

# Sustainability Report 2017

**MITSUBISHI CHEMICAL CORPORATION** 

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### **Editorial Policy**

Mitsubishi Chemical (MCC) publishes the *Sustainability Report* with the aim of reporting to stakeholders on its initiatives aimed at its vision, realizing *KAITEKI*.

The fiscal 2017 report is organized into three main sections, "Management Structure," "Responsible Care Activities" and "Together with Stakeholders," which detail the efforts that comprise the foundation of our activities aimed at realizing *KAITEKI*.

#### About the Sustainability Report

To provide information on MCC's initiatives aimed at enhancing sustainability to as many stakeholders as possible, we disclose such efforts via our website.

#### **Reporting Period**

Fiscal 2016 (April 2016 to March 2017)

As the current MCC was launched in fiscal 2017, the reporting in *Sustainability Report 2017* focuses mainly on MCC's policies, internal regulations, operational systems and activity plans. However, certain sections of the report, such as those related to environmental conservation and collaboration with industry, academic and governmental partners, cover the fiscal 2016 activities of the former Mitsubishi Chemical, Mitsubishi Plastics and Mitsubishi Rayon. The report also covers some social contribution and other activities undertaken in fiscal 2017.

#### Scope of the Report

The basic scope of reporting encompasses Mitsubishi Chemical Corporation on a non-consolidated basis. However, certain sections contain reporting on a consolidated basis that encompasses Group companies. The scope of reporting, whether non-consolidated or consolidated, is indicated in each instance.

#### **Referenced Guidelines**

- Ministry of the Environment Environmental Reporting Guidelines 2012
- Ministry of the Environment Environmental Accounting Guidelines 2005

#### Publication

Published January 2018 Previous issues: Pre-merger Mitsubishi Chemical November 2016 Pre-merger Mitsubishi Plastics September 2016 Pre-merger Mitsubishi Rayon October 2016 \* Because the current Mitsubishi Chemical was formed in April 2017, this is the first Sustainability Report. Next issue: October 2018

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#### Disclaimer

This report contains not only past and present facts about the Mitsubishi Chemical Corporation Group, but also forecasts related to social conditions, 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 their writing. As such, actual future social conditions and business activity outcomes may differ from the forecasts and estimates presented in this report.

### Message from the President



In April 2017, the former Mitsubishi Chemical, Mitsubishi Plastics and Mitsubishi Rayon merged to form the new Mitsubishi Chemical Corporation (MCC). As a core operating company of the Mitsubishi Chemical Holdings Group, MCC seeks to provide solutions to environmental and social issues and realize *KAITEKI*.<sup>1</sup>

> Hitoshi Ochi President & CEO

### Growing Volatility in the Operating Environment

Numerous global-scale risks have materialized in recent years: climate change is worsening, extreme weather events are occurring more frequently, water resources are increasingly unevenly distributed, and populations around the world are expanding and graying. These and other issues pose many crucial but as-yet unsolved challenges and have brought the issue of sustainability to a head. At the same time, science and technol-ogy—including information and communications technologies, IoT-related technologies, artificial intelligence, robotics, and biotechnologies—are evolving at an unprecedented pace, driving irreversible changes in society, markets and our ways of being in the world. Our ways of living, our communities and the global environment are approaching a major turning point.

Alongside these changes, the operating environment is transforming. We can no longer expect steady economic growth; as the pace of external change increases, numerous factors are interacting in complex ways, making the operating outlook less certain and more volatile.

### Our Vision—Realizing KAITEKI

Under these circumstances, management focused solely on enhancing capital efficiency will no longer be enough to ensure sustainable corporate growth. Companies will need management built on unshakable values that pursues greater corporate value in both financial and non-financial terms.

The enhancement of financial value through business activities is necessary to corporate survival and sustainable growth. Also crucial, however, are activities that support non-financial value, such as those aimed at spurring innovation, contributing to sustainability, ensuring safety, security and stability, maintaining thoroughgoing compliance, and enhancing health and comfort. Non-financial value helps us maintain and enhance the trust of stake-holders while guiding our way forward in an uncertain operating environment and helping us see opportunities in change. If we are to ensure sustainable corporate growth, we cannot divide our efforts between creating these two forms of value; we must forcefully advance a virtuous cycle in which we create non-financial value through our businesses and reinforce said businesses by clearly declaring our approach to non-financial value.

Our *KAITEKI* Management is based on this approach. With our vision defined as realizing *KAITEKI*, we are implementing management that simultaneously improves capital efficiency, fosters innovation and enhances social value through advances in sustainability, always informed by an awareness of shifting trends and opportunities. By doing so, we are not only providing solutions to environmental and social problems, but broadly contributing to the sustainable development of people, society and the Earth.

### Fiscal 2017 Initiatives

In fiscal 2017, our first year as the new MCC, we are implementing two major initiatives aimed at realizing *KAITEKI*.

The first initiative is health and productivity management. With the dual focus of health support and workstyle reforms, this initiative aims to maximize the performance of one of the greatest assets of any company—the people who work there—from the perspective of health. On the health support side, we are encouraging employees to change both their mindsets and behavior to ensure physical and mental health. Workstyle reforms, meanwhile, are aimed at achieving radical innovations at the workplace level under the leadership of on-site managers to free up time that can be used to improve work-life balance or for value-creating work.

The second initiative is UP!20, a company-wide productivity improvement initiative aimed at ensuring efficient operations. This initiative combines the company-wide initiatives previously undertaken by the three premerger operating companies. All employees are working to identify how their work specifically contributes to ROIC,<sup>2</sup> each division has adopted indicators relevant to its own operations, and each workplace is striving to achieve the initiative's goals. Furthermore, we are reexamining work processes at all levels to eliminate waste, improve efficiency and accelerate innovation. These initiatives are being implemented on a company-wide basis, with every employee participating.

Health management and UP!20 are not independent of one another. Rather, we are undertaking an organically integrated implementation, mainly in the area of workstyle reforms, aimed at energizing employees and the organizations they belong to, improving productivity and spurring innovation. These efforts truly embody *KAITEKI* Management, which is focused on the integrated enhancement of financial and non-financial value.

### To Our Stakeholders

Harmonious relationships with our stakeholders are indispensible to our vision of realizing *KAITEKI*—achieving the sustainable development of people, society and the Earth. As we advance our corporate activities, we will continue to share our goals and the challenges we face with stakeholders through dialogue and disclosure. We ask for your continued understanding and support as we move forward under the banner of the new Mitsubishi Chemical.

<sup>1</sup> KAITEKI: An original concept espoused by the MCHC Group defined as "a sustainable condition which is comfortable for people, society and the Earth, transcending time and generations."

<sup>2</sup> ROIC: Return on invested capital, a management efficiency indicator calculated as core operating income before taxes divided by the sum of fixed assets and net working capital.

As a core operating company of the Mitsubishi Chemical Holdings (MCHC) Group, Mitsubishi Chemical (MCC) shares the MCHC Group's philosophy, vision and motto, working to realize *KAITEKI* by providing solutions to environmental and social issues and contributing to the sustainable development of people, society and the Earth.

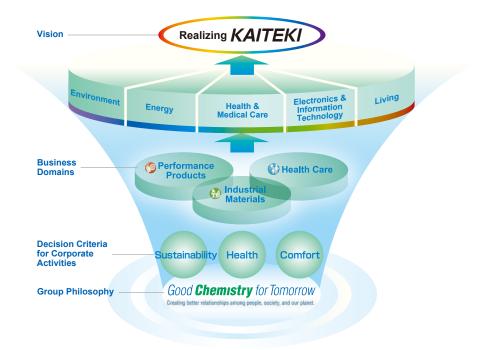
### What is KAITEKI?

Humanity has advanced to where it is today as a result of diverse economic activities as well as scientific and technological progress. At the same time, however, we have upset the natural balance of the global environment and are now confronted with complex problems ranging from climate change and natural resource and energy depletion to the uneven distribution of food and water. In addition to addressing these global issues, corporations are being asked by society to contribute to the fields of healthcare and medicine and to explore ways to improve convenience and advance technology while coexisting harmoniously with the planet.

*KAITEKI* refers to "a sustainable condition which is comfortable for people, society and the Earth, transcending time and generations." An original concept coined by the MCHC Group, *KAITEKI* points to 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.

MCC shares the vision of realizing *KAITEKI* with MCHC and, building on a foundation of chemistry, provides solutions to environmental and social issues through businesses related to performance products and industrial materials. In addition, MCC aims to more broadly contribute to the sustainable development of people, society and the Earth.

To advance corporate activities under the vision of realizing *KAITEKI*, we must earn the trust of stakeholders, and to do that, we must work in harmony with our stakeholders. As we advance our corporate activities, we will invite our stakeholders to share in our goals and the challenges we face through dialogue and disclosure.

