auditors examined accidents or trouble that had occurred since the previous audit to confirm the status of implementation of measures to prevent their recurrence and prevent accidents or trouble occurring beforehand and to confirm compliance with laws and regulations, with their focus on whether or not the PDCA cycle had been applied to the fiscal year policy for RC activities: "Promotion of RC activities to eliminate weaknesses in each workplace."
As a result of the audits, multiple cases in which the CA (check, act) part of the PDCA cycle was not implemented

sufficiently were found so the auditors gave instructions for improvement in each individual case.
Furthermore, at each of the business locations plenary discussions were held by the heads of all of the manufacturing sections. In the discussions "What action does the manufacturing division manager take to enhance equipment management?" was chosen as the common theme for all of the business locations, and the participants held lively exchanges of views about their daily innovations to deal with this issue and any difficulties they were facing. A document summarizing the results of the discussions at all of the business locations was distributed to all of the people who attended the discussions and put to use for running the sections.

In fiscal 2014 audits of the MCC Group companies were conducted at eight companies, including three overseas companies. The auditors confirmed whether or not the PDCA cycle had been applied to "Promotion of RC activities to eliminate weaknesses in each workplace" and also carried out confirmations regarding the status of development and application of rules and standards as well as their status of implementation, the status of education and training, the status of communication in the workplace, and other matters. As a result of the audits, cases in which the CA part of the PDCA cycle was not implemented sufficiently and cases in which rules and standards were not applied sufficiently were found so the auditors gave instructions for improvement in each individual case.

Through these RC audits, the MCC Group is aiming to improve the level of its RC activities.

Responsible Care Activities Process Safety and Disaster Prevention

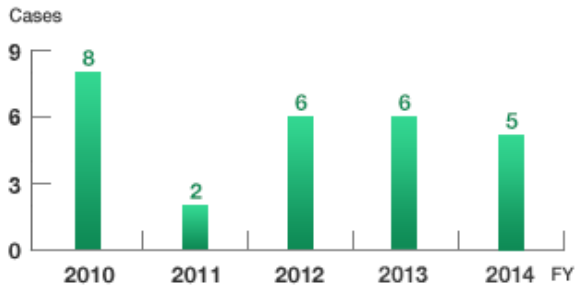
Policy Activities targeting zero facility-related accidents

MOS Indices C-3: Earn recognition of corporate trust ＞Find out more

Having established the policy that securing the environment and safety is the underlying principle of its business activities, the Mitsubishi Chemical (MCC) Group pursues disaster prevention initiatives as one of its five Responsible Care mainstay activities undertaken based on our Corporate Philosophy, "Good Chemistry for Tomorrow." In fiscal 2014, we engaged in process safety and disaster prevention efforts under our goal of zero serious facility-related accidents. These efforts were tailored to the distinctive characteristics of the work place and had as their top priority the institution of measures to prevent the recurrence of accidents and measures to prevent accidents.

Initiatives we pursued to prevent the recurrence of accidents included using accident case studies of not only MCC, but of other companies, as lessons and reconfirming whether or not preventative measures taken in the past had remained effective without erosion of efficacy. To prevent the occurrence of accidents, we undertook a number of initiatives such as conducting safety assessments before changing equipment and updating operating requirements and implementing risk assessment activities. As for the implementation status of these initiatives, we are conducting Responsible Care audits and making necessary improvements. We tirelessly carried out these initiatives, but failed to reduce the number of accidents in the MCC Group as a whole in fiscal 2014, thus the results were disappointing. In the future, to achieve these goals, we will actively work to further strengthen the implementation of steady measures to deepen safety review activities and clarify accident causes.

Number of facility-related accidents (MCC Group)



* Minor accidents are excluded

Activities and Achievements

Implementation of risk assessment in manufacturing

The Mitsubishi Chemical Group identifies potential risk factors in the manufacturing process (including manufacturing equipment, manufacturing methods, and operation methods) and takes steps to prevent their occurrence (manufacturing process risk assessment) through necessary countermeasures (risk reduction). Manufacturing process risk assessment is broadly divided into Safety Assessment (SA), which is implemented when beginning the manufacture of new products and when improving and upgrading existing manufacturing processes, and Safety Review (SR), which is the full inspection of existing manufacturing processes, safety reassessment, and confirmation of countermeasure effectiveness.

When beginning the manufacture of new products and when changing the chemical substances being used, the manufacturing equipment or the manufacturing order, SA is performed in advance, safety is evaluated, and necessary countermeasures are taken. The SA is performed at the planning stage and before the start of operation milestones and also after the start of operation. In the SA performed after starting operation, we evaluate whether safe operation has been achieved.

On the other hand, the SR evaluates safety by reconfirming the operating conditions such as the physical properties of substances being used, temperature, pressure and other factors, the control methods, and safety measures. Equipment operators familiar with everyday operation, staff, and those in charge of non-manufacturing divisions participate in the assessment and exchange views from a wide range of perspectives. Moreover, they assume not only a normal operating state, but various scenarios, such as variable states including startup and shutdown, as well as power failure, and then assess safety.

Activities and Achievements

System for enhancing manufacturing process risk assessment

To enhance SA and SR, Mitsubishi Chemical Corporation (MCC) trains employees to enable them to understand risk assessment development and all manufacturing processes. The main topics are as follows.

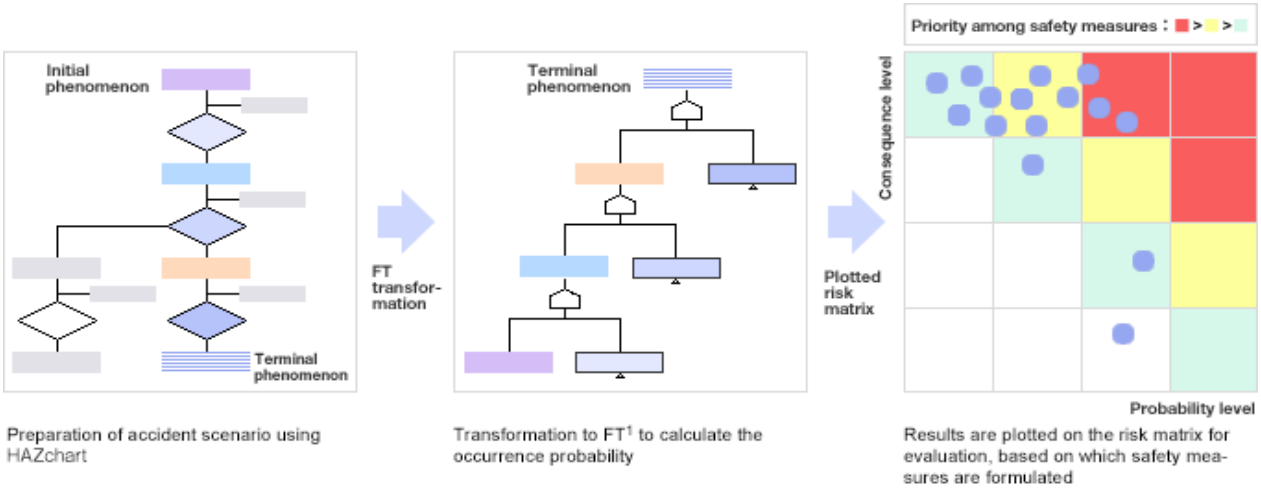
Application of manufacturing process risk assessment methods

One of the risk evaluation methods used for manufacturing process used at MCC is HAZchart analysis, developed jointly by MCC and Mitsubishi Research Institute, Inc. This is a method used to evaluate the magnitude of manufacturing process risk based on quantitative data such as the probability of machinery failure and incorrect operation occurring and employed mainly by manufacturing process designers and those in charge of plant operations and workplace safety. It facilitates everything from accident scenario formulation to the evaluation of quantitative risk for manufacturing processes, allows worst-case scenarios to be easily simulated, enables shared factor events to be easily handled, and offers a host of other features. By using supporting software (PHA Organizer), anyone can easily evaluate manufacturing process risks. HAZchart analysis is used at MCC in times of large-scale reform or establishment of plants with potential risks such as fire, explosion or leakage of toxic substances, and also at times of SR at existing plants.

Today, we offer on-the-job training (OJT) using HAZchart analysis to develop engineers capable of performing quantitative risk assessment of manufacturing processes in all of our plants.

In addition, this software has been released by Ryoka Systems Inc. under the name "PHA Organizer Ver. 3." Looking forward, we intend to further popularize understanding of HAZchart analysis among companies throughout the entire MCC Group.

● **Flow of HAZchart analysis**



*1 Fault tree (FT): Also referred to as a failure tree diagram, this is used for analyzing the causal relationship concerning accidents in systems and calculating occurrence probability.

Supporting SA and SR with SR instructors

In fiscal 2003, MCC launched an SR instructor system and took steps to improve manufacturing process risk assessment.

SR instructors are former employees with specialized experience and knowledge in manufacturing processes and safety countermeasures, as well as senior engineers. SR instructors attend the SAs and SRs of plants they are responsible for supporting the manufacturing process risk assessments of plants by providing advice and guidance from an expert's point of view.

Implementation of process safety education

In fiscal 2009, all MCC plants started teaching process safety education. The objective of process safety education is to systematically educate mid-career technical staff, who are the core of manufacturing process risk assessment (SA and SR), in matters that form the basis of process safety. Subjects taught include the risk of substances and reactions, such as ignition and explosion, runaway reaction caused by thermal decomposition and exothermic reaction, as well as countermeasures for greater safety, and risk management. Thus far, about 850 employees have received this training, which is useful in practical operations. At present, not only MCC employees are being taught, but we have expanded beyond this to include Group company employees.

The training will continue into the future with the aim of improving the capabilities of working-level employees.

Training process safety engineers

We train staff called "CPSEs" (Chemical Process Safety Engineers) to understand the basis and principle of process risks and to be able to practically instruct SA and SR. In the training of a practical nature, for example, we establish challenging themes for each plant and training is conducted in an on-the-job-training (OJT) seminar format so they can simulate and understand problem solving. Examples of challenging themes include 1) an investigation of the cause of past accidents and problems, 2) a safety review in equipment changes, and 3) an actual investigation of plant problems. CPSE training was begun at the MCC Yokkaichi Plant in 2009 and has been expanded in fiscal 2013 to include other plants.

A report briefing from the initial intake of CPSE training students at the Kurosaki Plant

Plant topics

MCC Mizushima plant

At the Mizushima Plant, regular reviews of risk assessments of the manufacturing process are carried out and when changes are made to the process. SA will confirm the safety of the manufacturing process to minimize risks through a quantitative assessment using items like HAZcharts. We strive to cultivate Chemical Process Safety Engineers (CPSE), who play an important role in discerning the principles and quantitatively analyzing processing hazards.

A CPSE receives a certificate of authorization from the plant CPSE training instructor

1) Manufacturing Process Risk Assessment
Existing manufacturing process safety begins with organizing into lists each event (called "hazards") that could be a possible cause or factor behind disasters such as fires, explosions, leakages of hazardous substances, or machinery breakage in each manufacturing plant process (this includes startup and shutdown). The risk in each process is calculated and assessed based on the magnitude of the impact if a disaster actually occurs and the probability of a disaster occurring. In doing so, large risks are quantitatively assessed using an analysis method such as a HAZchart analysis and measures taken to reduce risks. Further, by adding internal and external accident information to the risk factors, we can always make the most up-to-date assessments.

2) Process Changes and SA at Irregular Times
On the other hand, when new manufacturing equipment is set up, and when changing the chemical substances, the manufacturing equipment or the manufacturing order, SA is performed and safety is assessed. In this assessment as well, it is particularly important to use a HAZchart to make a quantitative assessment and confirm safety. Regarding risk assessment of variable states other than startup and shutdown, a risk assessment that assumes the loss of all power was performed and effective countermeasures were considered. In the future, we will also perform risk assessments assuming that a worker has forgotten to perform an operation in more variable states and take necessary countermeasures to reduce risk.

3) CPSE Training
The Mizushima Plant holds its own training course for the purpose of providing a more advanced level of CPSE training. The features of this course is that it is deals with the theme of process safety in actual manufacturing workplaces, has lectures centered on rules and principles and is practical by providing solutions through discussions with instructors on matters related to the theme. Consequently, those selected to take part in the course are engineers who have undergone basic CPSE training or applied HAZchart training which emphasizes building scenarios based on more practical themes. A security technical review committee inside the plant examined the results of themes used as topics. Listeners provided opinions and an even further exploration made of reviewed contents. Then, in the end of the course, the participants put together a report to raise their skills. Finally, if the participant is seen to have reached a certain level, they are recognized as a CPSE and can go on to be active in risk assessment or SA.

Activities and Achievements

Disaster drill improvement

Mitsubishi Chemical Corporation (MCC) is working to improve disaster drills that are conducted at each plant. In the past, we conducted disaster drills in cooperation with fire departments, the police, city governments, and the special disaster prevention councils of industrial complex areas. However, to make the drill more practical, we conduct it assuming it will not be publicly announced in advance. At the same time, we take a creative approach that includes conducting the drill under the assumption that a disaster has struck at multiple locations.

Plant topics

MCC Kurosaki plant disaster-readiness drill based on the assumption of multiple accidents occurring simultaneously

It is important that the drill be conducted repeatedly on a routine basis to ensure a swift response in the unfortunate event of an accident. The Kurosaki Plant conducts a comprehensive disaster preparedness drill each year that assumes the leakage of a hazardous substance, the leakage of high pressure gas, seacoast disaster prevention, and a massive earthquake. If a massive earthquake occurs, there is a possibility of several accidents breaking out simultaneously across the plant. As a result, in November 2014, simultaneous disaster training was carried out with a scenario of a high pressure gas leak and that a hazardous item leak occurring in different production facility while the first leak was being dealt with.

(1) Dealing with a scenario of high pressure gas leak

(2) Dealing with a scenario of hazardous item leak at different equipment while the above initial leak is being dealt with

Accident-prevention drills focusing on logistics safety

Along with Mitsubishi Chemical Logistics Corporation, which handles the product logistics business, MCC also works to prevent accidents in logistics processes. As one initiative, accident prevention drills are conducted at least once a year at major logistics centers, assuming various logistics accidents. Issues revealed through the drills are addressed promptly in order to make improvements, thereby establishing organizations that can smoothly handle emergency situations.

Furthermore, Mitsubishi Chemical Logistics Corporation, a comprehensive logistics company, is enhancing RC training for its logistics business subcontractors. Together with its subcontractors, it is engaged in logistics accident prevention activities by educating them about the physical properties of the chemical products we offer, how to respond in time of leakage, horizontal deployment of case studies of accidents at other locations.

Drill scenario of leakage from a high pressure gas truck (response while wearing protective equipment)

Activities and Achievements

Use of past accident information

The Mitsubishi Chemical (MCC) Group collects its own accident information and those of other companies which help prevent recurrence and the occurrence of similar cases.

We review the causes and countermeasures of cases of MCC's and other companies' accident, work accident and other collected accident information and inspect and review those cases with high commonality and similarity that are expected to occur.

Activities and Achievements

Technical tradition

Mitsubishi Chemical (MCC) engages in the technical tradition of passing down the techniques and knowledge of senior employees to the next generation. This activity imparts knowledge to new employees through the opportunities afforded by day-to-day work and education and training. Techniques and knowledge sketched in the minds and in the notebooks of senior employees are written down in shared documents so they can benefit everyone.

These shared documents not only contain work procedures, but take into account the purpose and reason for the work (called "know-why"), such as work points. The form of the documentation varies depending on the characteristics of the workplace. The organization of these documents, with work points written down in work procedure manuals serving as short lessons, one to a page (called "one-point lesson sheets"), assembled as training material, and the way the documents are easy to use, saved as a sequence of files and in a database, are ingenious and make them helpful to new employees.

Activities and Achievements

Sharing of information needed in operation and equipment management

At Mitsubishi Chemical Corporation (MCC), employees involved in the operation management division in charge of plant operation, the equipment management division in charge of equipment maintenance, and the department in charge of design that is responsible for equipment design, share design-based information, operation data, inspection records and other information which is used in newly built and improved equipment, day-to-day operation, and the equipment maintenance plan.

Information sharing during equipment design

Of information about problems arising during day-to-day operation and equipment maintenance, items that are reflected in future design are organized in the database as maintenance prevention (MP) information (that improves equipment reliability). When building new manufacturing equipment and improving it, the division in charge of design designs the manufacturing capacity, operating conditions and the quality of materials jointly with the operation management division and the equipment management division. The operation management division and the equipment management and plant safety management divisions jointly conduct a safety assessment of the design results and take measures to reduce risk when necessary.

Information sharing during the start of operation

When the equipment is completed and before operation starts, the operation management division prepares the standard operating procedure (SOP) manual. At this time, we strive to incorporate the basis of the design in the SOP in the know-why form. The operation management division, and the equipment management division and plant safety management division conduct a safety assessment before the start of operation and take measures to reduce risk where necessary.

Sharing information after the start of operation

The equipment management division establishes the design maintenance policy and maintenance plan and carries out equipment maintenance including repair after the start of operation. The operation management division and the equipment management division share information such as inspection records, equipment maintenance results and operation status at the manufacturing maintenance communication meeting and the equipment management review. Particularly, at the equipment management review, the operation management division and the equipment management division plant safety management division all meet and review the equipment maintenance results. They conduct a review by reexamining operation management and equipment management methods where necessary.

In this way, people responsible for the operation management division, equipment management division, and plant safety management division share needed information with operation management and equipment management.

Upcoming Initiatives

Strengthening earthquake countermeasures

All Mitsubishi Chemical Corporation (MCC) plants use the experiences and lessons learned from the March 2011 Great East Japan earthquake to produce a medium- to long-term plan and take the necessary response depending on risk assessment findings.