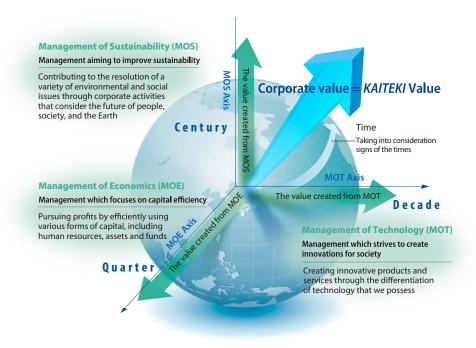


### KAITEKI Management

The word chemistry is used to refer to, of course, the science, but also to the compatibilities, relationships and connections between objects, between people or between people and objects. The MCHC Group includes these meanings in the Group philosophy of Good Chemistry for Tomorrow, and working to realize *KAITEKI* promotes corporate activities that create better relationships among people, society and our planet. Based on this philosophy, the MCHC Group asks, "What is the Good Chemistry that the future requires?" The answer that it has come to is Sustainability, Health and Comfort. The MCHC Group has therefore established Sustainability, Health and Comfort as three decision criteria for corporate activities.

In line with *KAITEKI*, the MCHC Group seeks to advance corporate activities aimed at solving environmental and social problems. To do so, however, conventional value criteria and management methods are not sufficient.

We have therefore created our own management method, which we named *KAITEKI* Management, and put it into practice. This method is 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. The MCHC Group evaluates and implements corporate activities based on these axes, the Group Philosophy and the abovementioned three decision-making criteria for corporate activities, always informed by an awareness of shifting trends and opportunities. We refer to the corporate value constituted by these three axes as *KAITEKI* Value. By enhancing said value, we get closer to realizing *KAITEKI* while improving the Group's sustainability. As an operating company, Mitsubishi Chemical also practices *KAITEKI* Management, implementing PDCA cycles using quantitative scoring on each of the three axes as it strives to increase corporate value, i.e., *KAITEKI* Value.



The Mitsubishi Chemical Holdings Group's KAITEKI Management

# Aiming to Realize KAITEKI Materiality Assessment

Mitsubishi Chemical Holdings (MCHC) conducts materiality assessments to identify important management issues (materiality) and further enhance *KAITEKI* Value. While referring to processes outlined in international sustainability guidelines and incorporating the viewpoints of stakeholders, MCHC identifies and prioritizes important management issues that it needs to work toward resolving to realize *KAITEKI*. MCHC has reviewed its materiality assessments in light of the management strategies and corporate activities for APTSIS 20, the medium-term management plan that ends in fiscal 2020. Mitsubishi Chemical, too, is implementing activities based on the results of the MCHC Group's materiality assessments.

#### Materiality Matrix

#### PROCESS 1

### Set issues to be researched and analyzed

As a starting point, ordered corporate activities under *APTSIS 20* by analyzing macro trends. Reviewed material issues identified in the previous assessment and added new issues.

#### PROCESS 2

Assess issues from the viewpoint of stakeholders Ordered and quantitatively assessed the importance of the issues based on public sustainability data, questionnaires, and interviews with experts.

#### PROCESS 3

#### Identify and prioritize material management issues the MCHC Group needs to address

MCHC management identified material issues accounting for management strategies, policies and activities under APTSIS 20 and prioritized them (three issues of highest priority related to the MCHC Group's existence and 21 materiality issues to be addressed).

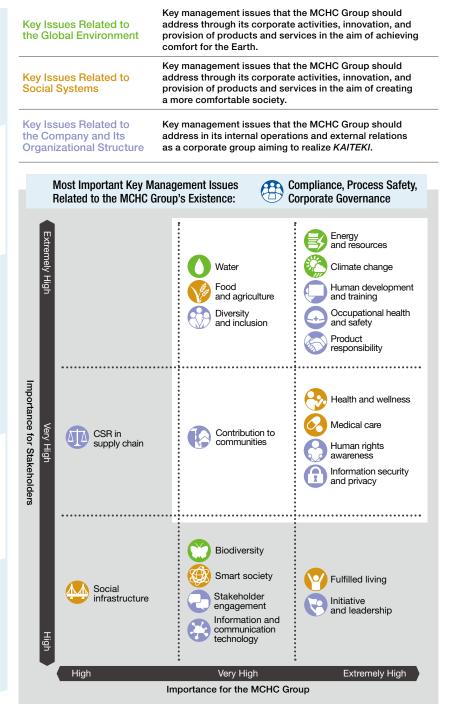
#### PROCESS 4

#### Create

the materiality matrix Created the matrix along the two axes of importance (the magnitude of effect) for stakeholders and importance for the MCHC Group.

#### PROCESS 5

Company approval procedures Discussed and approved the process of materiality assessment and the materiality matrix in the MCHC Management Committee and the Board of Directors.



## **MOS** Indices

As part of its efforts to promote *KAITEKI* Management, Mitsubishi Chemical Holdings (MCHC) has created the MOS (Management of Sustainability) Indices to gauge its contribution to people, society and the Earth. MCHC uses these indices to evaluate progress made with regard to MOS, one of its management axes, which aims to enhance social value through improvements in sustainability. The MCHC Group has revised the MOS Indices and the ways it is using them in line with updates to its materiality assessments and the formulation of the medium-term management plan. The Group has been applying the new MOS Indices since fiscal 2016.

As an operating company, Mitsubishi Chemical also implements and evaluates management aimed at improving sustainability based on the new MOS Indices.

Index that needs to be achieved			Achieve zero occurrences of serious accidents and compliance violations		
	Contribute to reducing environ-	S-1-1	Reduce burden on the atmospheric environment		
	mental impact	S-1-2	Reduce burden on the water environment		
		S-1-3	Reduce burden on the soil environment		
	Efficient use of resources and	S-2-1	Promote activities to conserve energy		
	energy	S-2-2	Convert to resource-saving and reusable materials		
S Index		S-2-3	Promote use of renewable energy		
	Contribute to the sustainability of the environment and resources through products and services	S-3-1	Provide products and services that contribute to reducing GHG emissions		
		S-3-2	Provide products and services that help solve water resource problems		
		S-3-3	Provide products and services that help solve food problems		
	Contribute to medical treatment	H-1-1	Pharmaceuticals provision		
H Index		H-1-2	Provide clinical testing services		
	Contribute to the prevention and early detection of diseases	H-2-1	Provide vaccines		
		H-2-2	Provide health management and health checkup information		
	Contribute to achieving healthy and hygienic lives through products and services	H-3-1	Provide products for the health field		
		H-3-2	Provide products for the sanitation field		
		H-3-3	Provide products for the medical field		
	Endeavor to earn greater	C-1-1	Improve awareness of compliance		
	recognition of corporate trust from society	C-1-2	Prevent accidents and injuries		
		C-1-3	Initiatives to provide products and services trusted by society		
C Index	Promote communication and work in concert with stakeholders	C-2-1	Promote communication with business partners		
		C-2-2	Improve evaluation by stakeholders		
		C-2-3	Build a dynamic and cooperative organization		
	Contribute to achieving a more comfortable society and better lifestyle	C-3-1	Provide products and services that contribute to a comfortable society and better lifestyles		

# Management Structure Basic Policy

As a member of the Mitsubishi Chemical Holdings (MCHC) Group, the Mitsubishi Chemical (MCC) Group abides by MCHC's basic Group management guidelines and shares specific Group management policies and strategy determined by MCHC. The MCC Group also adheres to MCHC Group policies and rules to ensure that it fulfills its corporate social responsibility in areas such as internal controls, risk management and compliance (with laws and corporate ethics) and actively implements management initiatives to enhance corporate value as a core operating company of the MCHC Group.

The Mitsubishi Chemical Group strives to ensure compliance based on the Mitsubishi Chemical Holdings Group Charter of Corporate Behavior, a common set of compliance regulations shared throughout the Group.

### 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.

### I 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

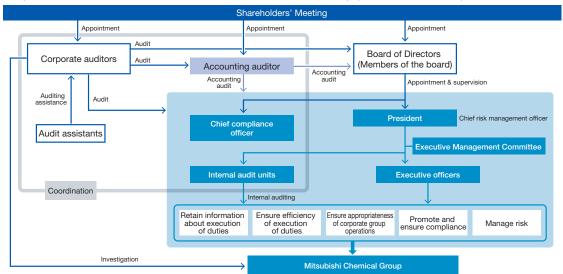
We shall contribute broadly to society through our businesses. In addition, we shall respond to the desires and expectations of local communities by enhancing our understanding of their cultures and customs and acting as a good corporate citizen.

### 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.

The top priorities for corporate governance of the Mitsubishi Chemical (MCC) Group are to ensure fast and efficient decision making and business execution, clarify management responsibilities, ensure compliance and strengthen risk management.

The MCC Group's basic corporate governance structure is illustrated below. The company has adopted an executive officer system to separate management and executive functions. Furthermore, MCC has defined the extent of the authority of such decision-making bodies as the Board of Directors and various management positions in its internal rules. Through these and other measures, MCC ensures proper, efficient managerial decision making and business execution.



Corporate Governance Structure of the Mitsubishi Chemical Group (as of June 26, 2017)

### **Board of Directors**

The Board of Directors meets once a month in principle. In accordance with the regulations of the Board of Directors and other relevant rules, the board makes decisions on important managerial matters and basic matters concerning Group management and provides oversight of the execution of duties by directors. The five directors (four of whom concurrently serve as executive officers) form a management structure capable of quickly adapting to environmental changes. To further clarify the managerial responsibilities and role of each director, the term of office for a director is one year. Human resources judged to possess the necessary skills and qualities to realize the Group's corporate philosophy are selected as candidates for director by the Board of Directors. Candidates are then proposed at the Shareholders' Meeting, where they may be elected by a resolution of shareholders.