Based on related laws and regulations and the basic policy below, MCC prioritizes conducting the prevention of damage in the plant and surrounding areas;

Basic Policy
1) Human life is the top priority,
2) Prevent the occurrence and expansion of operational safety and environmental accidents,
3) Operational recovery with the aim of supplying communities with essential products.

Specific responses are as follows:

1) Earthquake-resistant reinforcement work
Carrying out seismic reinforcement work envisaging the magnitude of earthquakes occurring at each plant and creating a priority accounting for the frequency of earthquakes.

2) Ground liquefaction countermeasures
Using experience from past earthquakes, conducted an independent analysis of road structures predicted to be dangerous and started ground liquefaction countermeasures on security roads in the event of a disaster.

3) Tsunami countermeasures
Evacuation routes and evacuation areas were re-set from the standpoint of protecting human lives, even at plants where the impact of tsunami is insignificant. At the Yokkaichi Plant, where a tsunami of 6-7 meters is envisaged in a Tonankai earthquake, we continue working together with the prefectural government to create a coastal seawall based on existing public seawalls resistant to tsunami.

4) Creation of a BCP
MCC created a business continuity plan drawing from the experiences of restoring operations at the Kashima Plant in the wake of the Great East Japan Earthquake.

Going forward, MCC will continue with its commitment of pursuing measures that align with Japan's policies and courses of action with regard to earthquakes, tsunamis and ground liquefaction.

Earthquake-resistant high pressure gas equipment

MCC evaluates the seismic performance of vital equipment[2] for earthquake-resistant design as established by the government of Japan, based on earthquake-resistant design at this point in time and will draw up improvement plans and pursue earthquake resistant countermeasures for equipment that requires countermeasures be taken.

*2 Vital equipment to earthquake resistant design as established by the government of Japan refers to (1) spherical storage units with a weld structure of steel pipe brace and (2) vital high-pressure gas facilities for earthquake resistant design.

Countermeasures against earthquakes are being implemented as follows, and the details of these measures are reported to the respective prefectures in which each plant is located.

(1) Spherical Storage Tank with a Weld Structure of Steel Pipe Brace
Of the seven units requiring earthquake-resistant countermeasures, five have already been implemented. Countermeasures will be implemented on the remaining two units by fiscal 2018.

(2) Vital High-Pressure Gas Facilities
Of the 26 units requiring earthquake-resistant countermeasures, we will continue examining those where countermeasures are technically difficult to implement and plan to propose an earthquake-resistance plan by the end of the fiscal 2015. Other units are planned to have earthquake-resistant countermeasures implemented by fiscal 2020.

Responsible Care Activities Occupational Safety and Health

Occupational Safety

Policy Initiatives to achieve zero work injury accidents

MOS Indices C-3: Earn recognition of corporate trust ＞Find out more

The Mitsubishi Chemical (MCC) Group established the policy that securing the environment and safety is the underlying principle of its business activities and it conducts work safety activities as one of the five Responsible Care (RC) mainstay activities based on Good Chemistry for Tomorrow, a principle upheld in its corporate philosophy.

In fiscal 2014, the MCC Group promoted work safety activities with the goal of achieving zero serious work injuries and a maximum of 0.1 lost-time injury frequency*1. An analysis of the lost-time work injury accidents occurring in the past five years, 56% were so-called behavioral accidents such as being caught and entangled, falls and drops, and rolling over, and 25% were chemical and thermal injuries distinctive to chemical plants. These two categories account for about 81% of all lost-time injury accidents. These results are thought to have been caused by a lack of risk prediction, as well as a lack of communication including miscommunication.

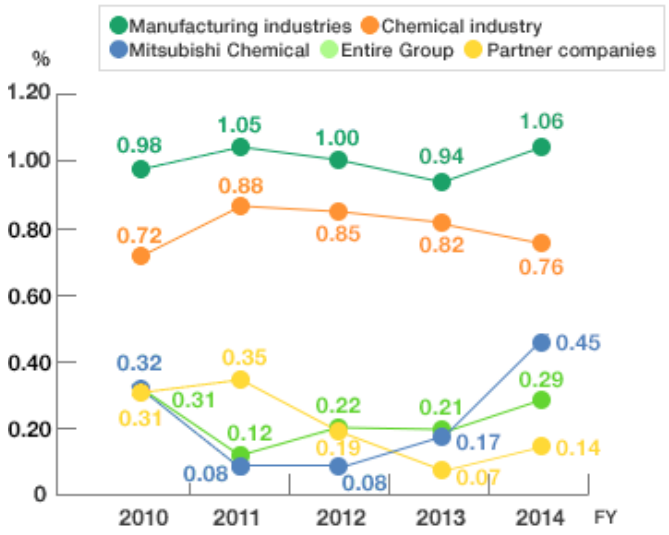
Therefore, in fiscal 2014 we made the making of countermeasures to prevent any reoccurrences and the raising of our awareness as professionals priority issues and conducted activities to thoroughly enable us to protect ourselves on our own. Specifically, in order to use past examples of work accidents effectively, we verified the causes of these accidents and put that information to practical use. We implemented activities to further raise safety awareness to prevent work accidents.

Although we conducted these various activities, the lost-time injury frequency*1 for the MCC Group in fiscal 2014 did not, unfortunately, reach our goal of 0.1 or less, but was instead 0.29, a disappointing result.

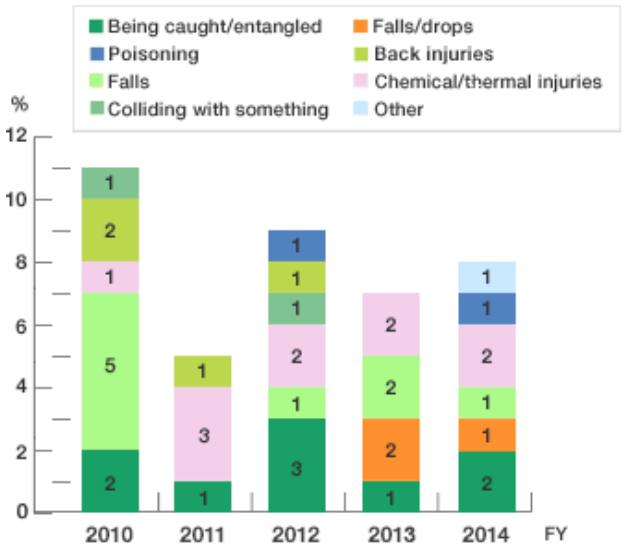
In fiscal 2015, to enable workers to protect themselves more thoroughly on their own, we will further strengthen our activities to rigorously prevent any reoccurrences after considering the weaknesses of each workplace, including by steadily implementing KY accident prediction training.

*1 Lost-time injury frequency: The number of casualties caused by lost-time injury accidents that took place per one million total working hours

Lost-time injury frequency



● **Categories of lost-time injury accidents (the Mitsubishi Chemical Corporation Group)**



Policy Safety management for construction work

Mitsubishi Chemical Corporation (MCC) implements various initiatives to safely perform construction work jointly with the subcontractor that carry out the construction work.

A risk assessment that identifies potential risk factors is conducted at the construction planning stage. For construction work that has a high level of risk, a construction safety assessment (construction SA) review meeting is held and safety measures are studied. Attending the construction SA meeting from MCC are the operation management division with jurisdiction over the equipment for the targeted construction work, the construction management division that manages the construction, and the safety management division responsible for workplace security and safety.

In addition, MCC and the subcontractor company meet together about construction safety and confirm and ensure the items that have been agreed to at the construction SA, as well as other safety instruction matters, whether an observer will be present during construction, and they also clarify the division of roles between the two companies.

The operation management division implements safety measures (depressurization, drainage, washing, electric power shutdown, safety locks such as valve shutoff) for construction equipment. It also explains the implementation status of safety measures, evacuation routes during emergencies, and other matters to the subcontractor. After all safety measures are completed and safety is confirmed, the operation management division gives the subcontractor permission to start construction.

In addition, during construction, the operation management division and the construction management division provide necessary observations or instructions.

Plant topics

MCC Mizushima plant

The Mizushima Plant won an RC Outstanding Award at the Japan Chemical Industry Association's 9th Responsible Care Awards*1 held on May 28, 2015. This was awarded for such feats as performing shutdown maintenance*2 from May to July 2013 without an accident or disaster and working with partner construction companies and exceeding 1,100 injury-free days*3, This is the result of the Mizushima Plant's continuous performance of safety activities with construction partner companies. The Mizushima Plant will continue working in unity with construction partner companies to further raise the level of safety.

*1 The Responsible Care Awards are presented to individuals or groups by the Japan Chemical Industry Association for contributing to the spreading or fulfillment of responsible care activities, and have been held yearly since fiscal 2006.

*2 The Mizushima Plant shutdown maintenance from May to July 2013 was intended for continuously operating plants such as the ethylene plant. As the shutdown maintenance is large in scale, reaching a total of 80,000 people from the construction subcontracting company entering the premises (2,500 people per day at peak time) and a total of 15,000 vehicles entering (500 vehicles per day at peak time), this large-scale shutdown maintenance is performed only once every four years. To ensure that every large-scale shutdown maintenance is performed with zero work injury accidents, from nine months earlier than the start of construction, together with the subcontractor, we meticulously carried out construction SAs, verified work procedures, provided rules training, and implemented safety measures. With the goal of raising awareness about safety, senior plant management communicated their thoughts about safety to employees and the subcontractor company at the shutdown maintenance zero accident rise to action rally and safety meetings.

*3 The 1,100 days applies to December 2014, the time of the Responsible Care Award application. The injury free period is continuing as of July 31, 2015.

Occupational Health

Activities and Achievements

Management of the working environment

The Mitsubishi Chemical Group handles numerous chemical substances, including specified chemical substances and organic solvents while taking into account occupational health as regards work done late-night or under noisy conditions. To prevent damage to the health of regularly employed employees who handle these substances, we manage the work environment by continuously implementing monitoring of working environment*4 in accordance with legal ordinances and various guidelines. Our efforts to manage employee health also include conducting special medical examinations as well as workplace inspections performed by occupational health physicians and other occupational health experts.

*4 Monitoring of working environment: Performed to gain an understanding of the extent of harmful factors existing in the work environment, and to what extent people working in the environment are exposed to them

Activities and Achievements

Activities to foster emotional and physical health

The Mitsubishi Chemical Group, in collaboration with the Mitsubishi Chemical Corporation Health Insurance Society, is involved in mental and physical health activities.

1. Promotion of mental health

Because the ratio of mental disorders in lost worktime due to illness is high, we have set up a system where employees are free to consult with health experts at mental health workshops that we hold and through the introduction of counseling by an EAP*5 service.

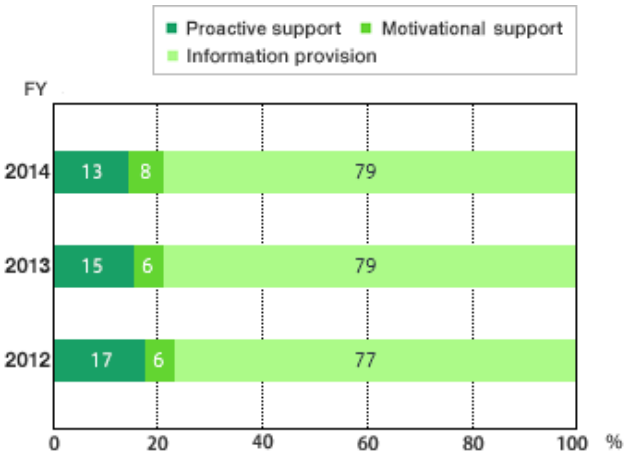
2. Promotion of physical health

We rigorously ensure 100% participation in standard health examinations and appropriate aftercare with a company doctor or public health nurse for employees who require support, and support employees in their independent efforts to manage their own health. Moreover, with cooperation from the Mitsubishi Chemical Corporation Health Insurance Association, we offer specific health guidance*6 to employees who require support and hold interviews. From next fiscal year, MCC will have a system in place to send Ikiiki Kenko Dayori, a health report, companywide every month.

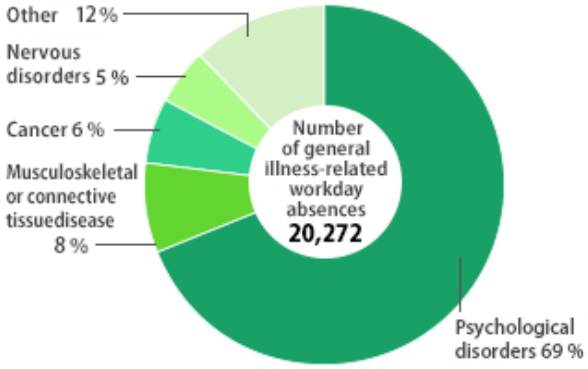
*5 EAP: Abbreviation for Employee Assistance Program, an initiative wherein certified counselors of outside professional institutions provide mental health counseling, training, and other related services.

*6 Specific health guidance: Examination and health guidance for preventing lifestyle-oriented diseases, with a focus on preventing and eliminating metabolic syndrome among the insured and their dependents aged 40 to below 75.

Percentage of specific health guidance (Mitsubishi Chemical)



Number of illness-related workday absences (Mitsubishi Chemical; 2014)



* Statistical standards changed from fiscal 2014

Responsible Care Activities Environmental Protection

Environmental Management

Policy Initiatives to reduce the environmental load in all processes of business activities

MOS Indices S-1: Contribute to reducing environmental impact through products and services
C-3: Earn recognition of corporate trust ＞Find out more

With the objectives of contributing to the global environment, the Mitsubishi Chemical Corporation (MCC) Group is proactively working on reducing greenhouse gas emissions, pursuing resource and energy conservation, preventing contamination of the air, water, soil, and other natural features, limiting waste generation and encouraging reuse and recycling, engaging in activities to conserve the natural environment and ecosystem and developing technologies contributing to these purposes, and engaging in the development and production of environmentally friendly products, as well as striving to reduce the environmental load in all processes in our business activities. In addition, we regularly provide environmental laws and regulations education and hold meetings to exchange environmental information. We recorded zero environmental accidents in fiscal 2014.

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Preventing Global Warming

Activities and Achievements Energy conservation initiatives at different locations

MOS Indices S-1: Contribute to reducing environmental impact through products and services
C-2: Improve stakeholder satisfaction ＞Find out more

The Mitsubishi Chemical (MCC) Group will proceed with activities aimed at promoting energy conservation and reducing greenhouse gases based on Mitsubishi Chemical Holdings Corporation's target of "reducing greenhouse gas emissions more than 17% compared with fiscal 2005 levels by fiscal 2015." On the energy conservation front, MCC is also involved in ongoing efforts to achieve the non-binding targets set forth in the Act on the Rational Use of Energy (Energy-saving Act) of "reducing unit energy consumption by an average of 1% or more annually, seen from a medium- to long-term perspective."

Towards meeting these targets, we are systematically identifying and assessing facilities and processes for which further energy-saving is possible and the formulation of related plans, which are currently underway at all MCC facilities, beginning with five plants with significant energy consumption rates, including Kashima, Mizushima, Yokkaichi, Kurosaki and Sakaide. Despite the high degree of technical difficulty, we investigated and undertook measures for a major energy conservation theme as a project involving the participation of specialist engineers.

In fiscal 2014, we improved equipment at large petrochemical plants with large steam load and optimized operating conditions. As a result of the combined energy conservation measures, we significantly reduced steam energy consumption equivalent to around 35,000 tons of CO_2.

Activities and Achievements

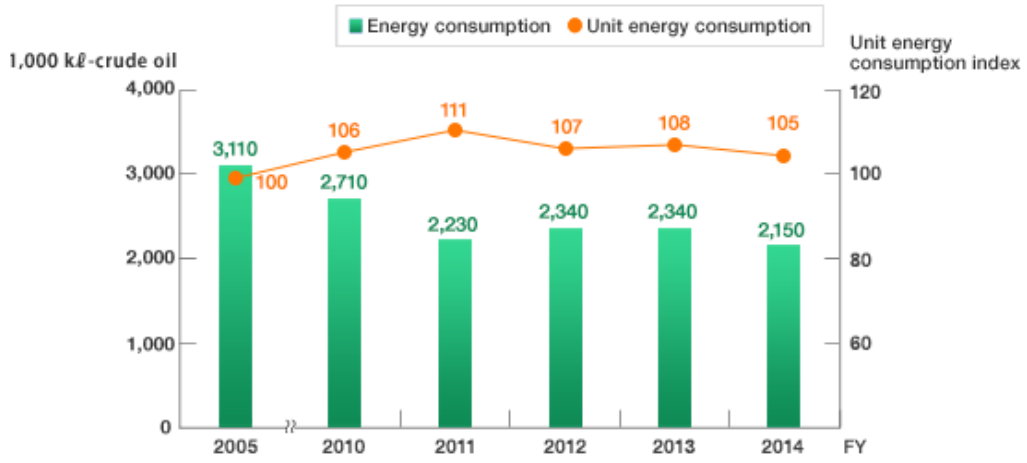
Reduction in energy consumption and greenhouse gas emissions in fiscal 2014

MOS Indices S-1: Contribute to reducing environmental impact through products and services
S-2: Take actions against the depletion of natural resources and implement energy-saving initiatives ＞Find out more

In fiscal 2014, energy consumption and greenhouse gas emissions significantly decreased compared with previous fiscal year levels, due to integrating and implementing all ethylene plant operations at the Kashima Plant. Unit energy consumption decreased by 3% compared with the previous fiscal year (the unit energy consumption index was 100 in fiscal 2005) due to significant improvements in the operation rates and efficient operations at the remaining ethylene plant, together with the implementation of energy conservation measures that led to drastic reductions of energy loss. Further, Groupwide greenhouse gas emissions marked about a 27% drop compared with fiscal 2005.