### **Executive Management Committee**

The Executive Management Committee is an advisory body that assists the President in making decisions, deliberating important matters concerning business execution, such as the investment and financing activities of MCC and the MCC Group. Particularly important managerial matters deliberated by the Executive Management Committee are acted on only upon the resolution of the Board of Directors. The Executive Management Committee meets twice a month in principle. The committee comprises the President, the chief operating officers of the business domains, the supervising officers of the corporate function domains, the presidents of the regional headquarters and the general manager of the Corporate Planning Department. The directors of the board and corporate auditors may also attend its meetings as needed.

### **Corporate Auditors**

MCC has corporate auditors to audit and supervise its activities. The corporate auditors attend Board of Directors, various committee and other important meetings, verify the contents of reports submitted by directors of the board and other relevant parties, investigate the status of the company's business and property, and audit the execution of duties by directors of the board. MCC does not have a Board of Corporate Auditors, but maintains a Corporate Auditors Liaison Committee, meetings of which are attended on a voluntary basis, to facilitate coordination and cooperation among the corporate auditors. The Corporate Auditors Liaison Committee meets once a month in principle. At meetings, the corporate auditors discuss audit plans and other important audit-related matters. As of the end of June 2017, MCC has five corporate auditors. Corporate auditors, the accounting auditor and the Internal Audit Department work in close coordination, exchanging opinions on their respective audit processes and results.

### Committees

The company maintains a number of committees, including the Compliance Promotion Committee, Risk Management Committee, Information Security Committee, Environmental and Safety Promotion Committee, and Human Rights and Diversity Promotion Committee. These committees refer or report important matters to the Board of Directors or the Executive Management Committee.

### **Basic Policy**

Based on the Basic Internal Control System Maintenance Policy established by the Board of Directors, Mitsubishi Chemical (MCC) maintains an internal control system that encompasses MCC Group systems related to enforcing compliance, risk management, ensuring efficacy and efficiency, and information archiving. By doing so, MCC strives to ensure appropriate operations and enhance corporate value. The Board of Directors receives reports on and verifies the maintenance and operational status of the internal control system once a year, and MCC works to strengthen and improve the system as needed.

### Improving Our Internal Control Systems

Based on the Mitsubishi Chemical Group Regulations on Promoting the Improvement of the Internal Control System, established July 1, 2017, MCC is reinforcing governance, ensuring proper operations, and establishing and improving related processes and operations to enhance the efficacy and efficiency of such initiatives. Together, these efforts constitute the foundation of internal control at MCC Group companies.

The Mitsubishi Chemical (MCC) Group regards compliance as a top priority in its corporate activities. The MCC Group has in place a Compliance Promotion Program that comprises basic regulations concerning compliance, a structure for compliance promotion, education and training programs, auditing and monitoring systems, and a consultation and reporting hotline. Based on this program, the MCC Group works to ensure appropriate and precise operations and management.

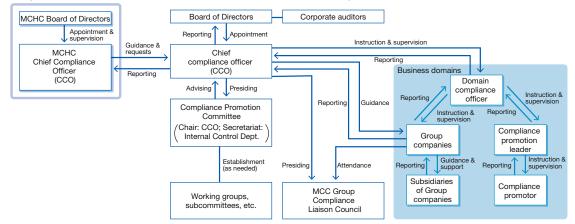
### Compliance Promotion Structure and the CCO

The Board of Directors appoints the Mitsubishi Chemical Group's chief compliance officer (CCO).

The CCO has the authority to direct and supervise the MCC business domains and Group companies in matters related to compliance. The CCO also chairs the Compliance Promotion Committee and reports to the Board of Directors and CCO of the Mitsubishi Chemical Holdings (MCHC) on the status of compliance and important issues.

The Compliance Promotion Committee deliberates on such matters as basic policy concerning the development and operation of the MCC Group's Compliance Promotion Program, the performance of the program and responses to compliance violations. The committee also makes proposals to the CCO as necessary.

Furthermore, our designated domain compliance officers, compliance promotion leaders and compliance promotors in each domain coordinate to promote compliance in the course of daily operations.



#### Compliance Promotion Structure of the Mitsubishi Chemical Group

### **Compliance Regulations**

The MCC Group maintains and operates according to internal compliance-related regulations, including regulations concerning the compliance promotion structure, hotlines and responses to compliance violations.

### Educational, Training, and Awareness-Raising Activities

MCC conducts a variety of educational, training and awareness-raising activities in Japan and overseas on an ongoing basis in order to further instill compliance awareness.

In fiscal 2017, in Japan, we are implementing group training for compliance promotion leaders and compliance promotors, including those at Group companies. In addition to lectures, such training incorporates role-playing using highly realistic case studies prepared in-house in order to help participants gain a first-hand understanding of the importance of compliance and the difficulty of making decisions when confronted with such situations. We also provide e-learning for all members of the Group, seeking to enhance each and every employee's compliance awareness. Furthermore, we are increasing awareness and knowledge of such important compliance risks as bribery, the Anti-Monopoly Act and information security through such means as holding risk confirmation interviews with sales employees and targeted email attack response drills.

Overseas, in the Americas, Europe and China, such activities are entrusted to MCC's regional headquarters,<sup>1</sup> which carry out training and awareness-raising tailored to the circumstances of each region. We are also bolstering initiatives in other regions (Taiwan, Singapore, Thailand, Indonesia, India and South Korea) through such means as local training and e-learning.

- 1 The following four companies, established to accelerate Mitsubishi Chemical's overseas business development by supporting business and revenue growth in their respective regions.
  - Mitsubishi Chemical America, Inc.
- Mitsubishi Chemical Europe GmbH
- Mitsubishi Chemical (China) Co., Ltd.
- Mitsubishi Chemical Asia Pacific Pte Ltd.

### Fair Business Practices

#### Mitsubishi Chemical Holdings Group Global Anti-Bribery Policy

MCHC has established the Mitsubishi Chemical Holdings Group Global Anti-Bribery Policy, aiming to prevent bribery on the part of its operating companies and executives and thus ensure compliance with anti-bribery laws and regulations in all the countries where it operates, prevent corruption, and help establish and maintain fair business practices.

The policy prohibits bribes to public officials and includes provisions concerning accounting records, compliance structures and penalties for violations.

### Monitoring and Reporting Systems

#### Compliance Hotline

The MCC Group has established a hotline through which employees can contact the Internal Control Department, an external lawyer or a hotline service company to seek advice or report possible compliance violations. The Group strives to ensure that the hotline is operated properly and employees are aware of it.

#### Global Compliance Perception Surveys

The MCC Group uses employee perception surveys to monitor the degree of compliance awareness among employees of Group companies in and outside Japan. Survey results are analyzed in detail and used to provide feedback to related officers. Challenges and problems identified as a result of said analysis are reflected in compliance-related measures and training.

#### Response to Compliance Violations

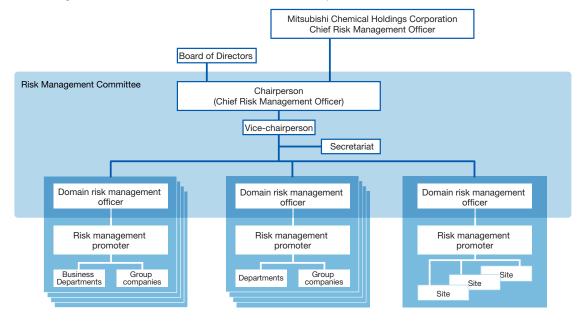
In the event of a compliance violation, the domain compliance officer and the departments overseeing compliance work together to make an appropriate initial response that rectifies or otherwise deals with the situation. They then investigate the cause of the violation and implement recurrence countermeasures. 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. The Mitsubishi Chemical (MCC) Group has established basic regulations for risk management and implements risk management activities related to the execution of its businesses and operations. Specifically, the Group's policy is to accurately identify and evaluate risks that could significantly impact the Group, deal with such risks appropriately, and minimize the impact of such risks on its businesses and society, including shareholders.

### **Risk Management Structure and Regulations**

The MCC Group has set up a Group-wide risk management system headed by the MCC President, who serves as the Group's Chief Risk Management Officer. The MCC Group strives to ensure that this system operates appropriately and smoothly.

The supervising officers of each business domain and corporate function domain serve as domain risk management officers charged with maintaining, operating, directing and overseeing the risk management systems within their respective units, including those of MCC Group companies. Meanwhile, the Risk Management Committee, established to support the Chief Risk Management Officer as a supplementary decision-making organ, regularly confirms the operational status of the MCC Group's risk management system and deliberates on important matters related to the development and operation of said system, basic policy and plans regarding risk management activities, and management objectives and countermeasures related to serious risks.

The Risk Management Committee regularly reports to the MCC Board of Directors and the Mitsubishi Chemical Holdings Corporation Chief Risk Management Officer regarding the operational status of the risk management system.