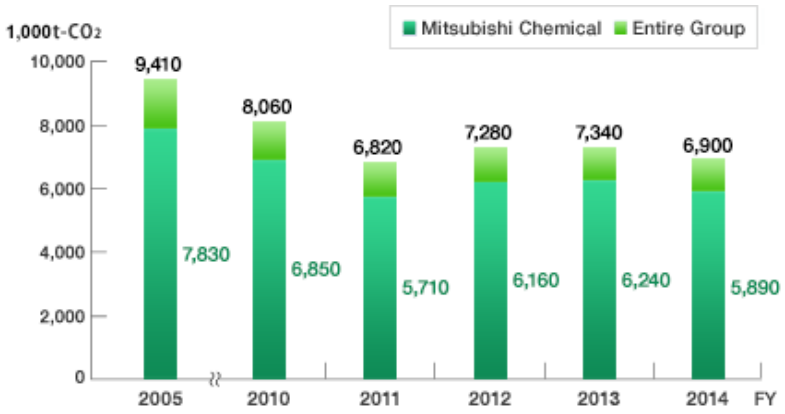
The Mitsubishi Chemical Corporation Group will continue striving to further reduce greenhouse gas emissions by the entire Group and develop and manufacture products that help conserve energy, thereby contributing to society's overall reduction of total greenhouse gas emissions.

Energy consumption (Mitsubishi Chemical)



*The data above is based on the periodic report from MCC. The data of Group companies is not included.
*The rate index for FY2009 to FY2012 has been recalculated using FY2005 as a standard so discrepancies may arise in the previous fiscal year's report and values.

Greenhouse gas emissions



*For greenhouse gas emissions, as the result of a detailed examination on the inclusion of heat-trapped gases not subject to reporting under the law in addition to reporting values stipulated in the Act on promotion of Global Warming Countermeasures, figures not included at Group companies were found, and in the FY2012 version of the graph, retroactive corrections have been made to add these figures to past data.

Activities and Achievements

Measures to improve unit energy consumption in transportation

MOS Indices S-1: Contribute to reducing environmental impact through products and services
S-2: Take actions against the depletion of natural resources and implement energy-saving initiatives ＞Find out more

Mitsubishi Chemical Corporation (MCC) submits actual energy consumption amounts, energy consumption reduction plans and other reports to the Ministry of Economy, Trade and Industry each year, as a specified consigner*1 stipulated by the amended Act on the Rational Use of Energy that went into force in April 2006. For achieving the Act's target of reducing unit energy consumption by an average of 1% or more annually, seen from a medium- to long-term perspective, MCC has sought efficient energy usage together with logistics contractor Mitsubishi Chemical Logistics Corporation (MCLC). Attempts are also being made to reduce CO_2 emissions.

MCC has conserved energy through reducing the transportation distance from plants by switching the exporting and importing ports of coastal shipping vessels engaged in domestic sea transport and vehicles used for land transport by increasing lots (shipping lot volumes). Also, hard measures being conducted, including "friend" fins*2 and contra-rotating propellers*3 attached to coastal shipping vessels and transport vehicles equipped with on-vehicle terminals that support eco-friendly driving, in addition to eco-friendly tires.

Moreover, as a result of a proactive modal shift to using trains, MCC received authorization from the Ministry of Land, Infrastructure, Transport and Tourism to use the Eco Rail Mark*4 logo, thereby rating us as a company promoting an environmentally friendly method of distribution. Furthermore, in fiscal 2014, MCLC started purchases of fixed transportation slots, enabling a general inspection of existing trucks used for transportation and a switch to rail transport. As a result, rail transport volume increased by 5 million tons compared with the previous fiscal year.

Eco Rail Mark

Against these initiatives, there were delays in relaunching a plant that had undergone periodic repairs resulting in a switch from sea to land transport and inefficient transport as a result of stormy winter weather. As a result, unit energy consumption worsened by 2.9% year on year for an average decrease rate of 0.3% over the last five years. In fiscal 2015, MCC will become even more proactive in promoting the initiatives it has pursued to date and endeavor to reduce fuel consumption and CO_2 emissions.

*1 Specified consigner: Business entity that transports 30 million tons-km of cargo in its possession each year.

*2 "Friend" fin: A tactic for obtaining large thrust force by attaching several fins to the stern in front of the propellers, thereby regulating the water flow to the propeller. The propeller's propulsive efficiency is improved by the water flow-regulating function, enabling navigation with fewer rotations per minute at the same speed. This method helps conserve energy and reduce CO_2 emissions.

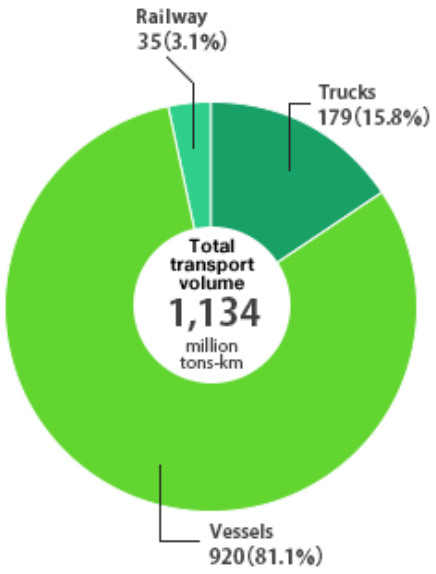
*3 Contra-rotating propellers: Two sets of propellers attached to each other that rotate in opposite directions. Energy lost by the front propeller is collected by the rear propeller, improving overall propulsion efficiency.

*4 Eco Rail Mark: A logo authorized for use by companies that use freight railway for more than 15% of freight transportation or that have an annual use of railways for shipment of 15,000 tons or more or 1.5 million ton-kilometers, calculated as volume multiplied by distance.

- **Actual reduction in unit energy consumption in transportation (Mitsubishi Chemical Corporation)**

FY		2010	2011	2012	2013	2014
Energy consumption	GJ	830,706	716,823	725,407	756,777	780,237
Fuel consumption (converted to crude oil)	Kℓ	21,432	18,494	18,716	19,525	20,130
Transport volume	Million tons-km	1,188	1,023	1,076	1,132	1,134
CO_2 emissions	t-CO_2	57,200	13%reduction → 49,500	1%increase → 50,100	4%increase → 52,300	3%increase → 53,900
Unit energy consumption	Kℓ/million tons-km	18.0	0.6%increase → 18.1	3.9%reduction → 17.4	0.8%reduction → 17.3	2.9%increase → 17.7

- **Breakdown of transportation volumes by transport mode in fiscal 2014 (Mitsubishi Chemical Corporation)**



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Preventing Air, Water Quality and Soil Pollution

Activities and Achievements

Initiatives for reducing environmental impact on air and water quality

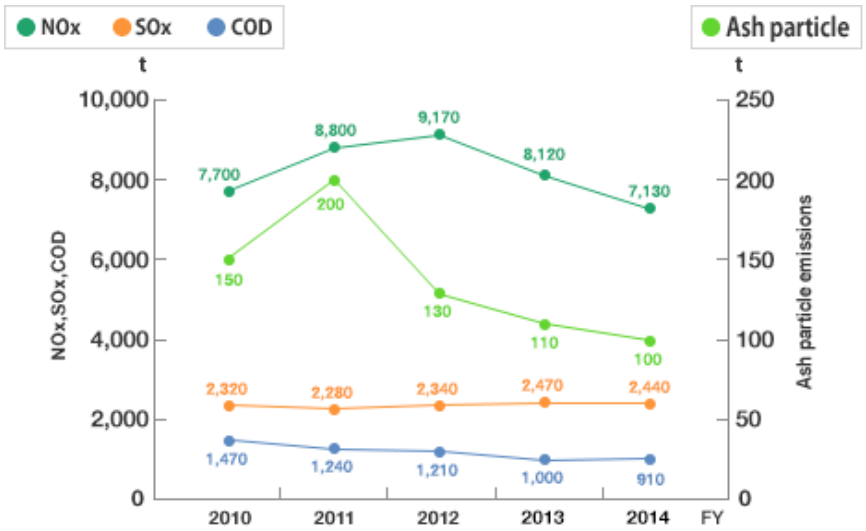
MOS Indices S-1: Contribute to reducing environmental impact through products and services ＞Find out more

The Mitsubishi Chemical Corporation (MCC) Group handles a wide range of chemical substances, and consumes large quantities of fossil fuels that are sources of nitrogen oxide (NOx) and sulfur oxide (SOx). We have therefore taken action to reduce emissions of hazardous air pollutants and reduce emissions of organic substances into public bodies of water. By installing and improving emission gas and drainage treatment facilities, we have substantially slashed the

environmental load on the atmosphere and public water bodies.

Emissions of NOx in fiscal 2014 decreased by 990 tons compared to the previous fiscal year because the operation of the power generating facilities at the Joetsu Center of Mitsubishi Chemical High-Technica Corporation that we restarted to overcome the power shortage attributed to the Great East Japan Earthquake was stopped.

Reducing Environmental Impact on Air and Public Bodies of Water



Activities and Achievements

Initiatives for reducing overall PRTR*5 and VOC*6 discharges

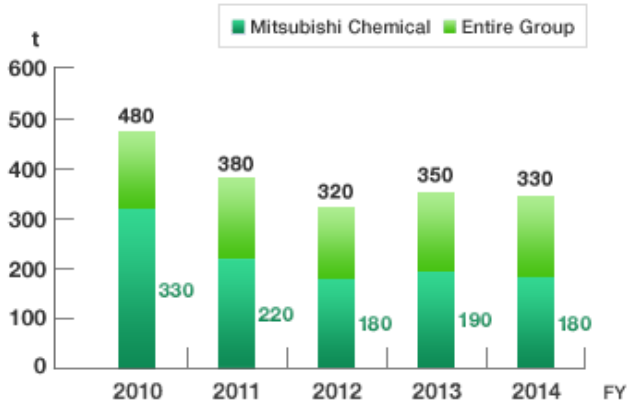
MOS Indices S-1: Contribute to reducing environmental impact through products and services ＞Find out more

The MCC Group has been working to reduce the discharge volume of chemical substances such as PRTR-regulated substances and VOCs. Regarding VOC emissions in particular, we maintained the goal of a reduction of at least 50% compared to fiscal 2000.
The PRTR-regulated substances discharge volume in fiscal 2014 was 330 tons, a decrease of 20 tons compared with the previous fiscal year.
Regarding VOC emissions, fiscal 2014 was the year of implementation of the large-scale periodic repairs which are conducted every four years. As a result, an increase of emissions was forecast due to a halt in supply to users and neutralization equipment, but the periodic repairs limited emissions because of measures including control of release of VOC into the atmosphere by collecting them in a low-temperature tank. VOC emissions declined by 20 tons compared with the previous fiscal year, maintaining a reduction of at least 50% compared to fiscal 2000.

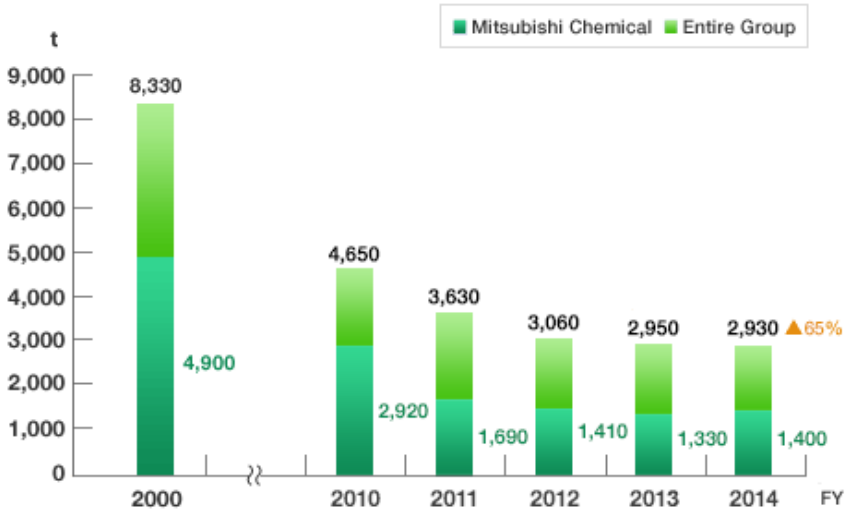
*5 Pollution Release and Transfer Register (PRTR): A notification system for the released and transferred amount of chemical substances. This is a system for clarifying, aggregating, and publicizing the data on the quantity of hazardous chemical substances released into the environment from each source, or the quantity taken outside facilities as a part of waste.

*6 Volatile organic compound (VOC): Typical substances include toluene and xylene. These compounds became subject to regulation by the amended Air Pollution Control Act of 2006, as source substances of photochemical oxidants (photochemical smog).

● **PRTR-regulated substances discharge volume**



● **VOC discharge**



*The negative figure for fiscal 2014 indicates a reduction ratio from fiscal 2000.

Purifying and monitoring soil and groundwater

All MCC production bases conduct voluntary surveys on soil and groundwater pollution. Production facilities where the surveys have revealed pollution provide notification pursuant to local ordinances or voluntarily, and continue purification and monitoring measures as instructed by the prefectural or city government. To date, seven of our plants have reported the survey results to local governments: in Kashima, Sakaide, Yokkaichi, Mizushima, Naoetsu, Kurosaki and Tsukuba. Each of these plants continues to implement appropriate measures as instructed by the local government.

Operation of the environmental data management system

MCC is operating an environmental data management system to strengthen its management of environmental data, including measurement records, based on laws, such as the Air Pollution Control Act and the Water Pollution Control Act, ordinances and agreements and unify internal operational management.

The system is strengthening data management mainly through functions like those in (1) - (5) below.

(1) Integrated management of the facilities subject to measurement, the measurement locations, and the

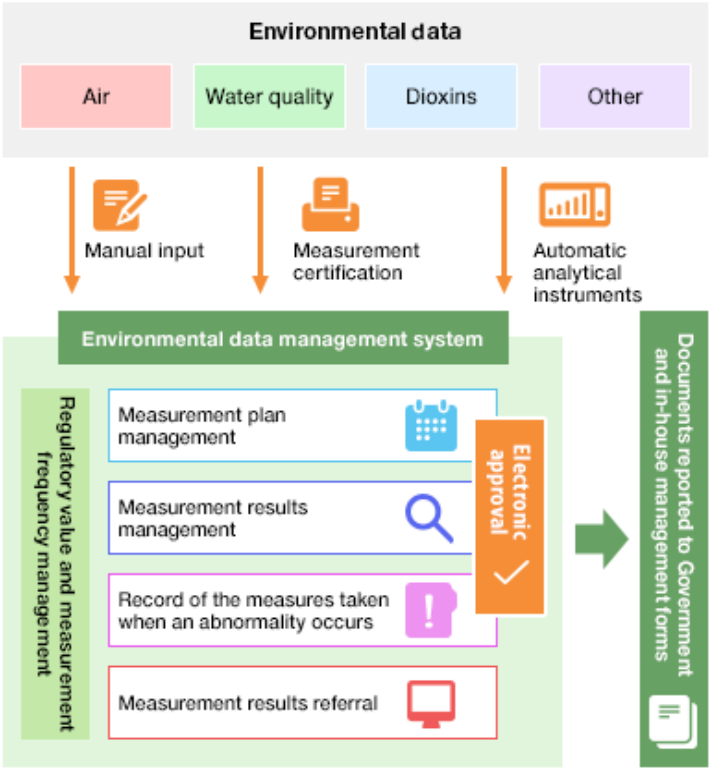
measurement plans to prevent measurement omissions

(2) Prevention of input mistakes and falsification by importing measured values from automatic analytical instruments and electronic reading of measurement certification issued on paper

(3) Strengthening of check functions through recording the modification history of the measured values and the electronic approval of managers

(4) Prevention of flaws in reports through automatic creation of documents reported to governments and in-house forms

(5) Keeping and storing records of the measures taken when an abnormality, such as exceeding the management value, occurs



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Waste Reduction and Recycling

Activities and Achievements

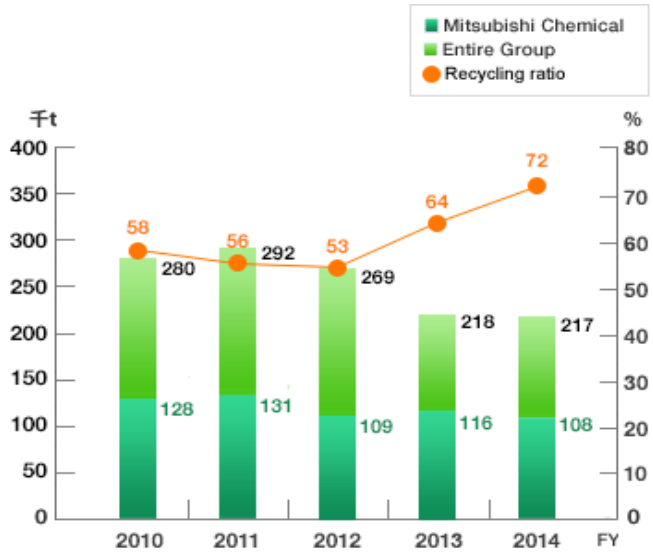
Initiatives for attaining zero emissions

To contribute to the global environment, the Mitsubishi Chemical (MCC) Group has stepped up recycling of industrial waste and has set a target of achieving zero emissions*7. Recycling rates have improved, particularly regarding construction waste, through such measures as rigid enforcement of sorted collection.
In fiscal 2014, the construction waste generated exceeded the previous fiscal year, but the recycled volume accompanying that also increased, raising the Groupwide recycling rate. However, sludge, which is one type of construction waste, was difficult to recycle. As a result, the ratio of industrial waste ultimately disposed of as landfill year on year was only 2.5% in fiscal 2014, failing to attain our target of zero emissions.

We will continue to aim for zero emissions through sorted collection of construction waste-something we will undertake thoroughly-and by continuing to make efforts to recycle.

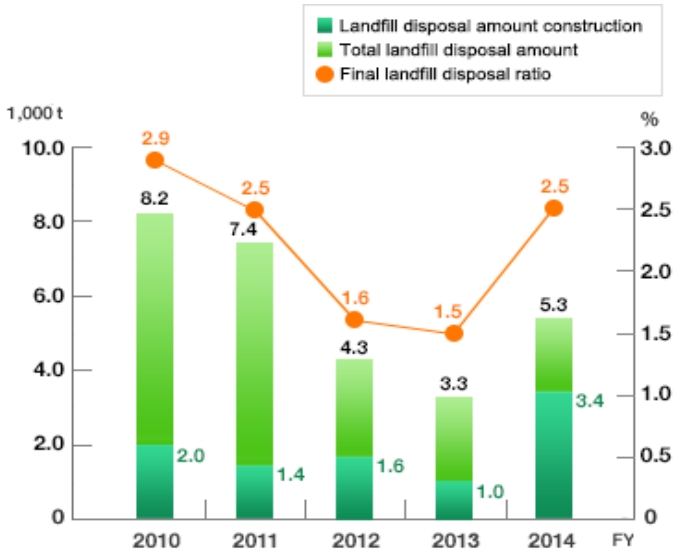
*7 Zero emissions: The MCC Group defines zero emissions as keeping the volume of industrial waste ultimately disposed of as landfill to a maximum of 1% of the total industrial waste generated (an ultimate landfill disposal ratio of 1% or less).

Industrial waste emissions and the recycling ratio



*8 In fiscal 2013 and fiscal 2014, the treatment volume related to the industrial waste treatment business is outside the scope of aggregation

Volume of industrial waste ultimately disposed of as landfill and ratio of industrial waste ultimately disposed of as landfill (Mitsubishi Chemical Group)



*9 In fiscal 2013 and fiscal 2014, the treatment volume related to the industrial waste treatment business is outside the scope of aggregation

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Front Runner

Environment, Safety, and Quality Department, MCC
Kei Yoshizuru

MCC operates an industrial waste management system we developed ourselves to ensure industrial waste disposal outsourcing operations are conducted properly. The industrial waste management system involves going through contract details with the company at the time of producing a manifest to ensure the appropriate disposal commissioning in addition to managing return deadlines for the paper manifest and emissions data from each plant.

In fiscal 2014, the industrial waste management system was improved to incorporate digital manifests* and six business sites switched from paper to digital manifests. Using the existing system enabled the digital manifests to be introduced without significant changes being made at worksites, and once adjustments have been made MCC can switch nearly all its manifests to digital versions. Digitizing enables assured handling of manifest information and eliminates collection and archiving of paper manifests, significantly reducing the worksite burden.

* Digital manifest: A system that digitizes manifest information and forms a network through the Japan Waste Network (JWNET) of the waste disposal company, collection and transport company and the disposer.

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Biodiversity Preservation

Activities and Achievements Initiatives to contribute to the global environment

MOS Indices S-1: Contribute to reducing environmental impact through products and services ＞Find out more

The Mitsubishi Chemical (MCC) Group is aware that its business activities are only possible due to the benefits we receive from biodiversity (ecosystem services*10) while the business activities also have an impact on the natural environment and the ecosystem, and we believe that implementing initiatives to contribute to the global environment will lead to the conservation of biodiversity. The MCC Group has always engaged in Responsible Care (RC) activities and as a part of its environmental conservation activities it has made contributions to the global environment, including reducing environmental impact (reducing greenhouse gas emissions, resources saving and energy saving, zero emissions of waste, 3R activities (reduce, reuse, recycle), reduction of VOC discharges, reduction of hazardous air pollutant emissions, living together with the local community, communication with the local community (factory tours, opening welfare facilities to the public, environmental training for outside the company), cleaning up neighboring areas, conservation of green areas (green area management, planting, and greening promotion)), and preservation of the natural environment. In addition, since fiscal 2010, the MCC Group has also upheld the Nippon Keidanren Declaration on Biodiversity*11 as a member of the Mitsubishi Chemical Holdings (MCHC) Group. In addition to this, from fiscal 2014 we are striving to reduce the impact on biodiversity from our business activities in an ongoing and self-initiated manner based on the MCHC Biodiversity Preservation Policy.
Looking ahead, we intend to continue contributing to global environment initiatives from the standpoint of biodiversity conservation.

*10 Ecosystem services

- Provisioning services: Materials and products that can be obtained from ecosystems (food, fresh water, wood, fibers, etc.)
- Regulating services: Benefits that can be obtained from the fact that ecosystems control the processes of nature (climate regulation, disease prevention, water and land conservation, etc.)
- Cultural services: Nonmaterial benefits that can be obtained from ecosystems (scenery, aesthetic experiences, etc.)

*11 Nippon Keidanren Declaration on Biodiversity: Announced by Nippon Keidanren in March 2009, the Declaration comprises seven main policies including harmony between the natural circulation and business activities and promotion of a resource-recycling style of business administration.

Activities and Achievements

Tackling the Heat with a Green Curtain

Every summer since 2010 at the MCC Tsukuba Plant, we have grown a green curtain on the office windows as a means to tackle the heat*12. The curtain is 3.5 meters high and grown on two surfaces with widths of 18 meters and 20 meters. It cuts power consumption by about 20%.

*12 An example of how to "create an industry, lifestyle and culture that will learn from biodiversity" from the Action Policy of the Declaration on Diversity by Keidanren

Before growing the curtain

After growing the curtain

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Environmental Accounting

Activities and Achievements

Investments and expenses for the environment

Mitsubishi Chemical Corporation tallies its investment and expenses for environmental conservation on the basis of guidelines set by Japan's Ministry of the Environment.

In fiscal 2014, we made large investments in upgrading wastewater management facilities. In addition, we worked on initiatives such as strengthening air pollution prevention and reducing industrial waste so the total amount of investment came to ¥4.6 billion.

Meanwhile, expenses in this regard amounted to ¥23.2 billion for outlays such as those involving operation and maintenance of pollution prevention equipment and for proper disposal of waste materials.

● **Investments and expenses for the environment (MCC)**

million yen

Environmental conservation costs			2013		2014	
Category		Main initiatives	Investment amount	Expenses	Investment amount	Expenses
Environmental conservation costs for suppressing environmental load generated in business areas due to production and service activities	1. Pollution prevention costs	Prevention of Air pollution Dust collection system augmentation and particulate matter reduction Prevention of water pollution Wastewater management improvement, etc.	3,320	15,369	4,012	15,067
	2. Global environmental conservation costs	CO_2 emissions reduction, operational improvement, etc.	3	695	23	699
	3. Resource - recycling costs	Industrial waste reduction, proper waste disposal, resource conservation, energy conservation, etc.	683	4,171	527	4,151
Environmental conservation costs in management activities		Operation of unit addressing environmental conservation ISO 14001 compliance and renewal national exams, environmental education, etc.	0	957	0	810
Environmental conservation costs in R&D activities		R&D for increased productivity, etc.	0	3,048	0	1,635
Environmental conservation costs in social contribution activities		Installation and upkeep of factory green spaces	58	379	8	355
Costs for dealing with environmental damage		Cleanup of contaminated soil, etc.	0	23	0	12
Other environmental conservation costs		SOx surcharges	24	446	0	462
Total			**4,088**	**25,088**	**4,570**	**23,192**

Responsible Care Activities Quality Assurance

Policy For further enhancement of customer satisfaction

MOS Indices C-3: Earn recognition of corporate trust > Find out more

In order to ensure "the environment, safety, and health" the Mitsubishi Chemical Corporation (MCC) Group has positioned quality assurance as one of the important pillars of its RC activities. We believe that implementing thorough product control is important in order to ensure the safety of the products and continuously improve their quality, so that our customers can use the products safely and with peace of mind.
As a comprehensive chemical manufacturer supplying a wide array of products to customers in a broad range of industries, and under our following basic policy, MCC believes that it is its duty to strive to prevent quality and product liability (PL) issues, while at the same time we will work to further increase customer satisfaction by offering safe and secure products.

In order to realize KAITEKI for customers, we provide products and services that customers can use with reliability.

We listen carefully to our customers' requests, and rapidly and sincerely fulfill them.

In accordance with the basis of our responsible care activities, we strive to achieve a continuous improvement in quality.

Meanwhile, on a global scale, public voices are increasingly demanding that corporations manage chemical substances contained in each of their products throughout the products' entire life cycle, and that they release information on such matters with appropriate transparency. To accurately respond to these rising demands, since fiscal 2011 MCC has been operating the "Green Information Management System," utilizing the infrastructure of the Joint Article Management Promotion-consortium (JAMP)*1 to provide accurate information on the management of specified chemical substances (management of which is required by law) for each of our products containing such chemicals. However, in fiscal 2013 the Ministry of Economy, Trade and Industry took the lead in commencing studies of the new scheme, chemSHERPA*2, to provide information about chemical substances in products. MCC also aims to build a better system, and through JAMP*1 will proactively and candidly provide its opinions and cooperation. Together with raw materials suppliers and our own corporate customers, we hope to contribute to the creation of a social system capable of managing chemicals throughout the entire supply chain.

*1 JAMP is an organization that works to promote appropriate management, disclosure, and communication across all industries relating to chemical substances contained in "articles" (parts and final products) throughout the supply chain.

*2 chemSHERPA: A new information communication scheme to advance examinations centered on those conducted by the Ministry of Economy, Trade and Industry of Japan, to standardize competing information communication schemes about the chemicals included in products.

Activities and Results Proactive cooperation with chemSHERPA

From fiscal 2013, MCC has been applying the "Green Information Management System," utilizing the infrastructure of JAMP, to administer and provide information about the chemical substances for each of our products containing such chemicals. However, in fiscal 2013 the Ministry of Economy, Trade and Industry took the lead in commencing studies of the new scheme to provide information about chemical substances in products. MCC also aims to build a better system, and through JAMP will proactively and candidly provide its opinions and cooperation. In fiscal 2014, a more detailed preparatory inspection was commenced. MCC will also continue to utilize JAMP in order to proactively contribute to the inspection, launch and smooth operation of chemSHERPA.

Responsible Care Activities

Chemicals Management

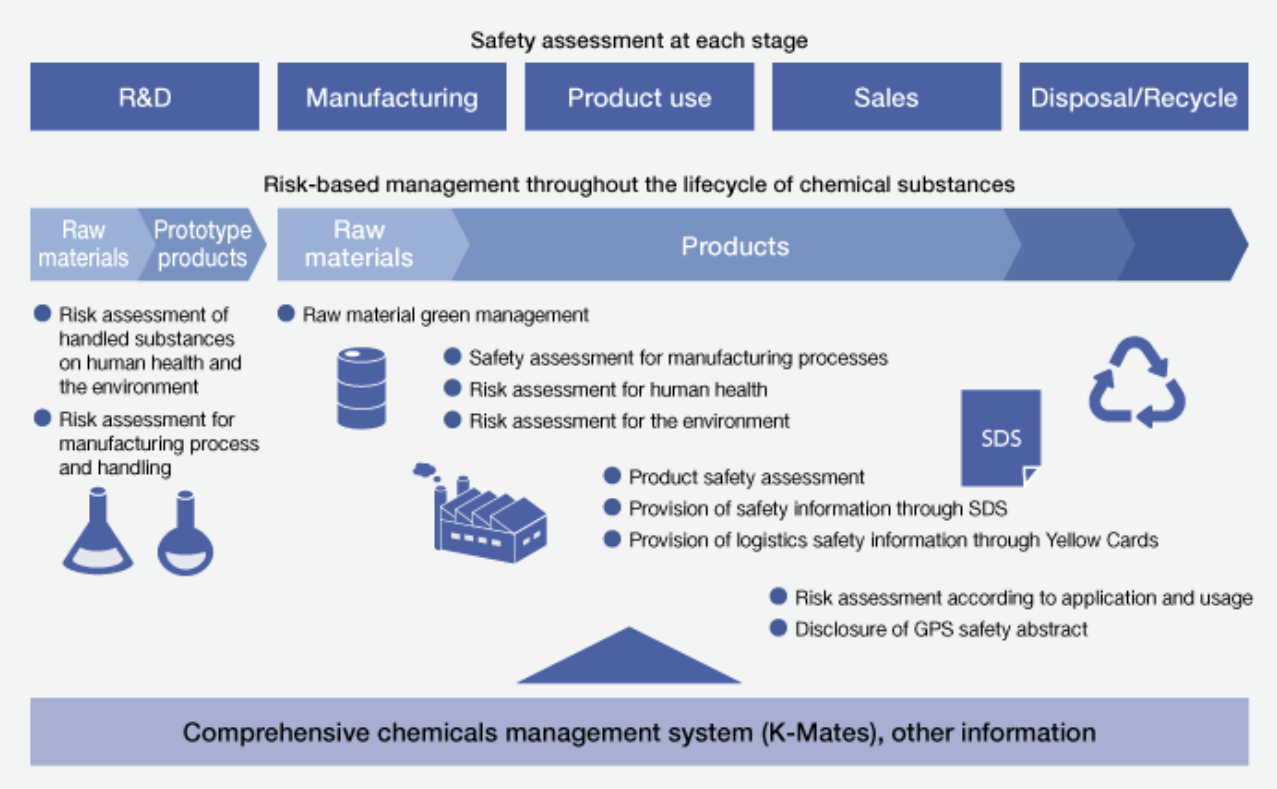
Policy Our basic stance on chemicals management

Based on the concept of product stewardship, the Mitsubishi Chemical (MCC) Group strives to rigorously manage chemical substances emphasizing risk-based chemicals management throughout the supply chain and actively disclose and provide risk management information on chemical products.

This is an effort in line with the Strategic Approach to International Chemicals Management (SAICM) and an activity aimed at addressing process safety and disaster prevention, occupational health and safety, product safety, and environmental protection through risk-based chemicals management throughout the product lifecycle, and realizing a KAITEKI society.

Specifically, the MCC Group comprehensively collects and manages information on all the chemicals it handles, not only for chemical products it manufactures but also their raw materials, by-products and waste generated in the manufacturing processes, as well as their recycled products, and based on this information, the MCC Group conducts risk assessment regarding the impact of chemical substances on people and the environment as well as the safety of manufacturing processes. Through these activities, the MCC Group continues to strengthen its voluntary management for a sustainable society.

- **Risk-based chemicals management from product development to manufacturing, product use, disposal and recycling**



Activities and Achievements

Establishing a comprehensive chemicals management system

To achieve the 2020 targets under WSSD*1, the Mitsubishi Chemical (MCC) Group has adopted three central themes of risk-based chemicals management, rigorous compliance, and efficient process innovation. Based on these themes, MCC has integrated and operates the various databases and management system functions that were previously administered by individual divisions into a new system (K-Mates*2) that can centrally maintain and manage all the necessary information for chemicals management.

K-Mates has a function for automatically determining the GHS*3 classification of chemicals and a function for automatically determining the applicable laws and regulations. It can also output SDS*4 and labels when the operator inputs hazardous substance information regarding a product or component. MCC is currently working to bolster the functions of the K-Mates system to make it compatible with various laws, regulations, and standards in Europe and the U.S., East Asia, and ASEAN countries by enabling it to comply with overseas laws and regulations, and to create overseas-compatible SDS and label creation.

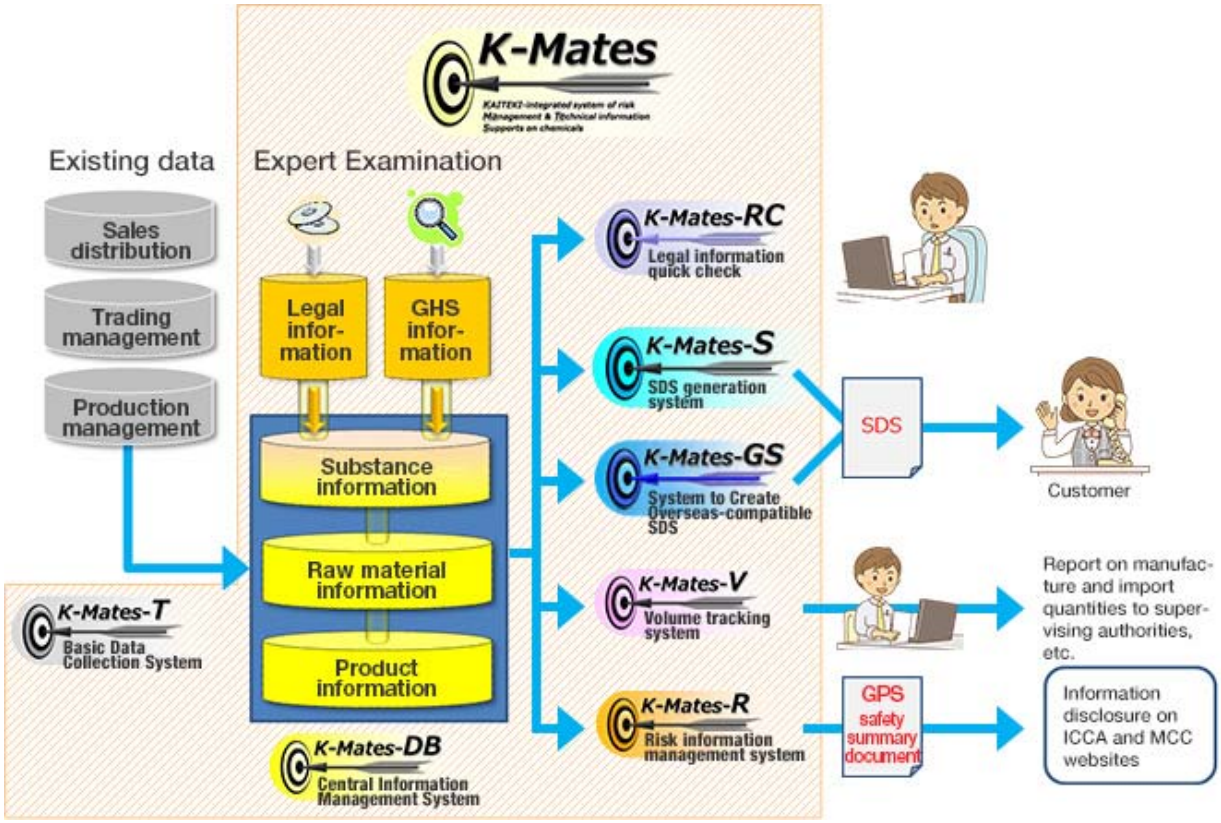
*1 WSSD: World Summit on Sustainable Development An international summit on environmental issues held in Johannesburg in 2002. The participants set the following target to be achieved by 2020: "to use and produce chemicals in ways that minimize significant adverse effects on human health and the environment.