#### Risk Management Structure of the Mitsubishi Chemical Group

### Action Plan

In fiscal 2017, in addition to the risks individually identified and addressed by each department, management has designated the following risks to be dealt with on a company-wide basis. Each of these risks has been assigned to a department and is being examined.

- (1) Process safety and stable operations
- (2) Compliance promotion
- (3) Governance and global management
- (4) Crisis management and business continuity
- (5) Information security
- (6) Management of working hours
- (7) Climate change issues

### **Business Continuity Plans**

MCC formulates business continuity plans (BCPs) to minimize the impact suffered by its customers and business partners in the unlikely event of a natural disaster or a major accident.

Specifically, we are creating manuals for responding to such crises as a major earthquake in the Nankai Trough or a pandemic. While giving greatest priority to assuring the safety of human life, including the lives of employees, their families, business partners and local residents, these manuals lay out how to maintain or quickly resume the supply of key products essential to society and thus fulfill our product supply obligations to our customers. In addition, we are making arrangements to ensure that operations important to the whole Group can be continued elsewhere should the head office be incapacitated by a major earthquake striking the Tokyo metropolitan area.

## Management Structure Intellectual Property Strategy

With socioeconomic globalization advancing and markets growing larger and more complex, the Mitsubishi Chemical Holdings (MCHC) Group believes that it is essential to expand and strategically utilize the value of its patents, expertise, trademarks and other accumulated intellectual capital in order to realize synergies between its operating companies and achieve further growth.

In line with this conviction, Mitsubishi Chemical (MCC) formulates and executes its intellectual property strategy with a focus on the type of intellectual property environment it seeks to create and the nature of the technologies and other intellectual property that each of its businesses creates and utilizes. Alongside these efforts, MCC works to reinforce the legal protections and improve the effectiveness of its intellectual property. Accordingly, the company endeavors to respect the valid intellectual property rights of other parties and takes appropriate measures when its own intellectual property rights are infringed upon.

Furthermore, aiming to expand the operating revenue of the MCHC Group as a whole, we actively promote coordination between operating companies in the area of intellectual property. By sharing intellectual property, we aim to enhance the MCHC Group's overall competitiveness and R&D productivity. At the same time, we work with third parties to employ the intellectual property of the operating companies in mutually complementary ways. By doing so, the entire MCHC Group works as one to maintain the value of its intellectual property and exercise and protect its rights.

### In-House Intellectual Property Training

MCC's business departments, R&D departments and Intellectual Property Department work together to implement in-house training aimed at developing strategic intellectual property activities. We strive to implement practical education for business and R&D departments that goes beyond just legal knowledge.

### Intellectual Property Department Human Resource Development

MCC believes that its Intellectual Property Department should be staffed by human resources who can leverage their intellectual property expertise and advance intellectual property activities that contribute to operating revenue alongside business and R&D departments. Accordingly, we are developing such human resources. We have divided the abilities required of such personnel into the categories of practical work execution, planning/strategy and organizational management. We are working to strengthen these abilities through a human resource development program that includes an overseas training system.

### Code of Research Conduct

MCC has established the Code of Research Conduct to ensure that its researchers' conduct, in all R&D activities, is always exemplary.

To ensure that research is carried out responsibly, the Code of Research Conduct includes provisions regarding the proposal of research topics and execution of related research, data management, the presentation of results, communication between researchers and procedures for addressing compliance problems.

MCC utilizes a variety of opportunities to implement and reinforce education related to the Mitsubishi Chemical Holdings Group Charter of Corporate Behavior, MCHC's basic regulations concerning compliance, and the Code of Research Conduct to ensure that researchers act with an awareness of such rules as they carry out their duties.

Reflecting these efforts, MCC's researchers bring a strong sense of ethics, sincerity and humility to their R&D work, seeking to live up to the trust and expectations of society by respecting both our own intellectual property and that of other parties while contributing to the growth and development of the MCHC Group as a whole on an ongoing basis.

### **Basic Policy**

The Mitsubishi Chemical (MCC) Group undertakes information management in line with the Mitsubishi Chemical Group Information Security Policy. Under this policy, the MCC Group strives to protect its information assets and, in the event of an information security incident, acts to minimize the impact on its businesses and quickly resume any interrupted operations. Furthermore, the MCC Group works to raise employee awareness of the importance of protecting information assets while striving to maintain and improve the efficacy of its information security as part of efforts to prevent business interruptions and the loss of society's trust due to such problems as information leaks or falsification.

### **Main Activities**

The MCC Group maintains, manages and works to enhance information security on a Group-wide basis under the leadership of the Information Security Committee, established per the Mitsubishi Chemical Group Information Security Policy.

In addition, to counter increasingly sophisticated cyber attacks, the Mitsubishi Chemical Holdings Group Information System Security Subcommittee enforces a PDCA cycle for the entire Mitsubishi Chemical Holdings Group, working to maintain and strengthen information security.

### Defensive Measures Against Threats to Computer Networks

The MCC Group has both technological and management measures in place to ensure network security. Technological measures include entrance safeguards, such as e-mail filters, as well as exit safeguards, such as systems that block access from within the network to websites that present security risks. In terms of management measures, the Group regularly urges caution against suspicious e-mails and conducts training drills.

### Measures to Prevent Leaks of Personal Information and the Confidential Information of Customers and Third Parties

MCC has established its own Rules on Handling Personal Information and strives to ensure strict compliance with the Act on Protection of Personal Information, the Act on the Use of Numbers to Identify a Specific Individual in Administrative Procedures and other relevant laws, regulations and guidelines.

As part of measures to prevent information leaks, MCC is taking such steps as strengthening the management of electromagnetic recording media and restricting access to the Internet.

### Internal Education and Training

The MCC Group regularly conducts awareness-raising and training events for employees to promote strict information management. Moreover, information security training via e-learning is implemented every year, and information security training education is built into in the employee training curriculum.

### **Basic Policy**

Amid rising international tensions that reflect such factors as armed conflicts, military provocations and frequent terrorist attacks around the world, security export control initiatives are growing more important than ever.

Mitsubishi Chemical (MCC) produces and possesses numerous products and technologies that can be used for both civilian and military applications ("dual-use" goods), such as carbon fiber. Appropriate security export control compliant with the Foreign Exchange and Foreign Trade Law and other relevant laws is necessary to prevent MCC's broad-ranging products and technologies from reaching countries under export bans, countries of concern, terrorist organizations or other improper destinations or recipients.

### Security Export Control System

Upon its launch in April 2017, the new MCC established both internal Security Export Control Rules and an export control system. The chief executive of this system is MCC's president and chief executive officer, under whom are the supervisor of security export control, the Export Control Department and the chief export control officers of exporting departments. Through this system, we work to prevent improper exports, including those that constitute legal violations, whenever possible using such means as strict, thorough export control and internal audits of exporting departments. Furthermore, we carefully maintain export records to ensure preparedness for risks that could arise should our products or technologies be improperly exported.

### **Export Control Initiatives**

Security control comprises three steps—item classification, customer screening and transaction verification that are uniformly managed using a dedicated system.

Item classification is the process of determining whether the product or technology being exported or supplied is subject to legal restrictions (namely, listed as a restricted item). We implement a double-check process wherein, based on the latest versions of restricted item lists, the exporting departments perform the initial check and the Export Control Department grants final approval.

Customer screening entails using the export control system, which contains the latest risk information to screen customers, including both customers in Japan who indirectly export and end-users at the item's final destination. This screening system is highly effective in preventing the circumvention of regulations by exporting through a third country. As with item classifications, a double-check process is applied to customer screenings.

For transaction verification, the exporting departments fill out a transaction verification form using the results of the item classification and customer screening. Based on this form, the export control system then automatically assesses the riskiness of the transaction and determines who will be responsible for granting final approval. The Export Control Department grants final approval for items listed as restricted that are considered high-risk, such as carbon fiber.

# Internal Audits

The Internal Audit Department, which is independent of business and administrative operations, conducts internal audits to assess the effectiveness of internal controls at Mitsubishi Chemical Corporation and its Group companies, monitoring such factors as the adequacy and the efficiency of each organization's governance, risk management and operating processes. The Internal Audit Department contributes to the improvement of the internal controls in close collaboration with the relevant organizations.

# Responsible Care Activities Basic Policy

Mitsubishi Chemical carries out Responsible Care (RC) activities,<sup>1</sup> which are self-initiated activities in the chemical industry for ensuring environmental conservation, health and safety. In line with the Mitsubishi Chemical Holdings Group Charter of Corporate Behavior and with the aim of realizing *KAITEKI*, we implement RC activities based on the five pillars of process safety and disaster prevention, occupational safety and health, environmental conservation, chemical and product safety, and logistics safety.

<sup>1</sup> Responsible care activities: Voluntary activities undertaken by companies that handle chemical substances to protect the environment, health and safety across all related processes, from the development of such substances to their manufacturing, distribution, use, final consumption and disposal. These activities also encompass the publishing of the results of such efforts and dialogue and communication with society.