*2 K-Mates: KAITEKI-integrated system of risk management & technical information supports on chemicals.

*3 GHS: Globally Harmonized System of Classification and Labeling of Chemicals"
A system for classifying chemicals and hazardous substances by type and degree based on globally harmonized rules, and communicating this information by labeling and provision of SDSs.

*4 SDS: Safety Data Sheet
A document for providing information on the properties, hazards and toxicity, safety measures, and emergency responses concerning chemical substances when transferring or providing the chemical substances or products to other business entities.

Overview of K-Mates



Activities and Achievements

Voluntary efforts toward chemicals management in industry

Participating in ICCA*5 activities and Japan Chemical Industry Association activities

Mitsubishi Chemical Corporation (MCC) actively pursues Global Product Strategy (GPS*6) activities that provide information on safety and risk management of chemical products promoted by ICCA. Also, as a member of ICCA Chemical Policy and Health Leadership Group, we are actively participating in the activities of planning and management of educational programs and lectures related to capacity building aimed at achieving the WSSD targets for developing countries and SMEs.

1. Promotion of GPS activities in Japan

To promote ICCA's GPS activities, MCC actively participates as a core member in the promotion and strengthening of JIPS*7. As part of the strengthening of JIPS promotion, during fiscal 2014, as in 2013, we continued our efforts to make GPS Safety Summaries (GSS) and disclose them. About 400 (as of May 2015) safety summaries are published by Japanese companies on the ICCA's website (ICCA GPS Chemicals Portal). MCC had published 16 chemical safety summaries (a total of 32 with both Japanese and English versions) among those by fiscal 2014.


GPS Safety Summaries (GSS)

Group companies are carrying out risk assessments of chemicals that will be targeted for GPS risk assessment by fiscal 2018. GPS Safety Summaries (GSS) introduce MCC recommended methods for handling chemicals that cannot be communicated by SDS alone and are useful in risk-based chemical management.

As part of GPS activities, the Japan Chemical Industry Association (JCIA) jointly started up the SCRUM*8 Project in 2011 with the Joint Article Management Promotion-consortium (JAMP) in order to suggest a system for sharing information on risk assessment for chemicals in the supply chain. Within this activity, MCC headed up the planning strategy working group and studied the risk assessment status concerning companies in the supply chain. MCC has also created draft guidelines regarding the sharing of risk assessment-related information. Looking ahead, based on these draft guidelines, MCC intends to create and examine a guidance plan for conducting risk assessments across model industries.

2. Cooperation in international GPS promotion activities

In fiscal 2014, MCC helped to spread GPS activities in Asian countries by attending GPS/PS*10 workshops in Taiwan, Indonesia, Malaysia and Vietnam that JCIA held in collaboration with ICCA's RCLG*9.

*5 ICCA (International Council of Chemical Associations)

*6 GPS (Global Product Strategy)
A voluntary initiative wherein each company conducts risk assessments of its own chemical products, performs proper management and also summarizes and discloses information on the safety and risks of those chemicals in Safety Summary.

*7 JIPS (Japan Initiative of Product Stewardship)
A voluntary initiative promoted by JCIA to strengthen risk-based chemical product management in companies.

*8 SCRUM (Project of Supply chain Chemical Risk management and Useful Mechanism discussion)

*9 RCLG (Responsible Care Leadership Group): ICCA's RC promotion organization

*10 PS (Product Stewardship): responsibility for product management

Activities and Achievements

Compliance with chemicals regulations

Compliance with laws and regulations concerning chemicals in Japan

Laws and regulations concerning the manufacture, import, use, and sales of chemical products are wide ranging and Mitsubishi Chemical Corporation (MCC) is making steady efforts with regard to various notifications and permissions and authorizations contained in the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc., the Industrial Safety and Health Act, the Poisonous and Deleterious Substances Control Law, and other laws by centralizing management under a system, establishing internal rules, and other means.

Related divisions are swiftly responding to the various types of substances that have been added as restricted substances and we are providing such information to relevant customers.

With respect to our past record of manufacturing and import volume for all chemical substances and the reporting on volume by application, which is mandatory under the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc., MCC positively addresses this law every year and utilizes the compiled data in risk-based chemicals management within the Company.

Regarding the provision of chemical hazard and toxicity information and cautionary handling information based on Globally Harmonized System (GHS), which is partially mandatory under the Industrial Safety and Health Act and the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof, MCC follows JIS Z 7253:2012, established based on the fourth revision of GHS, performs GHS classifications for all of its products, displays easy-to-understand labels, provides Safety Data Sheets (SDS), and also posts instructions within the workplace.

Efforts to address overseas laws and regulations

MCC is working to build up a database that will allow us to effectively manage applications for registration of new chemical substances in each country, and have centralized the management of information within the company in the same manner as our response to laws and regulations in Japan. For new chemical substances in functional chemical products, which are growing in terms of export volume from Japan, we rigorously manage information regarding registration procedures and for each country and compliance. Using this database, we reliably monitor and manage not only the application procedures, but also the status of subsequent mandatory reporting (export and import volumes and their intended applications).

Due to the trend of new overseas chemical regulations (especially in China and Asian countries centered on South Korea and Taiwan where new regulations come into full-fledged operation from 2015), we are collaborating more closely with affiliate companies of Mitsubishi Chemical Holdings Corporation (MCHC), and steadily obtaining information and dealing with registration application and other issues.

With regard to the EU REACH*11 regulations, MCC completed the registration of substances exported in quantities under 100 tons, which it had to register by May 31, 2018. We plan to respond to the guidance of the substances evaluation made by the European Chemicals Agency (ECHA) and authorities in EU member states, gather information on regulation trends on items such as Substances of Very High Concern (SVHC), Substances of Authorization and Substances of Restriction, and continue to steadily take necessary action.

*11 REACH (Registration, Evaluation, Authorization and Restriction of Chemicals): Regulations regarding the registration, evaluation and restriction of chemical substances.

In-house training

MCHC regularly holds the MCHC Chemical Product Management Seminar. The seminar is aimed at employees of MCHC Group companies in order to help them understand regulations of chemicals and to raise the level of chemicals management. In the 10 seminars held in fiscal 2014, we conducted various training required in chemical substance management such as providing the updated status of chemical product controls in Japan and overseas, response methods, registration methods, information search methods, GHS trends, and classification and labeling methods by instructors inside and outside of the Company.

Front Runner

Powerfully supporting business departments through the chemicals management system

Chemicals Management Office MCC
Tomomichi Oda

In order to minimize the adverse impacts of chemicals on human health and the environment, there is a global trend of strengthening regulations regarding chemicals, seen both in Japan and overseas, Moreover, there are more and more works on chemicals management in connection with the global development of business. This is why MCC started the project of developing an integrated chemicals management system (called "K-Mates) that aims to reduce the adverse effects on employees, customers and the environment of the chemicals we manufacture and use, to respond to the strengthening of regulations regarding chemicals, and to make work operations more efficient by unifying chemicals management. As the leader of this project, I rigorously comply with regulations related to chemicals, and aim to oversee the operation of a system that contributes to reducing the work burden regarding chemicals management of all the people in charge in business departments. To this end, I am working day and night to cooperate with the people concerned in business departments and system departments.

K-Mates does not only create SDS and labels for Japan, it also creates overseas-compatible SDS, and aims to operate as a system that coordinates data about the management of raw materials, and sales and distribution, as regards chemicals management. I myself will be very happy if I can voluntarily contribute to initiatives designed to further the MCC Group's united efforts to strengthen its chemicals management and to increase efficiency. Going forward, I aim to continue being proactively involved in initiatives to build chemical-related systems.

Together with Stakeholders

Basic concept

Basic policy in communications with stakeholders

	Basic policy	Tools	Opportunities
Customers	We aspire not only to offer products and services that are safe and of high quality but also to build an even better society together with our customers, by working together to solve their increasingly diverse and complex challenges and achieve their targets.	• Websites • News releases • Product brochures • Safety Data Sheets (SDS) • Advertising	• Sales activities • Call center • Purchasing activities • Questionnaires • *KAITEKI* forum • *KAITEKI* SQUARE showroom • *KAITEKI* CAFE restaurant
Business Partners	Recognizing all entities trading with us as business partners, we strive to build a mutually trusted relationship and foster fair and appropriate trading practices with them.	• Websites • News releases • Product brochures • SDS • Advertising	• Purchasing activities • Business partner briefings • Call center • Questionnaires • *KAITEKI* forum • *KAITEKI* SQUARE showroom • *KAITEKI* CAFE restaurant
Employees	We sincerely associate with each of our employees and strive to establish rewarding workplaces where each employee may fulfill their potential, and where employees can work with enthusiasm by mutually respecting diverse values.	• Intranet • In-house newsletter (Chemi-Pal, KAGAKU Station)	• Employee surveys • Labor-management consultation • Reports from operating companies
Regional communities and society	Understanding our responsibility of being a good corporate citizen, we make sure that our activities live up to the demands and expectations of society and the public.	• Websites • CSR reports • Responsible care reports for individual plants	• Plant and laboratory tour • Meetings with local authorities • Science experiment workshops • Internships • Collaborate with regional public benefit corporations • *KAITEKI* CAFE restaurant

Together with Stakeholders

Together with Customers

Policy

Basic concept

The Mitsubishi Chemical (MCC) Group aspires not only to offer products and services that are safe and of high quality but also to realize *KAITEKI* together with our customers by communicating with them to solve their increasingly diverse and complex challenges and achieve their targets.

Policy

Providing solutions by positioning Sustainability, Health and Comfort as the decision criteria for our corporate activities

MOS Indices C-1: Deliver products (development and manufacturing) for comfortable lifestyle > Find out more

As a member of the Mitsubishi Chemical Holdings (MCHC) Group, the MCC Group offers solutions to our customers through a broad range of chemistry-based products and technologies by positioning Sustainability, Health and Comfort as the decision criteria for its corporate activities.

In the Performance Products domain, we promote the shift to high-performance and high-value added products as well as green businesses. In the Industrial Materials domain, we offer global support and high-performance products, and at the same time we are proceeding with the diversification of raw materials to create industrial materials that contribute to the global environment and a sustainable carbon society.

Activities and Achievements

To be a Group that customers will choose as their partners

MOS Indices C-2: Improve stakeholder satisfaction
C-3: Earn recognition of corporate trust > Find out more

The MCHC Group shares a common understanding that close communication with our customers is important during the course of achieving accurate insight into social issues and challenges that the customers face, and finding solutions together. Thus, the Group has been conducting customer satisfaction surveys since fiscal 2012.
The surveys include customer views regarding the MCHC Group's core business activities related to product, such as quality, supply systems, sales promotion and technical support, as well as the attitudes and reliability of individual operating companies in the Group. Ultimately, MCC hopes that analysis of the survey results and subsequent implementation of a PDCA cycle approach will enable us to provide even better customer service and gain higher levels of customer satisfaction.

The MCHC Group showroom "*KAITEKI* SQUARE" is located in its corporate headquarters as a means of enabling it to connect with customers in giving thought to the *KAITEKI* concept. It comprises three distinct zones: 1) a special exhibition zone where visitors can ponder social issues of the 21st century and consider the role of science and technology in solving such challenges, 2) a permanent exhibition zone profiling the MCHC Group technological capabilities and its collective strengths through showcasing the Group company products and technologies designed to realize *KAITEKI*, and 3) a conceptual zone where visitors can experience the future of our society through video footage and interactive exhibits. The showroom features MCC products designed to bring the *KAITEKI* concept to life,

and exhibits technologies under investigation through MCC research and development (R&D) efforts.

After MCHC defined "THE *KAITEKI* COMPANY" as its corporate brand, the former "Chemistry Plaza" showrooms located in the Mitsubishi Chemical Group Science and Technology Research Center (Kanagawa Prefecture) and the Yokkaichi Plant (Mie Prefecture) were renamed in April 2014 as *KAITEKI* SQUARE Yokohama and *KAITEKI* SQUARE Yokkaichi, respectively. In addition, *KAITEKI* SQUARE Shanghai was opened in the area of Mitsubishi Chemical China Commerce Limited. *KAITEKI* SQUARE Yokohama houses the cutting-edge technologies and platform technologies that are only found at the R&D center, and *KAITEKI* SQUARE Yokkaichi introduces the capability of the MCHC Group for product development based on a customer-centered technological service system by collaborating with the Customer Laboratory, while *KAITEKI* SQUARE Shanghai presents automobile parts and materials and products contributing to environmental conservation in which the MCHC Group focuses on in China. All three squares provide a venue for communication with our customers.

In the previous fiscal year, from April 2014 to March 2015, the *KAITEKI* SQUAREs in the corporate headquarters, Yokohama, and Yokkaichi welcomed 9,596, 1,453, and 1,862 visitors, respectively.

Together with Stakeholders

Together with Business Partners

Policy Basic concept

As a member of the Mitsubishi Chemical Holdings (MCHC) Group, the Mitsubishi Chemical (MCC) Group will promote and reinforce procurement activities to fulfill our corporate social responsibilities not only in our group but also the entire supply chain including our business partners while aiming to achieve *KAITEKI* an original concept of the MCHC Group.

To achieve that concept, we act in accordance with the MCHC Group Charter of Corporate Behavior and have established the following purchasing guidelines that promote purchasing and procurement activities to ensure fair and equitable transaction practices, compliance with laws and regulations, and the taking into account of human rights and the environment.

Purchasing Policies (Excerpted)

Basic Principles

1. Purchasing competitive materials, equipment, and services
2. Openness and fairness
3. Partnerships and mutually beneficial relationships

Codes of Conduct

1. Compliance with laws and regulations
2. Fairness, impartiality, and transparency in decision-making process
3. Clear distinction between private and business relationships

Requests for Business Partners

1. **Compliance with laws, regulations, and social norms**
   We request each business partner to comply with the following laws, regulations and social standards, in all countries and regions in which they operate.
   (1) Compliance with laws and regulations concerning the manufacturing and distribution of raw materials.
   (2) Compliance with laws and regulations concerning labor, health, and safety, and development of proper working environments.
   (3) Prohibition of racial and sexual discrimination, and respect for the dignity of each employee.
   (4) Prohibition of bribery and unfair proceedings.
   (5) Compliance with environmental laws and regulations.
2. **Promoting sound business management**
3. **Consideration for the environmental issues**
4. **Non-disclosure of confidential information**

▸ The full text of the basic purchasing policies is available here.

Policy Ensuring full compliance with the Subcontractor Act

MCC has clearly established an organization for complying with the Subcontractor Act, and has established the Subcontractor Act Compliance Rules which specifically stipulates the intentions and scope of application of the Subcontractor Act and compliance matters in tasks related to order placement and payment. In order to ensure that transactions are conducted pursuant to the Subcontractor Act Compliance Rules, MCC urge employees to participate in in-house study meetings and seminars offered by outside parties, and we systematically conduct audits of those associated with purchasing departments.

Activities and Achievements Holding business partner briefings

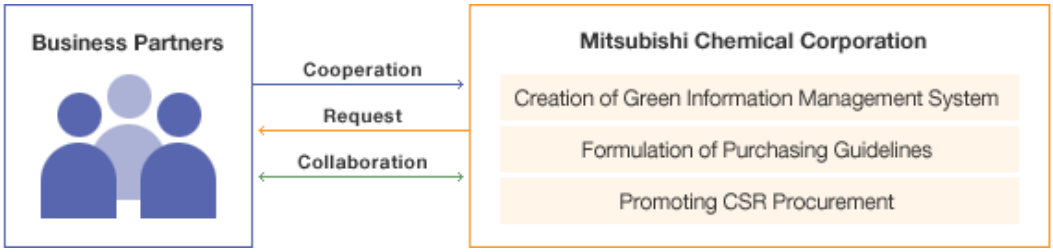
MOS Indices S-3: Contribution to solving social and environmental issues through procurement
> Find out more

MCC aims to promote CSR activities together with our business partners to help build a sustainable society. As part of these efforts, we are operating the Green Information Management System to comprehensively manage and convey information on chemical substances contained in products with the cooperation of our business partners. In the basic purchasing policies, we are making efforts to build fair and equitable relationships with our business partners, and ask our business partners to promote CSR initiatives. We are also holding briefings with the objective of deepening our business partners' understanding of these policies and systems.

In fiscal 2010 and fiscal 2011, briefings for business partners were held to explain these policies and systems. The business partner briefings provide explanations about MCC's *KAITEKI* activity initiatives, CSR questionnaires and green surveys, and we asked for their cooperation. We provided feedback to all business partners that cooperated with the questionnaire by June 2014. In November 2014, together with MCHC, operating companies and the MCC Group companies (Japan Polychem Corporation and Mitsubishi Chemical Logistics Corporation), held a third briefing session for business partners, which was attended by 400 people from about 270 companies. At the briefing, an overview explanation was given on (1) MCHC's *KAITEKI* management and (2) outline of "Developing Cooperative Business Practices with Suppliers and Business Partners Guidebook", and we also distributed the guidebook. The guidebook's scope of the briefing was easily understandable, involving our plan to implement the Mitsubishi Chemical Holdings Group Charter of Corporate Behavior instituted in April 2013 to promote the realization of *KAITEKI* and to ask our business partners to empathize with these standards as well.

To work together as one with our business partners toward the realization of *KAITEKI* going forward, we will further improve communication on both sides and further strengthen CSR initiatives in the supply chain.

Working with Business Partners to Create Initiatives Designed for a Sustainable Society



Together with Stakeholders

Together with Employees

We undertake a range of initiatives to ensure that our employees, who act as the stewards for achieving *KAITEKI*, can maximize their potential.

Policy Basic concept

The Mitsubishi Chemical Group believes that for the sustainable development of a business, the Company and each employee need to build autonomous relations based on trust and duty while fulfilling respective responsibilities, with a focus on human resources development, and the development of a good organization and culture. Based on this concept, we deal with each employee sincerely and offer a rewarding working environment that suits personal levels of development so that the capacities of each member are brought out to the fullest extent. These efforts emphasize human resources development, organizational and cultural development, and support for attaining work-life balance.

Ideal Personnel and Organizations

Personnel strategy to realize sustainable corporate growth and development

Hiroshi Katayama　Executive Officer, General Manager, Human Resources Department, Mitsubishi Chemical Corporation

We have drawn up a strategy in the field of personnel based on the fundamental ideas that each employee holds the key to the Company's sustainable development, and that the Personnel Division is an organization with the power and responsibility to nurture and utilize the Company's human resources. We are currently tackling various issues related to this strategy.

As priority issues over the medium-to-long term, we are working to realize the following four sets of measures so as to achieve the goals set forth in the Mitsubishi Chemical (MCC) Group's *APTSIS 15* medium-term management plan.

1. Adequately respond to the ongoing structural reorganization of the Group's business operations
2. Respond to globalization
3. Strengthen the capabilities of personnel assigned to "front line" operations
4. Continue and further intensify efforts to strengthen the Group's business base

Regarding "Adequately respond to the ongoing structural reorganization of the MCC Group's business operations," we are aiming to enhance the MCC Group's competitiveness while pursuing optimal staff allocation for an optimum balance of personnel.

Regarding "Respond to globalization," we are focusing on hiring and training staff capable of performing effectively in the global marketplace, and we use the newly-built global personnel database to conduct studies about the understanding and utilization of the regional staff.

Regarding "Strengthening the capabilities of personnel assigned to "front line" operations" we are making efforts to improve the management capacity of the middle managers and streamline operations, and regarding "Continue and further intensify efforts to strengthen the MCC Group's business base" we are working to create a transparent and open corporate culture, and to make more use of the talents of a wide range of personnel, including women, foreign citizens, senior citizens, and persons with disabilities, and promoting the health of our employees by launching the "Health Promotion Committee" consisting of three parties: the Company, labor union, and health insurance society.

In addition, human resources management including recruitment, placement and training has been rebuilt to create a system even more in line with business strategies.

Activities and Achievements

Initiatives aimed at human resource development: Training people capable of thinking and acting independently

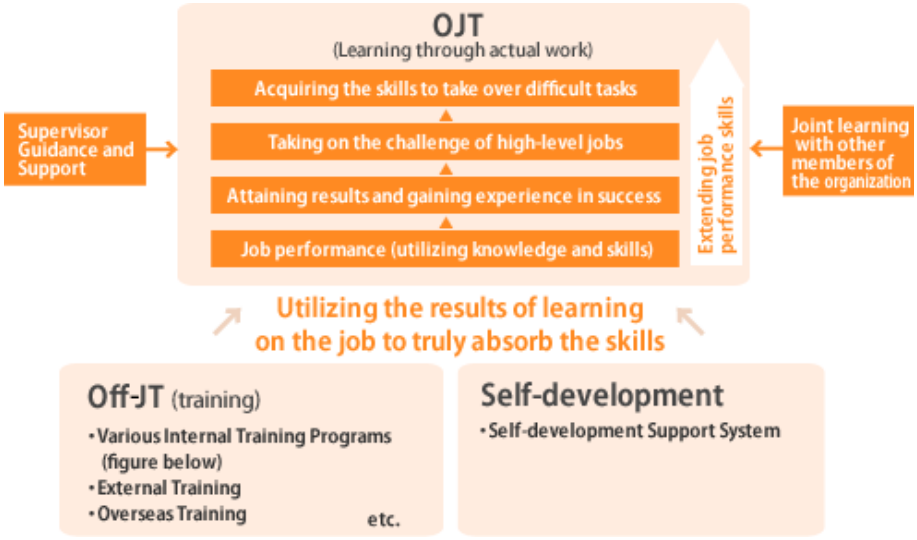
Basic concept to human resource development

Mitsubishi Chemical Corporation (MCC) believes there are three important elements in the growth of human resources, namely "OJT"[1] where personnel learn through actual work, "Off-JT"[2] where personnel utilize opportunities outside work for learning and self-development, "Self-development" where they themselves engage in learning in various ways. By establishing links between these three elements and supplementing them with one another, they become more effective overall. With these three elements as the pillars, MCC supports the growth of its personnel in a number of ways.

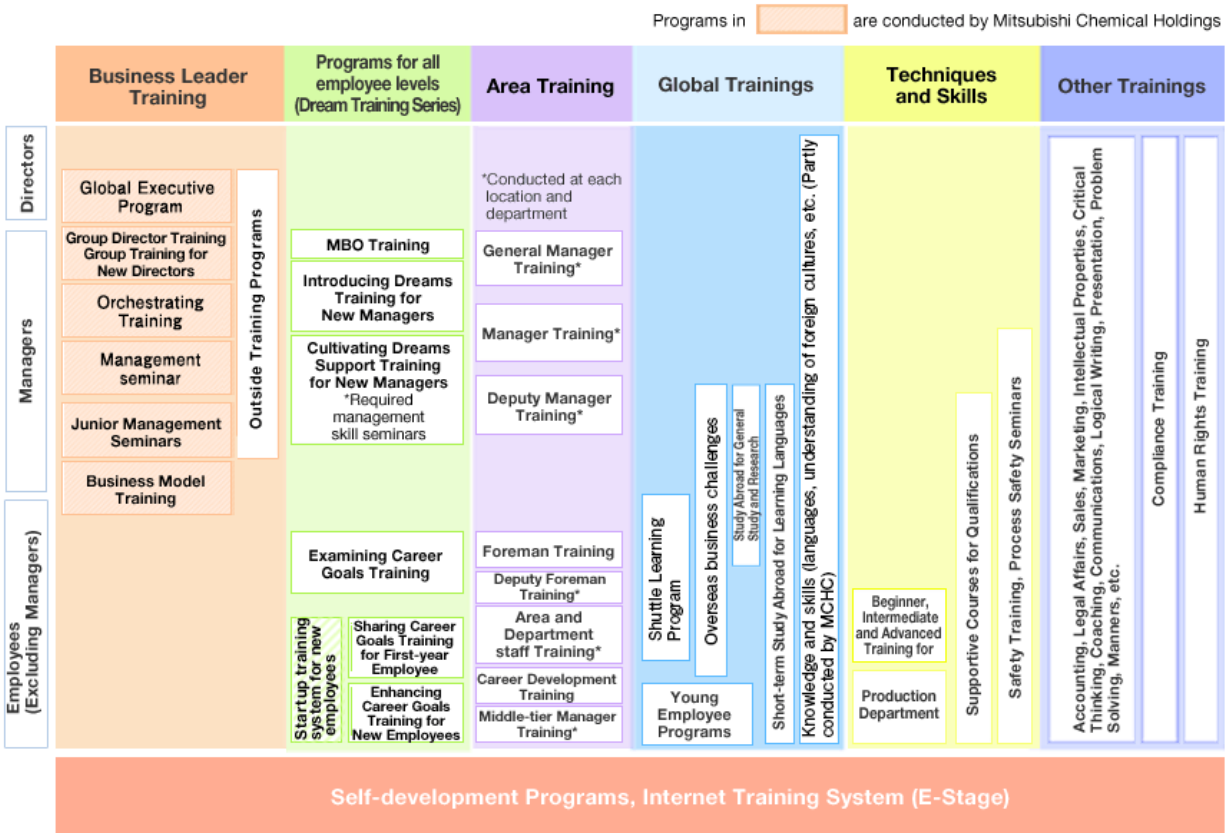
1 OJT : On the Job Training

2 Off-JT : Off the Job Training

The Three Pillars of Human Resource Growth



● **Employee training system of Mitsubishi Chemical Group**



Enlarged view

Management system

MOS Indices C-2-2: Achieve targets for employee-related indexes ＞Find out more

Since 2001, MCC has employed a target management-oriented evaluation system. Today, the system applies to all employees, under which we conduct goal setting interviews at the beginning of a period and performance evaluation interviews for the previous fiscal year later on. In fiscal 2011, we also introduced a system to hold interviews part way through a period. In this way, we are working to further disseminate the personnel system and improve the legitimacy of evaluations.

Fostering the next generation of executives

Training for the development of the next generation of MCC Group executives is centered on participation in the business leadership program organized by Mitsubishi Chemical Holdings Corporation (MCHC). For executives, the Global Executive Program and Group New Executive Training were held. Moreover, the MCHC Group holds programs including Orchestrating Training to promote sharing vision and orchestration, Management Seminars and Junior Management Seminars to learn management literacy, and students are sent to the programs from the MCC Group.

Cultivating Global Human Resources

The MCC Group is currently making an active effort to globalize its businesses by establishing overseas production bases and expanding businesses in overseas regions, mainly in China, India, and other emerging countries. In the area of human resources development, in order to cultivate global management human resources capable of dealing with mergers and acquisitions and the configuration of alliances and partnerships, we are providing domestic training to enhance employees' global sensibilities and communication abilities, including language training and understanding of different cultures, and in addition we are implementing the systems and programs required for the dispatch of employees overseas.

Together with Mitsubishi Plastics, Inc. we carried out the Shuttle Learning Program, where Japanese employees with

little overseas experience and local staff from overseas companies undergo training through lectures and discussions in English.

Activities and Achievements

Offering opportunities to take on challenges and boost awareness

In addition to usual personnel transfer and rotation among divisions, Mitsubishi Chemical Corporation (MCC) has established a system (Career Challenge System) where employees may declare their desires related to their duties and career, and transfer to desired areas.

The system works in three ways: open recruitment where programs are offered in-house and those wishing to participate apply, in-house free agencies where employees make a request for a transfer to another duty, and in-house internships where employees are transferred to another duty for two to three years for training on the assumption they will return to their previous duty. These ongoing efforts are being made to encourage greater use of the system, such as improving ease of use by unifying application forms and trying more effective measures for publicizing the system among employees.

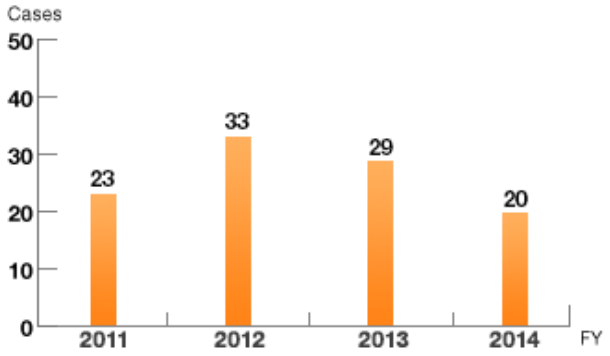
A career counseling system adopted in fiscal 2006 also enables employees to independently consider their career path. Qualified career counselors are assigned in-house and other employees may consult with them at any time about their careers. The system offers awareness-building opportunities for employees who are seeking to form their career path. Individual guidance is given from the viewpoints of taking inventory of one's career so far and of rediscovering oneself.

Actual use of open recruitment, in-house free agencies, and in-house internships

FY

Title		2011	2012	2013	2014
Open recruitment	Programs offered (people)	13	4	13	4
	Applicants (people)	13	18	32	24
	Accepted (people)	6	4	12	4
In-house free agent (people)		0	2	1	0
In-house internship (people)		4	1	1	1

Number of people who consulted career counselors

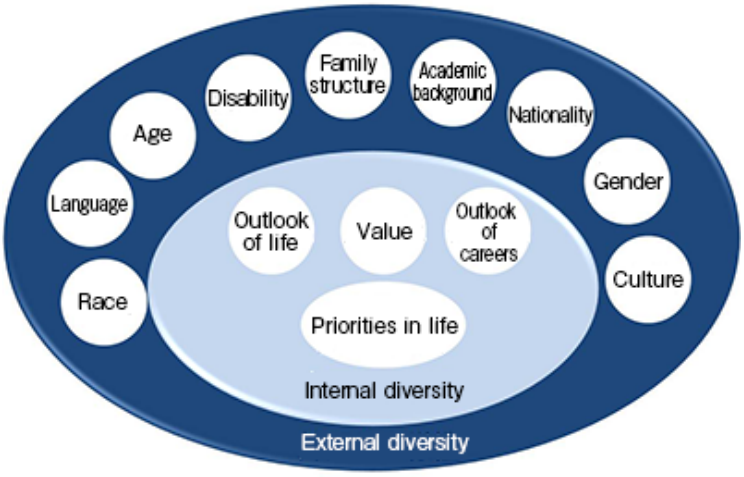


Activities and Achievements

Initiatives aimed at developing the organization and corporate climate: Striving to develop an organization and corporate culture that makes work rewarding for anyone

The Mitsubishi Chemical (MCC) Group proactively promotes diversity for developing a corporate culture where all employees mutually respect each other's values and find work rewarding.

Diversity applicable to MCC's diversity promotion



Efforts to promote the active participation of female workers

MOS Indices C-2-2: Achieve targets for employee-related indexes
C-3: Earn recognition of corporate trust ＞Find out more

Aiming to be a company where all employees work to their fullest capacities regardless of their gender, as well as having appeal as a place where energetic workers come together, MCC in 2008 adopted the Women's Initiative & Work Innovation (WIN-WIN) Plan. Using the targets stated in the plan as guidelines, MCC has established systems to provide necessary career support to female workers, including leave while accompanying the spouse's overseas assignment, temporary suspension of transfer, and declaration of the desired place of work. These systems can be used regardless of gender. Systems for work-life balance related to child care and family care also being used on an ongoing basis. As a result of these initiatives, an in-house survey showed many respondents felt personnel assignments and appointments are conducted regardless of gender and age, and that there have been improvements and progress in expanding job types and fields.

Target values of Women's Initiative & Work Innovation (WIN-WIN) Plan（%）

FY

Item		2011	2012	2013	2014	2015	Target values[3]
Ratio of women among management		4.9	5.3	5.8	6.3	6.4	over 20
Ratio of women among new hires	Clerical	39	36	44	31	50	over 40
	Engineering	14	8	18	15	29	over 20

3. The target for ratio of women among management is for fiscal 2025 and for women among new hires is for fiscal 2015.
The result for the ratio of women among management as of April 1 for each year

Status of use of systems for work-life balance

FY

System	2011	2012	2013	2014
Child-raising leave (people)	116	110	99	100
Shorter work hours while raising a child (people)	210	218	210	195
Nursing care leave (people)	2	6	6	4
Shorter work hours while providing nursing care to family members (people)	3	4	5	4
Fertility treatment leave (people)	0	0	0	1
Subsidy for fertility treatment (cases)	40	56	56	62
Leave to accompany spouse's overseas assignment (people)[4]	1	1	3	1
Temporary suspension of transfer (people)[5]	0	0	0	0
Declaration of desired place of work (people)[6]	2	0	1	1

4 Leave for accompanying spouse's overseas assignment
Allows employees to take leave of up to three years when accompanying the spouse's overseas assignment.

5 Temporary suspension of transfer
Allows employees to be exempted from transfer that accompanies relocation and to continue working at the current place of work for a specified period while raising a child.

6 Declaration of desired place of work
The system allows employees to ask to be transferred to the spouse's place of assignment when the spouse is transferred to a remote location and work-life balance is hindered or there are other family reasons.

Front Runner

Taking leave while accompanying the spouse on an overseas transfer

Kyoung-Hi Nishino
Electrolyte Business Group
Battery Materials Department
Mitsubishi Chemical Corporation (As of July, 2015)

It was decided that my husband would go to the United States for two years from August 2011 to conduct research at a university there so in order to go with him I took leave under the system for leave while accompanying a spouse overseas. Initially I did not know that this system existed and I considered quitting my job, but when I consulted with my superior he recommended that if I intended to continue working in my current job after returning to Japan I should apply for leave under the system for leave while accompanying a spouse on an overseas assignment.

Deciding that during my time in the United States I wanted to challenge myself to learn skills that would be useful for my work when I return to Japan, I studied English and matters related to business. For English I attended the Extension School at Harvard University, and I obtained an opportunity to acquire business-related knowledge in a program at Georgetown University in Washington DC. I was able to greatly broaden my perspective because I heard lectures given by distinguished professors and by coming into contact with innovative and diverse views through my discussions with my classmates from countries around the world.

After returning to Japan I went back to work from September 2013. I was worried about whether I could do the work as well as before because I had not been involved for two years, but I was given a period of approximately three months to warm up by reacquainting myself with the operations, and after that I returned to full-scale practical operations. It is now approximately nine months since I returned to the workplace but thanks to the warm support of my colleagues, I have already been able to regain the sense of the work I had before I took leave. Going forward I hope to utilize my experiences in the United States for my work.

Taking child care leave

Takeshi Kato
Waterborne Resin Group, Performance Products Laboratory,
R & D Center, Yokkaichi Plant,
Mitsubishi Chemical Corporation (As of July, 2015)

In May 2013, my first daughter was born so until the end of January the following year I took child care leave. I consulted with my superior about when to take the leave and we chose a time between major projects.

I had two reasons for taking the leave. The first was that I wanted to reduce the burden on my wife during her child care leave as much as possible. The second was that when my wife returned to the workplace I would return to my job assignment away from my family so I wanted to spend as much time as possible with my family before that.