Mitsubishi Chemical (MCC) has designated departments responsible for promoting each of the five pillars of its Responsible Care (RC) activities. These departments work together to carry out RC activities. The designated departments draft annual RC action plans that are then deliberated by the Environmental and Safety Promotion Committee, comprising the director in charge of RC, representatives of the business domains and plant general managers, before being discussed by the Executive Management Committee and then going to the President for final approval. The director quickly informs employees of the approved plans and orders the creation of action plans for plants and business domains based on said plans. The departments responsible for implementing RC activities monitor the action plans of the plants and business domains and their implementation status and provide support and instruction aimed at improvement, thereby helping to improve the RC activities of the MCC Group as a whole.

RC activity pillar	Implementation departments	
Process safety and disaster prevention		
Occupational safety and health	Environment & Safety Dept.	
Environmental conservation		
Chemical and product safety	Chemicals Management Dept., Quality Assurance Dept.	
Logistics safety	Logistics Dept.	

### **Basic Policy**

Mitsubishi Chemical (MCC) has established the Environment and Safety Principles as well as Policies Related to Environment and Safety, and it implements activities related to process safety and disaster prevention, occupational safety and health, and environmental conservation. MCC has published these principles and policies, as laid out below.

### Environment and Safety Principles

- 1. Safety lies at the foundation of the company's very existence, and ensuring safety is the company's social responsibility.
- 2. The company has an obligation to conserve and improve the environment and become an entity that is friendly to both people and the planet.

### Policies Related to Environment and Safety

- 1. We will comply with social rules and standards, including corporate ethics in addition to applicable laws.
- 2. We will pursue zero accidents and zero occupational injuries.
- 3. We will reduce our environmental impact to prevent global warming and protect the natural environment.
- 4. We will educate our employees about the environment and safety so that they can act with awareness of their own responsibilities.
- 5. We will communicate closely with society to enhance understanding and trust.
- 6. We will continue making improvements by utilizing the latest technologies and available internal and external information.

Based on the above environment and safety principles and policies, every year, MCC creates a Group environment and safety action plan. The plan reflects the results of the previous year's plan and audits and lays out yearly targets, policies and key measures.

The fiscal 2017 plan includes the annual targets of zero serious accidents,<sup>1</sup> zero serious occupational accidents,<sup>2</sup> zero environmental accidents<sup>3</sup> and contribution to the global environment. The annual policy under the plan is to effectively understand workplace weaknesses and steadily make improvements. In line with this plan and the status of each workplace, we are carrying out environment and safety activities.

1 Serious accidents: Accidents deemed by MCC to have a major social impact.

2 Serious occupational accidents: Occupational accidents resulting in four or more days of lost work or the incurrence of a certified graded disability.

3 Environmental accidents: Incidents of non-compliance with legal or regulatory standards reported to the government (excluding transient incidents).

### Audits of Environment and Safety Activities

MCC conducts safety audits of 16 plants, one R&D center, 28 domestic Group company locations and 42 overseas Group company locations. Through these audits, MCC checks and evaluates the status of safety-related activities and provides guidance related to needed improvements. In fiscal 2017, we are confirming whether workplaces are implementing PDCA cycles for activities based on the annual policy of effectively understanding workplace weaknesses and steadily making improvements. In addition, we are checking the implementation status of the environment and safety activity plan and measures to prevent problems and their recurrence as well as the status of legal and regulatory compliance.

Furthermore, MCC conducts environmental audits of 16 plants, one R&D center and 30 domestic Group companies. Through these audits, MCC checks and evaluates compliance with environmental laws and the status of PDCA cycles related to environmental conservation activities and provides guidance related to needed improvements.

In response to guidance provided as a result of such audits, audited plants and Group companies are working to make necessary improvements by, for example, improving their facilities or reviewing their standards.

### **Basic Policy and Key Measures**

In line with its environment and safety principles and policies, Mitsubishi Chemical (MCC) engages in process safety and disaster prevention activities as well as occupational safety and health activities. In fiscal 2017, we have set the goals of zero serious process safety incidents and zero serious occupational accidents and are implementing the following key measures.

### Thoroughness and Continuation of Safety Management Activities

To eliminate occupational accidents caused by employee behavior, we are thoroughly reinforcing basic safety practices and basic operations while implementing exacting risk assessments, measures to ensure the effective use of information on accidents, and field work and construction management.

### Thoroughness and Continuation of Facility Management

We systematically inspect, diagnose and repair aging facilities while steadily performing regular monitoring to ensure necessary functions are maintained. Furthermore, to prevent incidents, we rapidly respond to any report of irregularity.

### Developing Safety Professionals (Education and Passing Down Skills)

We implement education and training for less experienced employees, as well as education aimed at increasing their understanding of facilities and processes. Furthermore, to enhance process risk assessments, we are proactively developing human resources with highly specialized knowledge and analytical skills.

### Incident and Natural Disaster Response

We have in place robust earthquake and tsunami countermeasures and carry out related drills. In addition, we are advancing measures to deal with natural disasters caused by extreme weather (wind and flood damage) due to climate change.

#### Enhancing Chemicals Management

We designate chemical substances that could be particularly harmful if stolen or lost and abused as MCC Specified Chemicals. We manage these substances, from manufacturing to distribution and transfer to customers, in accordance with methods laid out in relevant guidelines, thereby reinforcing chemicals management.

### | Focus: Safety Conventions at Mitsubishi Chemical Plants

On June 30, 2017, MCC's plants and R&D centers held conventions aimed at increasing employees' safety awareness. The conventions were attended by President Ochi or other members of top management, who spoke directly to employees about the importance of safety. After the events, the top management representatives visited factory floors, held roundtable discussions and so on, providing opportunities for management and employees at manufacturing sites to talk directly with one another about safety.

In tandem with the safety conferences, MCC held the President's Environment and Safety Award ceremony to recognize departments and employees for outstanding contributions to environment and safety activities.

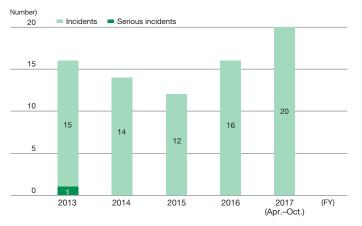


### **Responsible Care Activities**

# Process Safety and Disaster Prevention, Occupational Safety and Health

### Preventing Process Safety Incidents and Occupational Accidents

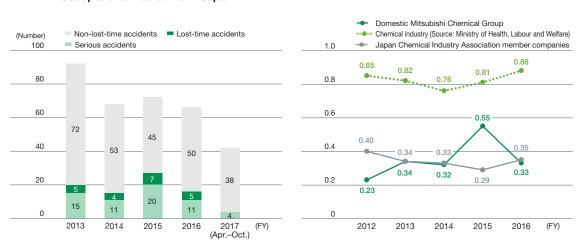
As of October 2017, no serious facility-related accidents have occurred in fiscal 2017. There have, however, been 20 incidents, including small fires and leaks, 14 of which were leaks of chlorofluorocarbon gases from cooling machines. Going forward, in addition to implementing the priority measures, we will work to prevent chlorofluorocarbon gas leaks by reinforcing inspections and systematic repairs.



Mitsubishi Chemical Group Process Safety Incidents in Japan

\* Data for fiscal 2016 and before are the totals of the figures for the previous Mitsubishi Chemical, Mitsubishi Plastics and Mitsubishi Rayon groups. The same applies hereinafter.

Although MCC has worked to thoroughly reinforce basic safety practices and basic operations, in fiscal 2017, four serious occupational accidents resulting in four or more days of lost work have occurred in Japan (as of October 2017). These accidents were due to falls on level surfaces and from elevated surfaces and getting caught in machinery. To prevent such accidents, MCC has ordered facility inspections and safety countermeasures. We continue to work to prevent occupational accidents.

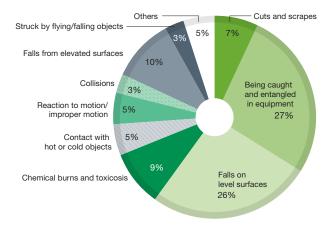


#### Mitsubishi Chemical Group Occupational Accidents in Japan

### Lost-Time Injury Frequency

From fiscal 2012 to 2016, 26% of all occupational accidents that occurred within the global MCC Group were due to falls on level surfaces. To eliminate such accidents, our plants have been implementing education and awareness raising while improving facilities in line with the Ministry of Health, Labour and Welfare's "STOP!" project aimed at preventing falls on level surfaces. However, these efforts have not eliminated such accidents. In addition to the abovementioned measures, we have therefore determined that employees must have the physical strength and dexterity to prevent such falls. We have therefore rolled out *KAITEKI* exercises, which help improve strength and physical skills that are effective in preventing falls, on a company-wide basis.

#### Mitsubishi Chemical Group Lost-Time Accidents by Classification (FY2012–2016)



# Focus: Koriyama Plant Receives Award from the Minister of Health, Labour and Welfare

The Koriyama Plant received an encouragement award in the fiscal 2017 Labour Minister's awards to excellent workplaces, organizations and persons who contributed to occupational safety and health. This award recognizes workplaces, organizations and individuals that maintain excellent safety and health standards and serve as models for others. The Koriyama Plant received the award in recognition of its 22-year accident-free record and efforts aimed at improving safety and realizing *KAITEKI* in the workplace. The plant received specific praise for the installation of safety covers and sensors to automatically halt machinery if needed and other facility-related measures as well as organizational measures, such as the use of a five-grade evaluation system to promote the establishment of correct work procedures.