I had my hands full with housework and child care during my child care leave. For example, in addition to housework such as cleaning, laundry and cooking, I changed the diapers of my daughter, gave her baths, prepared her milk formula, took her for walks, read picture books aloud to her, put her to bed, and so on. Because everything was new to me I could not do things at my own pace and it was more challenging than I had imagined, but with instructions from my wife I became able to do everything related to child care. I experienced the joy of watching my child grow. I think this was suffering and joy I was able to know precisely because I could focus exclusively on the child care. Now that I have truly experienced and understood the difficulties of child care for myself, I have started to do an hour's housework in the morning before going to work.

Finally, I would like to express my deep gratitude to the relevant people in my workplace who provided the support that enabled me to take child care leave.

Promoting diversity in recruitment

MOS Indices C-2-2: Achieve targets for employee-related indexes ＞Find out more

Mitsubishi Chemical Corporation (MCC) promotes diversity in its recruitment activities, with the hope of revitalizing the organization by addressing changes in the business environment and globalization, and by assembling diverse human resources. Specifically, we are working to increase the percentage of female and foreign national hires and for recruitment activities for fiscal 2016, we have established a diversity promotion quota to accelerate diversity, centered on foreign nationals. Application eligibility has also been expanded for university graduates, treating them as new graduates for up to three years after graduation. We are also making active use of mid-career recruitment.

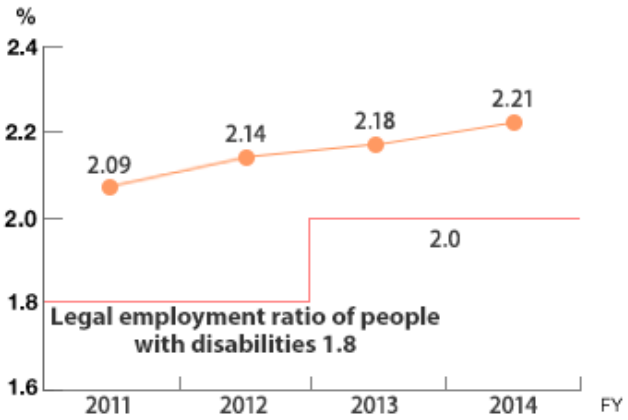
In fiscal 2015, 55 new graduates were hired, 19 of whom were women and 4 of whom were foreigners. After recruitment, training commenced for this diverse array of employees to enable them to make an outstanding contribution to the realization of *KAITEKI* Value in the years ahead.

Helping people with disabilities bring out their skills

Under a philosophy of normalization, in 1993 we established a special subsidiary, Kasei Frontier Service, Inc., for helping people with disabilities take on roles with greater responsibility, developing their capabilities, and contributing to society. At the same time, we have sought to improve their working environment. This subsidiary's major businesses include information processing services, general printing services and work consigned by MCC. As of June 2015, 75 people with disabilities (of a total of 114 employees) work at the Kitakyushu head office and Yokkaichi branch office in ways that suit their respective skills.

The employment ratio of people with disabilities as of fiscal 2014 is 2.21%. Since the statutory employment ratio was raised to 2.00% in April 2013 we have maintained a level that is above this.

Change in employment ratio of people with disabilities



* Includes companies to which MCC's system of disabled person employment ratio applies

Front Runner

Filling our company with a bold spirit where people with disabilities work in harmony

Kenichi Sato
Managing Director
Kasei Frontier Service, Inc.

Kasei Frontier Service, Inc. considers both the tangible and intangible aspects of the working environment to enable people with disabilities to work with enthusiasm. Yet we have never treated people with disabilities in a special way. This is because we hope to be a group with a bold spirit where people with disabilities and those without impairments work in harmony.

In our management, we are continually mindful of making the company an organization we can be proud of as a team of human beings. For this purpose, this must be a company where anyone can work comfortably in a friendly but competitive environment. On the other hand, we need to face the reality that, as we age, we experience different occurrences. Even under these circumstances, we need to develop working environments where each of our employees feels joy when they work and have a sense of participating in and contributing to society.

Front Runner

Aiming to be a reliable branch office in Yokkaichi

Masayo Ito (internal disease)
Leader
Kasei Frontier Service, Inc. Yokkaichi branch office

I am in charge of managing progress with orders and overall clerical duties as “the gateway” to customers, as well as take charge of following through on duties related to employees with disabilities working at the Yokkaichi branch office and being there to consult with them.

The Yokkaichi branch office has been in operation for 12 years, is gaining an increasing number of orders and I think it has earned customers’ trust. I want to heighten customer satisfaction going forward by enhancing our skills and improving our work accuracy and speed.

Moreover, keeping in mind that health management is the most important thing for individuals, we try to improve by learning from others’ working hard so we can all lead better lives and strive hard on a daily basis.

Utilizing skills of senior workers effectively

Since the Act for Stabilization of Employment of Older Persons was amended in April 2013, companies have become obligated to make employment opportunities available to interested employees up to the age of 65. Staying ahead of social trends, however, MCC established prior to this the Senior Partner System for rehiring enthusiastic and able employees after they reach retirement age. In fiscal 2014, 126 of 144 such employees wished to continue their employment and were rehired under the system. They use their skills as experienced workers and train younger workers to pass on the expertise and techniques they have acquired in their careers.

Activities and Achievements

Helping employees attain a work-life balance by promoting a reduction in total working hours

The Mitsubishi Chemical (MCC) Group believes that maintaining work-life balance improves productivity and motivation for both men and women. Based on this thinking, MCC has attempted to reduce total work hours so that all employees can lead healthy and satisfying daily lives.

Reducing overtime and holiday work hours and eliminating excessive work hours by raising work efficiency

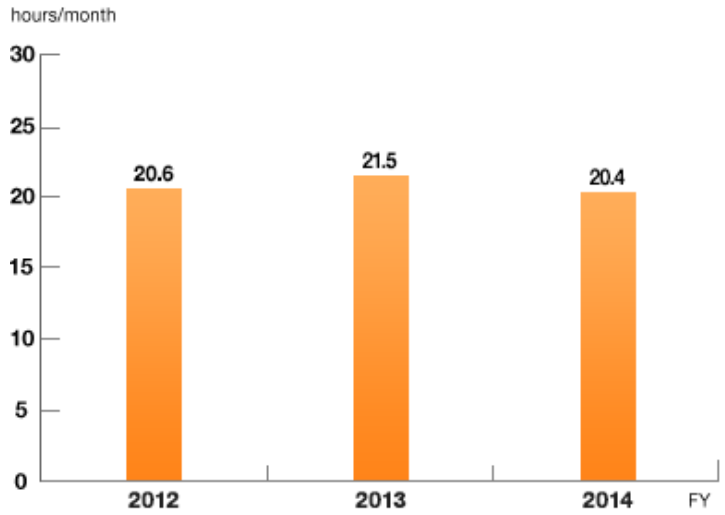
MOS Indices C-2-2: Achieve targets for employee-related indexes ＞Find out more

MCC seeks to reduce overtime, holiday work, and excessive work hours by ensuring division managers properly understand the duties and work hours of subordinates, eliminate excess or waste in their duties, and maintain appropriate duty allocation within the workplace.

Specifically, by obeying a system requiring advance permission for overtime and holiday work and prompting people to leave work early, we encourage awareness of completing work within set time periods and then going home. In addition, to make work more efficient we are not particular about previous methods through daily communication between managers and their subordinates.

In fiscal 2014, there was an increase in workloads due to large-scale periodical repairs at plants. However, there was a decrease in overtime and holiday work compared to the previous fiscal year as a result of steady efforts.

● **Change in overtime and holiday work hours (general workers (regular daytime workers))**



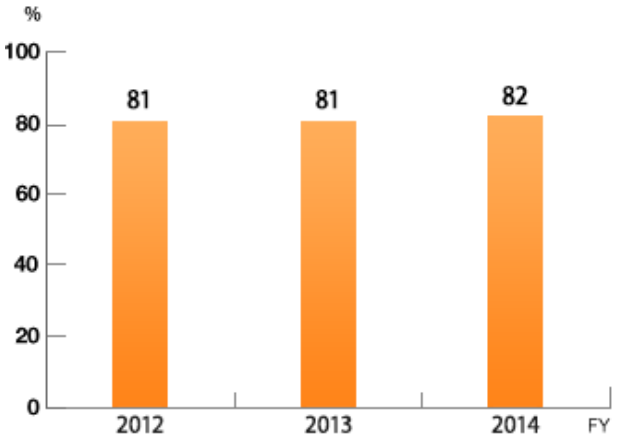
Measures for encouraging employees to take annual paid vacation

MOS Indices C-2-2: Achieve targets for employee-related indexes ＞Find out more

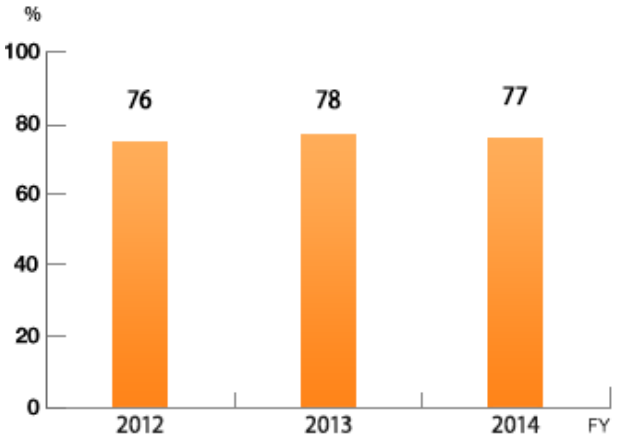
Aspiring to encourage employees to lead well-modulated daily lives with greater leisure, MCC is striving to create an environment that allows employees to take planned vacations. Examples include setting planned annual holidays (three days each year) and adopting a life support holiday system. The life support holiday system enables an employee taking two consecutive paid days off to take an additional day off once a year. This enables five consecutive days off if a weekend is included, so it is a mechanism that can raise the employees' awareness of extended holidays. Employees aged 30, 35, 40, 45, 50 and 55 are allowed three extra days off, to take even longer vacations.

We have also established volunteer holiday (five days), volunteer leave (three years), and donor holiday (in the number of necessary days) systems to assist employees doing volunteer work.

● **Change in number of paid vacation days taken (general workers)**



● **Change in the ratio of life support holiday system taken (general workers)**



The drafting of the 4th Action Plan (April 2013 – March 2018)

The Act for the Promotion of Measures to Support the Nurturing of the Next Generation went into force in 2005, following which Mitsubishi Chemical Corporation (MCC) drew up its Action Plan for General Business Proprietors. Then, in 2007 MCC acquired the Kurumin certification as a company providing help for its employees in bringing up children. Since that time, the Company has continued to provide a working environment enabling its employees to achieve a good work-life balance, and since April 2013 we have been promoting enhanced work-life balance support in line with the stipulations of our 4th Action Plan.

The 4th Action Plan

We have drawn up the following action plan to realize a working environment in which all employees can achieve a good work-life balance, enabling them to work efficiently and make full use of their skills.

1. Period of plan: April 1, 2013 to March 31, 2018 (5 years)

2. Objectives

Goal No.1: Provide increased support for child-raising by employees

- Examine ways in which the working environment can be improved to help employees achieve a healthy work-life balance

  Examples: Improve follow-up procedures for employees taking advantage of the Company's work-life balance support system; promote understanding and wider utilization of newly introduced systems; expand maternal welfare activities; promote greater involvement in child-raising by fathers; examine expansion of work-menu options for mothers and fathers during child-raising period; develop a corporate culture that encourages employees to take advantage of system of paid leave for child-raising.

Measures taken

April 1, 2013 to March 31, 2018

Formulation and implementation of specific measures; operation of new system, and comprehension of issues needing to be addressed

Goal No.2: Take measures to further foster a corporate culture that helps employees achieve a healthy balance between work and child-raising

- Various educational activities to foster the desired culture across the entire Company Plan and hold lectures and seminars; make use of existing in-house training system
- Continue and further enhance in-house educational activities regarding human rights aimed at helping bring about a gender-equal society
  Take measures to raise human rights consciousness through training
- Take steps to reduce overtime to help employees achieve a healthy work-life balance (Examples: campaign to encourage employees to leave work at the fixed time; hold talks in the office regarding use of the system of paid leave for work-life balance support, and on cutting back on overtime hours worked)

Measures taken

April 1, 2013 to March 31, 2018　Formulation and implementation of specific measures

Goal No.3: Apply Companywide regional support measures for fostering sound development of young people

- Provide opportunities for children and adolescents to acquire work experience and experience of participation in the wider society, such as holding factory tours, conducting chemical experiments in front of students at local elementary and junior high schools, inviting children to visit workplaces, and offering internships and other practical work experience programs

Measures taken

April 1, 2013 to March 31, 2018　Development of specific activity program

Activities and Achievements

Striving to establish a culture of human rights through ongoing education and awareness-raising activities

MOS Indices C-3: Earn recognition of corporate trust ＞Find out more

The Mitsubishi Chemical (MCC) Group established Guidelines for the Promotion of Human Rights Awareness in 1980, tackled human rights issues to fulfill its social responsibility as a corporation from the outset, and has continued to engage in human rights education and awareness-raising activities ever since. As initiatives related to human rights and respect for diversity are so closely related, we revised our human rights and diversity awareness-building guidelines from fiscal 2014 and will tackle these issues together going forward. Today, we conduct training and awareness-building to deepen the proper understanding and recognition of human rights issues and ensure that we conduct business activities in ways that conform to the Ten Principles of the United Nations Global Compact.

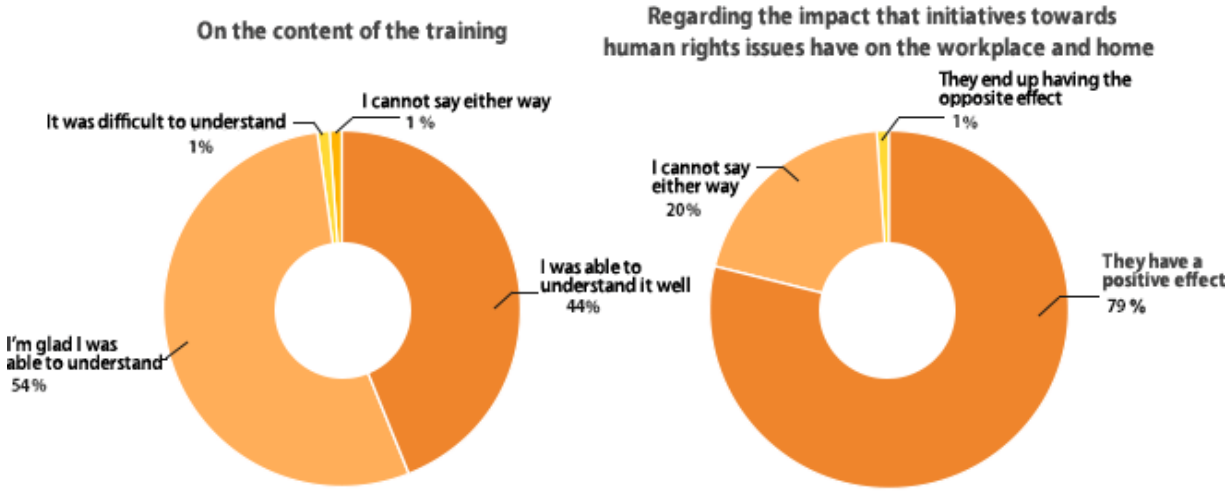
Each year, we develop a timely priority issues list. In fiscal 2014, for instance, we set out the goals of working toward global standards of human rights, reconfirming and understanding the Buraku issue, eradicating prejudice as well as preventing sexual, power, and other forms of harassment. We conducted 446 group training sessions aimed at all employees working within the Group, including executives and temporary staff. In total, 8,925 employees attended these sessions. Human Rights E-Training is also continuously administered using the Company Intranet, and has been used by some 15,802 employees to date. The percentage of employees who have undergone group training currently stands at around 40% of all employees (members such as executives and top management undergo training on a yearly basis).

Education and training on human rights given

FY

Training description		2011	2012	2013	2014
Group seminars	Number of times	432	556	450	446
	Number of people	10,019	11,611	8,710	8,925
Human Rights E-Training	Number of times	4	4	4	4
	Number of people	20,364	17,072	17,086	15,802

Results of Questionnaire after Group Human Rights Training (2014)



MCC precludes any and all discrimination in its hiring and selecting employees. MCC takes sufficient consideration of the privacy of the persons concerned in the case that infectious diseases, such as HIV, or sexual minorities (LGBT people) are made known after joining the Company, and takes appropriate steps.

Guidelines for the Promotion of Human Rights and Diversity Awareness (Preamble)

Based on the Mitsubishi Chemical Holdings Group Charter of Corporate Behavior, we approve diversity and strive to be a company that does not infringe on the respect and rights of individuals, and herewith lay down these guidelines.

1. Basic Policy

(1) As part of our corporate social responsibility, we work to increase awareness of various human rights issues such as social discrimination against outcast people, and prevent all cases of discrimination or harassment.

(2) As part of our corporate social responsibility, we work to respect diversity among people, and create a company where employees can maximize their abilities with secure physical and mental health.

Activities and Achievements

Running of employee surveys

MOS Indices C-2-2: Achieve targets for employee-related indexes ＞Find out more

The Mitsubishi Chemical Group has conducted employee surveys since fiscal 2006. In fiscal 2014, 20,576 employees, representing roughly 91% of all domestic employees and employees stationed overseas, cooperated with the survey. The survey addressed a diverse range of issues from employee satisfaction to the workplace environment, with initiatives being undertaken to reflect the feedback from employees in various management policies.