### **Risk Assessment**

MCC implements risk assessments as described below, striving to prevent process safety incidents and occupational injuries.

#### | Manufacturing Process and Operation Risk Assessment

MCC identifies risks present in manufacturing processes and the operations of manufacturing sites and implements countermeasures as necessary to prevent process safety incidents and occupational accidents. In addition to risk assessments prior to beginning the manufacture of a new product or when changes are made to manufacturing processes or work methods, we carry out assessments to reconfirm the efficacy of existing safety measures. Furthermore, we evaluate risks related to non-routine operations, such as those occurring during facility startup and shutdown as well as those arising during power outages and other extraordinary circumstances. Based on such assessments, we implement countermeasures for risks related to a wide range of operating conditions.

### **Responsible Care Activities**

# Process Safety and Disaster Prevention, Occupational Safety and Health

### | Chemical Substance Risk Assessment

MCC implements chemical substance risk assessments in line with Japan's Industrial Safety and Health Act in order to identify the dangers and hazards posed by the chemical substances it handles and reduce the risk of danger and health impairment faced by its workers. We have explicitly outlined our risk assessment protocol and are steadily implementing assessments.

### Use of Past Incident/Accident Information

MCC uses shared information about past accidents and incidents at the company and other companies to help prevent both recurrences and the occurrence of similar accidents. When incidents or occupational accidents do occur, we determine the root causes and implement countermeasures without fail in order to prevent recurrences. Furthermore, we use data on incidents and accidents that have occurred at MCC and other companies to predict where similar incidents and accidents are likely to occur within MCC and then take preventive steps at the sites thus identified.

### Human Resource Development Initiatives

With the aim of strengthening and enhancing risk assessment, MCC implements process safety education to systematically educate mid-career technical staff in the fundamentals of process safety. This education first imparts basic process safety skills and then teaches safety evaluation techniques that employ analytical methods. Participants also examine the safety of the processes employed in the manufacturing units to which they belong. This training aims to develop staff that can put process safety skills to use and direct others at manufacturing sites.

### Focus: MCC Receives the Outstanding Award in the Japan Chemical Industry Association's Responsible Care Award

MCC received the Outstanding Award in the Japan Chemical Industry Association's Responsible Care Award. This award was given in recognition of MCC's achievements in developing technical staff with process safety skills.



### Strengthening Earthquake Countermeasures

Based on the results of risk evaluations, MCC's plants have developed and are systematically implementing medium- to long-term earthquake countermeasure plans. In addition to ensuring compliance with related laws and regulations, we are focusing on measures to prevent harm to plants and their surrounding communities. To this end, we are advancing the seismic reinforcement of facilities in accordance with an order of priority based on the anticipated intensity and frequency of earthquakes in each region. Furthermore, we are working to secure evacuation routes and emergency roads that will be safe from liquefaction and implementing tsunami evacuation drills.

#### Earthquake-Resistant High-Pressure Gas Equipment

MCC uses earthquake resistance design standards to evaluate the earthquake resistance of such facilities as spherical storage tanks with welded steel pipe braces and high-pressure gas facilities designated as vital in terms of earthquake-resistant design. Based on such evaluation, MCC has drawn up plans to improve facilities where necessary and is advancing earthquake countermeasures in line with said plans. We plan to complete all of these measures by fiscal 2020.

### **Basic Policy and Key Measures**

Aiming to contribute to the global environment, Mitsubishi Chemical (MCC) proactively works to reduce its greenhouse gas emissions, conserve resources and energy, prevent contamination of the air, water and soil, limit waste generation, encourage reuse and recycling, engage in activities and develop technologies that help conserve the natural environment, and develop and produce environmentally friendly products. In these ways, MCC strives to reduce its environmental burden at every level of its business activities.

In addition, to ensure legal compliance, we carry out training on environmental laws and regulations and regularly hold liaison meetings at which MCC Group managers in charge of environmental issues exchange the latest information about legal amendments and other issues.

In fiscal 2017, we are implementing the following key measures

#### Reducing Environmental Risk

We are implementing legal education and environmental audits to ensure compliance with environmental laws and regulations and systematically reducing environmental risk by implementing risk assessments.

#### Reducing Environmental Impact

We are working to reduce our environmental impact through such means as cutting greenhouse gas emissions, saving resources and energy, and reducing waste disposed of in landfills.

#### Coexisting Harmoniously with Local Communities

We are letting local communities know about our environmental conservation initiatives and promoting harmonious coexistence through communication.

#### Focus: Kurosaki Plant Receives Award from the Minister of the Environment

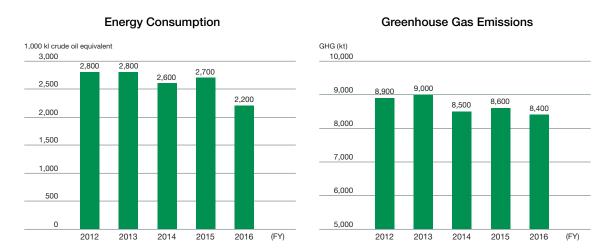
The Kurosaki Plant received the Exemplary Environmental Initiative Award in the fiscal 2016 Environment Minister's Awards. This award recognized the plant's ongoing initiatives to improve and deepen employee awareness related to the prevention of environmental incidents and other problems as well as environmental conservation and the results of said initiatives as exemplary in contributing to the prevention of pollution from industrial activities.



### Addressing Climate Change

In line with the target set by Mitsubishi Chemical Holdings (MCHC) of reducing greenhouse gas emissions at least 17% compared with fiscal 2005 levels by fiscal 2015, MCC has been working to cut its greenhouse gas emissions. We achieved the fiscal 2015 target and have maintained emissions at this lower level in fiscal 2016 and into fiscal 2017. In fiscal 2016, energy use decreased significantly due to business reorganization.

Going forward, we will expand the range covered by this measure to include overseas Group companies and advance initiatives to further reduce greenhouse gas emissions as we aim for the targets of the MCC Group medium-term management plan.



\* Data shown above are the totals of the figures for the previous Mitsubishi Chemical, Mitsubishi Plastics and Mitsubishi Rayon and their respective domestic group companies. The same applies to the environmental data hereinafter.

# Tsurumi Plant and Yokohama R&D Center Receive the Yokohama Global Warming Countermeasures Award

The Tsurumi Plant and Yokohama R&D Center received the Yokohama Global Warming Countermeasures Award from the City of Yokohama in recognition of their outstanding greenhouse gas emission reductions under the City of Yokohama global warming countermeasures plan system in fiscal 2016.



### | Life Cycle Assessments

Life cycle assessment (LCA) is an approach that enables the quantitative evaluation of the environmental burden generated by a product or service over its entire life cycle (from resource collection through raw material production, product manufacturing, distribution, consumption, disposal and recycling) or at specific stages of said life cycle. The evaluation of the environmental impact of MCC's products and services over their entire life cycles better enables the company to develop environmentally friendly products and services and provide them to society.

### Preventing Air, Water and Soil Pollution

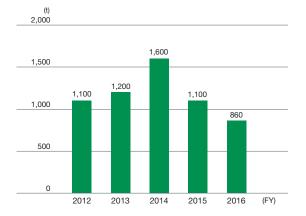
MCC handles a wide range of chemical substances and consumes large quantities of fossil fuels that are sources of nitrogen oxides ( $NO_x$ ), sulfur oxides ( $SO_x$ ) and dust. We therefore maintain ongoing measures to reduce emissions of hazardous air pollutants and of pollutants into public bodies of water through such means as installing and improving emission gas and wastewater treatment facilities.

We have been reducing or maintaining at a steady level the environmental burden our businesses place on atmospheric and water quality, as measured by  $NO_x$ ,  $SO_x$  and dust emissions as well as chemical oxygen demand (COD). MCC's emissions of PRTR-regulated substances<sup>1</sup> and VOCs<sup>2</sup> rose in fiscal 2014, due in part to increased production volume, but decreased in fiscal 2015 as a result of revisions to manufacturing methods and other reduction efforts. They have continued to decrease since.

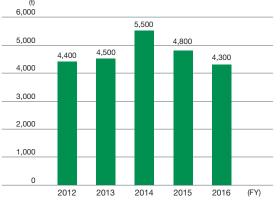


#### Reducing Our Environmental Burden on the Atmosphere and Public Water Sources

- 1 Pollutant Release and Transfer Register (PRTR): A system for filing notifications of the amounts of chemical substances released and transferred. This system enables the identification, aggregation and publishing of data on the types, sources and amounts of hazardous chemical substances that have been released into the environment or transferred outside facilities as waste.
- 2 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 Substance Emissions**

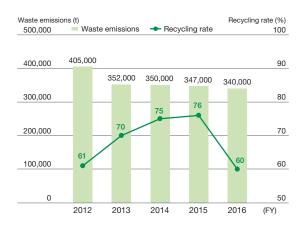


#### **VOC Emissions**

### Waste Reduction and Recycling

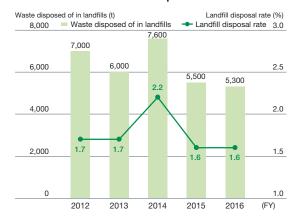
MCC is advancing 3R activities (reduce, reuse, recycle) in an effort to reduce its industrial waste, with the ultimate goal of achieving zero emissions\* of such waste. As a result of such efforts, the amount of waste generated by the company has been decreasing. Although there have been fiscal years in which, due in part to increased construction waste, waste disposed of in landfills increased, we have put the generation of said waste back on a downward track by promoting recycling. Going forward, we will continue working to improve the recycling rate of industrial waste by strictly enforcing sorted collection and strengthening coordination with disposal contractors while seeking to recycle construction waste.