Activities and Achievements

Building productive labor-management relations

The Mitsubishi Chemical Labor Union exists at MCC. It is made up of the headquarters and seven branches, Tokyo and Districts, Kurosaki, Yokkaichi, Mizushima, Sakaide, Kashima and Tsukuba. In October 2014, it switched from a federation of labor unions to a single organization. As of the end of March 2015, there were approximately 5,200 members of the labor union, accounting for about 60% of the employees belonging to MCC. The MCC Labor Union does not participate in senior bodies, but pursues a policy of working together with the Company. The emphasis is placed on maintaining and strengthening sound labor-management relations, and the two parties meet regularly and exchange opinions at biannual management and labor committee meetings.

Some MCC Group companies have organized labor unions, and these have all maintained productive labor-management relations.

Front Runner

MCC Labor Union

Masaki Okazawa
President
MCC Labor Union

Based on a union philosophy of “Working together with the Company,” we contribute to corporate growth and development to realize an enriched and leisurely life.

In conjunction with environmental changes including globalization and an aging society with a low birthrate, working methods and lifestyles are changing and diversifying. Under these situations, we realize that creating a workplace environment where individuals feel safe and secure is a matter of highest priority.

Consequently, in addition to the improvement of working conditions, we think that good relations between the Company and labor union, including relations between workplace managers and rank-and-file employees are important. So, we state what should be stated and cooperate where cooperation should be given through various Management Council Meetings and union activities, and endeavor to build a healthy labor-management relationship based on trust and understanding.

Together with Stakeholders

Corporate Citizenship Activities

Policy

Basic concept

As a member of the Mitsubishi Chemical Holdings (MCHC) Group, Mitsubishi Chemical Corporation (MCC) engages in corporate citizenship activities that include fostering the development of the next generation, communicating with local communities, and disaster support in line with the MCHC Group Corporate Citizenship Activities Policy.

The MCHC Group Corporate Citizenship Activities Policy

As good corporate citizens, the MCHC Group has been striving for realizing *KAITEKI* with better understanding of 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 in various ways including our business activities where we located.

[Approach]

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

Disaster support

Activities in support of post Great East Japan Earthquake reconstruction

MOS Indices C-3: Earn recognition of corporate trust ＞Find out more

Many places in Tohoku suffered enormous damage from the tsunami that followed the Great East Japan Earthquake. As part of our activities to support reconstruction in Tohoku, we invited primary school students from Kamaishi City and Otsuchi Town in Iwate Prefecture, together with a guardian for each student, to Tokyo in cooperation with Good Neighbors Japan[1], an NGO. Called "Let's Go To Tokyo," this event, held for the third time, enabled the group of 71 people to visit Tokyo as part of Tohoku reconstruction support. Participants went sightseeing to Tokyo Disneyland and Tokyo Skytree, as well as took part in science experiment workshops in our head office building. We believe that this event gives the children both a refreshing break and the opportunity to learn more about the MCHC Group's business operations.

1.Good Neighbors Japan is a Japanese Specified Nonprofit Corporation and part of Good Neighbors International, which is an international, non-profit humanitarian organization committed to child education, community development and emergency relief projects in 30 countries.

"Let's Go To Tokyo"

Science experiment workshop

Furthermore, the MCHC Group held in its head office building exhibitions of local specialty products of Iwate Prefecture, Miyagi Prefecture and Fukushima Prefecture. On the days of the exhibitions, many employees purchased a wide variety of goods and the events were a great success.

One of the exhibitions of local products from three prefectures in Tohoku

The MCHC Group has also made donations and provided relief supplies to help disaster-affected areas and has supported volunteer activities by its employees in these areas. Going forward we plan to continue activities supporting the recovery of Tohoku.

Fostering the development of the next generation

Science experiment workshop

MOS Indices C-3: Earn recognition of corporate trust ＞Find out more

The MCC Group runs a science experiment workshop in each plant with the aim of sparking an interest in chemistry and science among the children who will lead the next generation.

Delivery of Science Experiment Workshop (Kashima Plant)

To forge communications with the local community and spark an interest in chemistry and science among the children who will lead the next generation through fun chemistry experiments, Kashima Plant has run a delivery of science experiment workshop for elementary school fifth graders in Kamisu City, Ibaraki Prefecture, where the plant is located, since 2000.

For fiscal 2014, experiments on atmospheric pressure were held at four local elementary schools under the theme "The air is powerful" in February 2015. The students were amazed to observe how easy it was to crush aluminum cans and large square cans using air pressure and how easy it was to lift up a heavy plastic container or adult human being simply by blowing air into a sealed bag with a straw, and enthusiastically took part in the experiments together with the employees who served as were the instructors.

2014 Youngster's Science Festival in Kurashiki (Mizushima Plant)

In November 2014, we set up a booth for scientific experiments and engineering experiences at the 2014 Youngster's Science Festival in Kurashiki, Okayama Prefecture. The festival is a science education event held on a nationwide scale with the aim of helping youngsters understand the attraction of science through real-life experience. This was the 16th science festival in Kurashiki, and Mizushima Plant has taken part every year since 2006.

On the day, we worked with children on experiments using liquid nitrogen, and making glittering balloon slime, contributing to raising children's interest in science.

Chemistry Experiment Workshop during the Kurosakiyado Autumn Festival (Kurosaki Plant)

Kurosaki Plant held a chemistry experiment workshop during the Kurosakiyado Autumn Festival in the area

centered in front of Kurosaki Station in Kitakyushu City, Fukuoka Prefecture. This is the eleventh time MCC has held the workshop, which are held each year.

Once again, R&D Center employees played a central role as instructors to conduct experiments making slime from laundry starch and fragrance from super-absorbent polymer and aromatic oil.

The workshop was such a great success that many children lined up to take part and displayed keen interest as they set about conducting the experiments.

Mitsubishi Chemical Junior Designer Award (MCJDA)

MCC has supported the Mitsubishi Chemical Junior Designer Award (MCJDA) since fiscal 2006 for supporting young designers and promoting design. MCJDA is the only system in Japan giving awards to the graduation projects of students aspiring to be leading designers in all areas of design including product, graphic, fashion, multimedia, packaging and design studies. Through MCJDA, we strive to create opportunities to find promising young designers and introduce them to the public. We usually issue a call for works in January, and announce the award winners and exhibit the winner's project in the fall.

In fiscal 2014, the fourteenth awarding, 233 works were sent in. Of these, 14 won award for their uniqueness, representing great variety.

2014 MCJDA Awarding Ceremony

Lifestyle and Paper crafts of Taiwan and Japan - Design of Paper Structures (by Sheng-Hsueh Hsaio) awarded the 2014 MCJDA Grand Prize

Activities and Achievements

Communicating with local communities

Coordination with local public interest corporations incorporated foundation

Kurosaki plant is a member of the Kitakyushu International Techno-cooperative Association (KITA). We take part in activities to help promote international cooperation through personal exchanges and technology transfers by providing opportunities for international training and developing the curricula for it in Kitakyushu City, Fukuoka Prefecture. MCC has participated in these activities since KITA was first established in 1980 and remained involved with the running of KITA, with successive Kurosaki Plant general managers having served as directors of the association to date.

For fiscal 2014, a total of 50 trainees from 25 countries were accepted into 5 courses held for 13 days. The training consisted of learning about environmental technology for managing air pollution and industrial wastewater, as well as developing instructors to train equipment management technicians.

The trainees have high motivation for learning and are highly interested in the environmental conservation and equipment management technologies employed by Japan, which went from being called one of the world's major polluters to achieving environmental improvements in a short time. For their part, the team of instructors conducts the training enthusiastically with the hope that the trainees will make use of what they learned in the training after they return to their own countries.

About Mitsubishi Chemical Corporation

Mitsubishi Chemical Corporation was incorporated on October 1, 1994 through the merger of Mitsubishi Kasei Corporation with Mitsubishi Petrochemical Co., Ltd. The company's roots trace back to Nippon Tar Industries Corporation, established on a fifty-fifty basis capital contribution by Mitsubishi Mining Company, Ltd. and Asahi Glass Co., Ltd. on August 1, 1934. As of March 2015, Mitsubishi Chemical Corporation and its 182 Group companies conduct business in the domains of performance products and industrial materials.

Corporate data of Mitsubishi Chemical Corporation (March 2015)

Mitsubishi Chemical Corporation

Establishment	June 1, 1950 (incorporated on October 1, 1994)
Head office	Palace Building, 1-1, Marunouchi 1-Chome, Chiyoda-ku, Tokyo
President & CEO	Hiroaki Ishizuka
Paid-in capital	50,000 million yen
Listing	Unlisted
URL	http://www.m-kagaku.co.jp/index_en.htm

Group Overview (Fiscal year ended March 2015)

Mitsubishi Chemical Corporation

Subsidiaries	142
Affiliates	40
(Total)	182
Number of employees	5,397 (non-consolidated) 22,866 (consolidated)

Business Domains and Main Products

Electronics Applications & Designed Materials

We provide increasingly diverse markets and society with a wide range of solutions, from materials to devices, by utilizing chemistry-based featured technology clusters.
>Details

White LED lighting / supplies

White closely resembling natural light achieved with propritary technology

Display Materials and Related Products

Offering a vast range of solutions including materials and components for LCD displays

Recording media

A leading share of optical recording media products in the global market

High performance polymers

Developing high barrier performance resins in the fields of food wrapping and various types of packages

Semiconductor-related Products and Services

Providing services such as wafer reclamation and precision cleaning together with materials such as high-purity process chemicals

Lithium ion battery materials

Make full use of material technologies to provide the main materials

Specialty chemicals

Targeting the three fields of coating and additives, electronic materials and living, we provide various materials enabling diverse functionalization

Food ingredients

Under a motto of "bringing tastiness and health closer," a diverse lineup providing advanced solutions for the food industry

Ion exchange resins

Supporting separation and refinement solutions for customers with a wide range of offerings, including pure water production and the purification of pharmaceuticals and foods

Chemicals & Polymers

With energy and resource-saving materials design, optimum process design and ultra-stable plant operation positioned as our core technologies, we seek to enhance our international competitiveness while providing the chemicals that support sustainable and diverse social infrastructure.
>Details

High performance graphite

World-class quality through integrated production

Coke

Crafted technologies supporting core industries
World-class production capacity as a merchant coke producer

Terephthalic Acid

World-class quality through integrated production

C4 chemicals

Responding to the need for high value-added chemicals for applications across an array of industries including high-performance fiber

High performance polymers

A broad array of products, mainly functional polyolefins, thermoplastic elastomers and PVC compounds, which address a myriad of applications, ranging from medical and industrial to daily necessities

Phenol and polycarbonate chain

Developing business with a low environmental load production process and strong global partnerships
One of Asia's few polycarbonate suppliers

Polyolefin

A lineup of high quality, high function polypropylene products
Providing a wide range of applications from automobiles to healthcare and foods

Sustainable resources

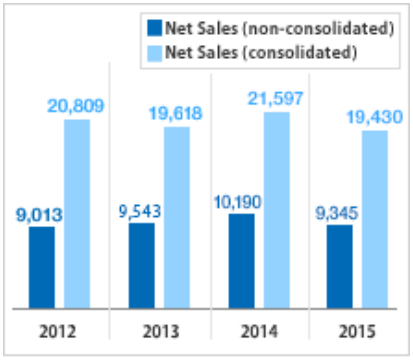
World's first development of DURABIO™ made from plant materials, with excellent transparency and optical features along with outstanding durability and weather resistance

Polyester resin

Established a product team that oversees all activities from obtaining resin from the raw material of terephthalic acid through to film. Responding to a variety of needs by advanced design, development and production technologies

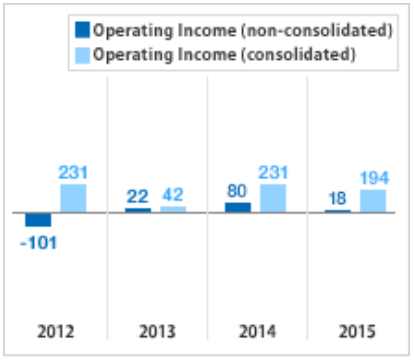
Financial Highlights (non-consolidated / consolidated)

- Change in Net Sales
  (units: 100 million yen)



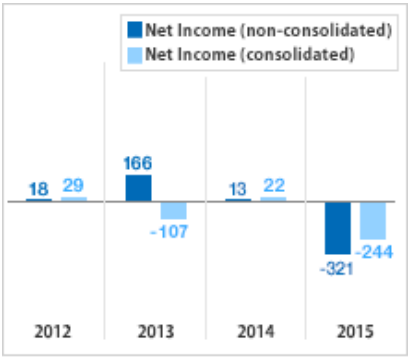
(Years ended March 31)

- Change in Operating Income
  (units: 100 million yen)



(Years ended March 31)

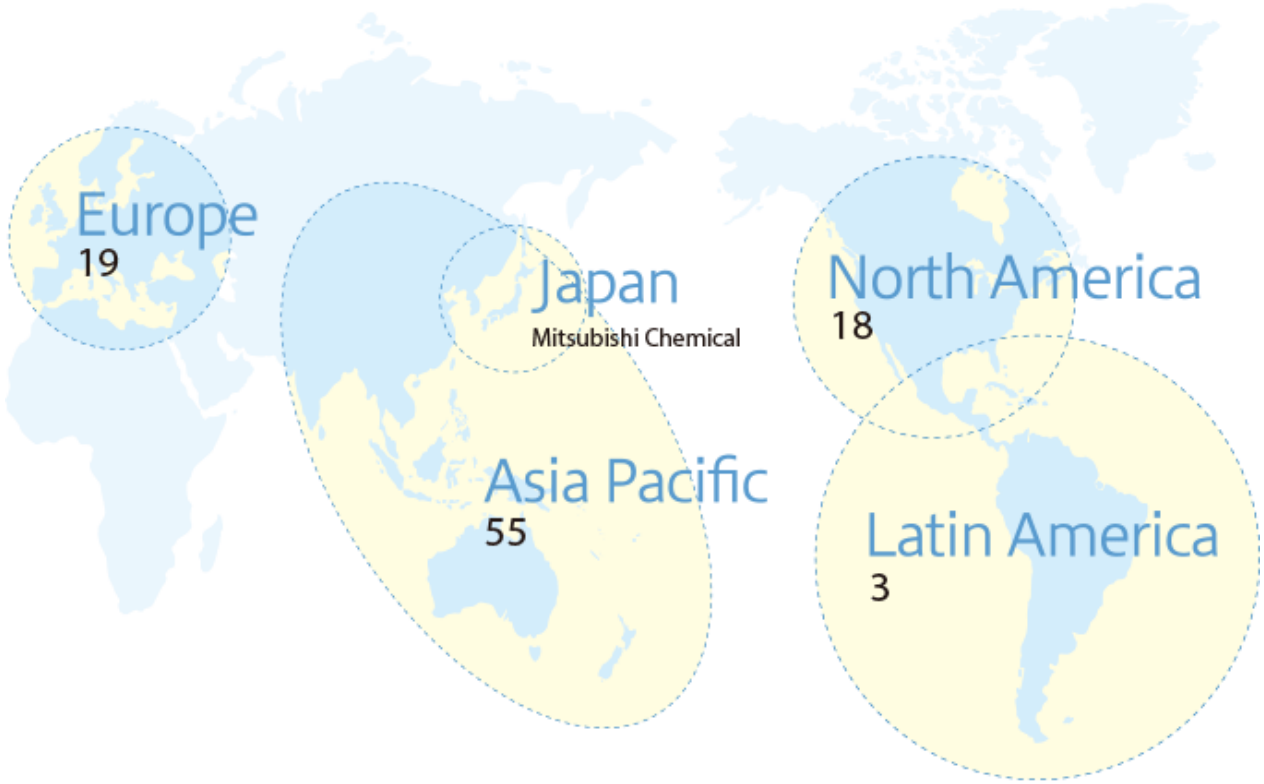
- Change in Net Income
  (units: 100 million yen)



(Years ended March 31)

Global network

Number of Subsidiaries and Affiliates (Japan) : 87
Number of Subsidiaries and Affiliates (Outside Japan) : 95

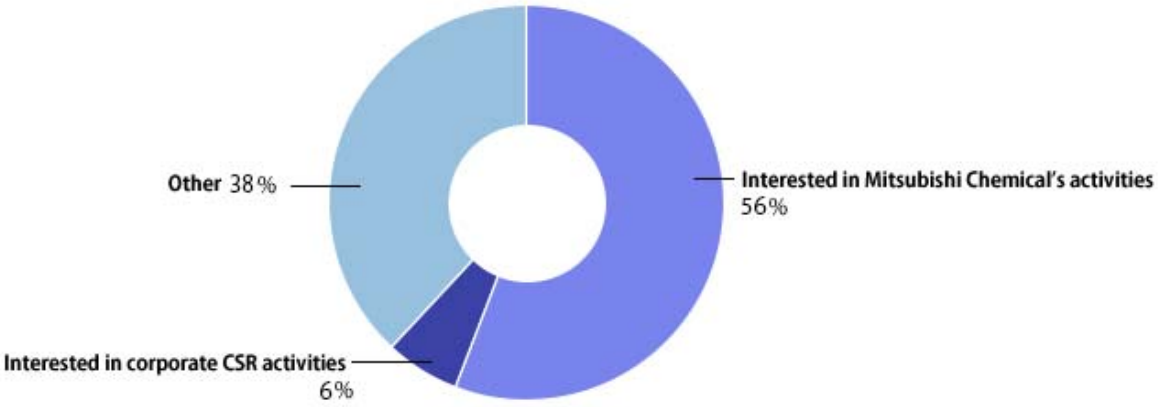


Results of questionnaire on CSR Report 2014

Thank you for your valuable opinions and comments on CSR Report 2014. We will refer to your feedback in our activities geared toward making *KAITEKI* a reality.

Below, please find the aggregated results of responses to the questionnaire.

Q1: What was your reason for visiting the website?



Q2: What is the position of the person responding to the questionnaire?