\* Zero emissions: MCC defines achieving "zero emissions" as keeping the percentage of industrial waste ultimately disposed of in landfills at 1% or less.



### Industrial Waste Emissions and Recycling Rate

#### Waste Disposed of in Landfills and Landfill Disposal Rate



### **Biodiversity Conservation**

We are aware that our business activities are made possible by the benefits we receive from biodiversity, and that our business activities impact the natural environment and ecosystems. For this reason, MCC pursues initiatives that contribute to the global environment and thus conserve biodiversity. Through these initiatives, we work to reduce environmental risk and impact while conserving the natural environment by cleaning up neighboring areas and coastal areas and protecting green areas.

### **Environmental Accounting**

To fulfill its environment-related social responsibilities, MCC engages in environmental conservation activities. In the interest of maximizing the effectiveness and efficiency of these activities, we have introduced environmental accounting—a methodology used in environmental management that links environmental and economic activities. MCC uses environmental accounting to better understand the costs and effects of its environmental burden reduction and conservation efforts.

Fiscal 2016 environmental accounting totals included ¥3.6 billion in investment in such areas as reinforcing wastewater management and air pollution prevention as well as ¥32.0 billion in expenses, including those for the operation and maintenance of pollution prevention equipment and proper waste disposal. Meanwhile, such positive factors as revenue from the sale of valuable materials and savings from reduced raw material and energy use totaled ¥2.6 billion.

Environm	nental conserva	tion costs			(Millic	ons of yen)
Category		Main initiatives	FY2015		FY2016	
			Investment	Expenses	Investment	Expenses
Costs within business areas	1. Pollution prevention costs	Air pollution prevention, dust countermeasure reinforce- ment, dust collection system replacement, water pollution prevention, activated sludge consolidation, wastewater management reinforcement, response to deterioration of wastewater facilities and pipes, etc.	2,138	16,018	2,417	15,967
	2. Global environmental conservation costs	CO <sub>2</sub> emissions reduction, operational improvement, etc.	213	1,936	594	2,072
	3. Resource- recycling costs	Industrial waste reduction, proper waste disposal, resource conservation, energy conservation, etc.	588	6,086	389	6,300
Upsteam/downstream costs Waste reclamation, green purchasing, etc.		Waste reclamation, green purchasing, etc.	55	350	10	189
Environmental conservation costs in management activities		Operation of units to address environmental conservation, ISO 14001 compliance and renewal, national exams, environmental education, etc.	0	1,793	17	1,903
Environmental conservation costs in R&D activities		R&D for increased productivity	21	4,045	29	5,315
Environmental conservation costs in social contribution activities		Construction and upkeep of factory green spaces	37	426	144	389
Costs of dealing with Clean environmental damage		Cleanup of contaminated soil, etc.	0	127	0	132
		Subtotal	3,052	30,781	3,600	32,268

### Investment and Expenses Related to Environmental Conservation and Process Safety

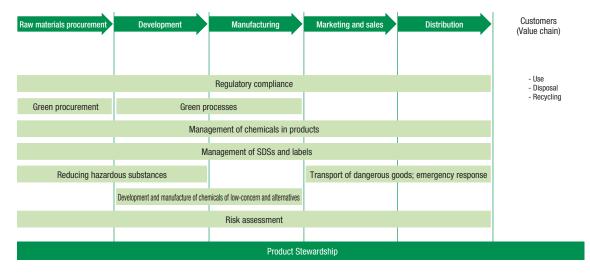
Positive economic effects (Millions of yen)				
		FY2015	FY2016	
Revenues	Sale of recycled valuable materials	1,403	1,249	
	Raw material cost savings	550	438	
	Energy cost savings	723	883	
Cost sovings	Water cost savings	0	5	
Cost savings	Waste disposal cost savings	74	61	
	Savings of costs of dealing with environmental damage	0	0	
	Other cost savings	2	0	

### **Basic Policy**

Based on a product stewardship approach, the Mitsubishi Chemical (MCC) Group strives to minimize the adverse effects of its products on human health and safety and the environment. To this end, we evaluate and share information on risks related to product safety throughout product life cycles (raw materials procurement, development, manufacturing, marketing and sales, distribution, use, and disposal and recycling), working with stakeholders to proactively advance initiatives to secure the safety and wellbeing of society at all stages of the value chain.

These initiatives are in line with the Strategic Approach to International Chemicals Management (SAICM).<sup>1</sup> Along with process safety and disaster prevention, occupational safety and health, environmental conservation, chemical and product safety, and logistics safety, these initiatives are aimed at realizing *KAITEKI* through risk-based chemicals management across product life cycles.

1 Strategic Approach to International Chemicals Management (SAICM): A strategic approach to international chemicals management adopted by the International Conference on Chemicals Management (ICCM) and the United Nations Environment Programme (UNEP) in 2006.



#### Mitsubishi Chemical's Product Stewardship Initiatives

### Management System and Regulations

Mitsubishi Chemical (MCC) maintains a system that ensures the rigorous management of chemicals in all its business domains.

To effectively utilize the favorable properties of its chemical raw materials, MCC collects and shares information on all substances related to its products, including that on chemical hazards, applicable domestic and international regulations, and the results of risk assessments. In addition, we have built a support structure to better enable the business domains to implement proper chemicals management.

Because chemical regulations vary by country and region, MCC has appointed a person responsible for overseeing chemicals management at each of the regional headquarters<sup>1</sup> to reinforce the global management system.

We have laid out the essentials of chemicals management in our Chemicals Management Regulations, Standards for the Safe Management of Chemicals and Standards for Product Safety Management. Furthermore, we have formulated guidelines and manuals that provide concrete methods for working within regulations, authoring and issuing SDSs,<sup>2</sup> and implementing voluntary chemicals management. These efforts help ensure proper management.

- 1 The following four companies, established to accelerate Mitsubishi Chemical's overseas business development by supporting business and revenue growth in their respective regions.
  - Mitsubishi Chemical America, Inc.
- Mitsubishi Chemical Europe GmbH
- Mitsubishi Chemical (China) Co., Ltd.
  2 Safety data sheet (SDS):
- Mitsubishi Chemical Asia Pacific Pte Ltd.

A document for providing information on the properties, hazards and toxicity, safety measures and emergency responses concerning chemical substances when transferring or providing chemicals to other business entities.

### **Compliance with Chemical Regulations**

#### 1. Japanese Laws and Regulations

MCC complies with wide-ranging laws concerning chemicals, including the Chemical Substances Control Law (CSCL), the Industrial Safety and Health Act's requirements concerning filing new substance notifications, and the Poisonous and Deleterious Substances Control Law's requirements concerning the registration and management of manufacturing, importing and sale businesses as well as record maintenance. To ensure that such compliance is thorough and comprehensive, MCC has established internal guidelines and rules related to compliance with domestic laws and carries out centralized management using a database of notifications filed. In fiscal 2017, we are focusing specifically on training responsible persons in MCC's departments and launching guidelines for our chemicals management that will enable each business domain to verify the name and inventory status (new or existing chemical) for each substance in accordance with the CSCL.

#### 2. Overseas Laws and Regulations

In the run-up to 2020, the target deadline for achieving the goals of SAICM,<sup>3</sup> countries around the world (including China, South Korea, Taiwan, Thailand, the United States and Turkey) are enacting and amending legal regulations on chemicals. In particular, the mandatory registration of all existing chemicals, begun under REACH<sup>4</sup> in Europe, will soon be adopted in South Korea and Taiwan. To respond to these changes, we are working with the regional headquarters established in fiscal 2017 and other Group companies to collect the latest information on legal requirements in each region or location and develop a system to ensure a more accurate response to regulations. In fiscal 2017, we are preparing for the full-fledged enforcement of new standards from 2018, namely registration under K-REACH<sup>5</sup> in South Korea and TCSCA<sup>6</sup> in Taiwan, compliance with the inventory reset rule under the U.S. TSCA,<sup>7</sup> and the registration of chemical substances produced or imported in quantities of less than 100 tons annually under REACH in Europe.

<sup>3</sup> Strategic Approach to International Chemicals Management (SAICM):

A strategic approach to international chemicals management adopted by the Governing Council of the United Nations Environment Programme in 2002.

<sup>4</sup> Registration, Evaluation, Authorization and Restriction of Chemicals (REACH):

European Union regulations regarding the registration, evaluation, approval and restriction of chemical substances.

<sup>5</sup> Korea REACH (K-REACH): A law concerning the registration and evaluation of chemical substances.

<sup>6</sup> TCSCA: Toxic Chemical Substance Control Act

<sup>7</sup> TSCA: Toxic Substance Control Act

### Voluntary Chemicals Management Initiatives

#### 1. Participation in Initiatives In and Outside Japan

MCC contributes to the Global Product Strategy (GPS)<sup>8</sup> activities advanced by the International Council of Chemical Association (ICCA)<sup>9</sup> on an ongoing basis. MCC actively works with the ICCA as a CP&H LG<sup>10</sup> member to plan and hold educational programs and workshops aimed at advancing capabilities in developing countries in order to achieve the goals of SAICM. We actively participate in Japan Chemical Industry Association as an activity-promoting member of JIPS.<sup>11</sup>

#### 2. Mitsubishi Chemical's Voluntary Initiatives

As part of its GPS activities, the MCC Group evaluates the risks of its chemical products, compiles the results as GPS Safety Summaries,<sup>12</sup> and publishes these summaries via a portal page (available in Japanese only) on the MCC website as well as on the ICCA website.

Furthermore, to prevent the theft and/or abuse of chemicals, MCC has established its own list of MCC specified chemicals, which includes voluntarily designated substances in addition to legally designated or restricted substances. We have established safety management guidelines for managing these substances at plants and laboratories, during logistics operations and during transfer to customers. In this way, we are working to reinforce the management of such substances.

- 8 Global Product Strategy (GPS):
- A voluntary initiative wherein companies appropriately manage and conduct risk assessments of their chemical products in order to minimize risks posed by chemical substances throughout the supply chain.
- 9 International Council of Chemical Associations
- 10 Chemical Policy and Health Leadership Group
- 11 Japan Initiative of Product Stewardship (JIPS):
- A voluntary initiative promoted by the Japan Chemical Industry Association aimed at reinforcing risk-based chemicals management at companies.
- 12 GPS Safety Summary (sometimes abbreviated as GSS): Documents that clearly explain methods for handing chemical substances and other information

Documents that clearly explain methods for handing chemical substances and other information in detail that cannot be fully included on SDSs. These summaries are used in risk management-based chemicals management.

### Initiatives to Provide Reliable Chemical Substance Information: SDS Management

We use comprehensive chemicals management systems (for example, K-Mates<sup>13</sup>), to support our expert staff in the proper provision of information to customers and supply chain operators as well as reliable chemicals management within the company.

The systems comprise databases of the chemical substances and components of products handled by MCC, their hazardous properties, relevant domestic and international laws and regulations, and other information. The system is capable of performing the GHS<sup>14</sup> classification of chemical substances, determining the applicability of laws and regulations, and producing SDSs and labels in line with the laws and standards of a wide range of countries and regions, including Japan, Europe, the United States and East Asian and ASEAN countries for review by expert staff. The system uses highly reliable data that is carefully reviewed by experts at Mitsubishi Chemical Research, an MCC Group company, to generate GHS classifications. Furthermore, we are implementing proactive management using a function of the system that enables users to search chemical substances and products in the MCC database that may be subject to anticipated legal or regulatory amendments.

14 Globally Harmonized System of Classification and Labelling of Chemicals (GHS):

<sup>13</sup> KAITEKI-integrated System of Risk Management & Technical Information Supports on Chemicals

A system for classifying chemicals by the type and degree of their hazardous properties based on globally harmonized rules and communicating this information using labeling and the provision of SDSs.

### In-House Chemicals Management Training

In addition to basic chemicals management education, MCC hosts the Chemicals Management Seminar on a monthly basis at MCC Group headquarters. This seminar serves to teach Group company employees about increasingly stringent regulations in and outside Japan and how to address them. Furthermore, plants and R&D centers provide education on relevant laws and regulations as well as practical training on GHS classification and labeling methods, and reading and preparing SDSs.



In-house chemicals management training

### **Basic Policy**

The Mitsubishi Chemical (MCC) Group believes that implementing thorough quality control (QC) is important to ensuring product safety and continuously improving quality so that MCC Group customers can use MCC Group products safely and with confidence.

As an integrated chemical company that provides a wide array of products and services to customers in a broad range of industries, it is MCC's duty to prevent quality and product liability issues while working to further increase customer satisfaction by offering safe, reliable products. We strive to fulfill this duty in line with the following basic policy.

- In order to realize KAITEKI for customers, we provide products and services that customers can use with confidence.
- We listen carefully to each customer's requests and respond rapidly and sincerely.
- In accordance with the basis of our responsible care activities, we strive to achieve continuous improvement in quality.

### **Product Information Disclosure**

Around the world, corporations are facing growing demands to exercise proper management of chemical substances in products throughout the entire life cycle as well as to disclose information on such chemical substances. To accurately respond to these demands, MCC has established management standards for chemical substances in products and continues to contribute to the smooth operation of chemSHERPA<sup>1</sup> through the Joint Article Management Promotion-consortium (JAMP).<sup>2</sup> Furthermore, with regard to conflict minerals,<sup>3</sup> which present possible human rights issues, we have established a policy and strive to meet customer requests.

MCC is working with its business partners and customers to contribute to the creation of a social system capable of managing chemicals throughout the supply chain.

- 1 chemSHERPA: A new private-public information communication scheme aimed at standardizing communications about the chemicals included in products.
- 2 JAMP: A cross-industry organization that works to promote the appropriate management, disclosure and communication of information on chemicals contained in "articles" (parts and final products) throughout the supply chain.
- 3 Conflict minerals: Tantalum (Ta), tin (Sn), gold (Au), tungsten (W) and other minerals extracted in the Democratic Republic of the Congo and neighboring countries that are used to fund armed groups.

### **Basic Policy**

Mitsubishi Chemical (MCC) strives to put safety first and promote strict compliance, risk management, respect for human rights and communication with business partners in order to realize *KAITEKI*. Based on a product stewardship approach, we are promoting *KAITEKI* logistics to earn the trust of customers and society in logistics operations.

# Hazardous Materials Transport Initiatives and System to Prevent External Harm in Case of an Accident

MCC focuses considerable effort on ensuring the safe transport of hazardous materials.

MCC's business domains regularly hold responsible care meetings with logistics subsidiaries, maintaining close communication and implementing measures aimed at reducing problems, accidents and occupational injuries.

We work with logistics subsidiaries to ensure that all shipments are accompanied by yellow cards<sup>1</sup> and educate our business partners about the chemical properties of our products. In these ways, we work to enhance understanding of the products being transported and sensitivity to safety.

In addition to initiatives aimed at preventing accidents, we also conduct regular disaster drills with logistics subsidiaries and are taking steps to address the risk of a serious road accident through a contract with the Maritime Disaster Prevention Center. Furthermore, for products that present particularly high risk if stolen or lost, we have established our own management standards that we use in the transportation and storage of such products.

1 Yellow card: A document that contains emergency safety procedures to be taken in the event of a transportation accident and contact information for fire departments and other relevant parties.

### Modal Shifts: Increasing Energy Efficiency

MCC is also aggressively working to save energy in logistics.

We are working with logistics subsidiaries to improve energy efficiency and reduce CO<sub>2</sub> emissions. Specifically, we are implementing such measures as increasing transport lot sizes and promoting weight reductions by utilizing ship propellers made with carbon fiber, an MCC product. MCC is also actively advancing modal shifts to rail transport. As a result of these efforts, MCC has received Eco Rail Mark certification from the Ministry of Land, Infrastructure, Transport and Tourism in recognition of its efforts to promote environmentally friendly logistics.



Propeller made with carbon fiber



Eco Rail Mark

### Mitsubishi Chemical Group Companies Promoting Responsible Care Activities

As of October 2017

#### | Petrochemicals Business Domain

Japan Polychem Japan Polypropylene Japan Polyethylene Mitsubishi Chemical Indonesia

#### | Carbon Business Domain

Kansai Coke and Chemicals

#### | MMA Business Domain

Mitsubishi Chemical Lucite Group Huizhou MMA Suzhou Sanyouli Chemicals MCC Unitec Thai MMA Mitsubishi Chemical Polymer Nantong Suzhou MRC Opto-Device Diatec Ryoko Acry Sunday Diapolyacrylate The Saudi Methacrylates Company

#### Advanced Polymers Business Domain

Mitsubishi Chemical Performance Polymers Europe Mitsubishi Chemical Performance Polymers Echizen Polymer Japan Unipet RHOMBIC

#### High Performance Chemicals Business Domain

DIACHEM RESINS INDONESIA Toei Kasei Dianal America Japan Coating Resin Mitsubishi Chemical Analytech ARKEMA Yoshitomi Mitsubishi-Chemical Foods Nippon Kasei Chemical

# Information, Electronics & Display Business Domain

MC PET FILM INDONESIA Mitsubishi Polyester Film Suzhou Mitsubishi Chemical Converting Film Wuxi Tai Young High Tech Mitsubishi Chemical Infonics Shinryo Mitsubishi Chemical Media The Nippon Synthetic Chemical Industry

#### High Performance Films Business Domain

J-Film Hishi Plastics U.S.A. Tai-Young Film DiaPlus Film Mitsubishi Polyester Film (U.S.A.) Mitsubishi Polyester Film (Germany)

#### Environment & Living Solutions Business Domain

Dalian Rayon Environmental Equipment Wuxi Rayon Membrane Technology Fengxin JDL Environment Protection Mitsubishi Chemical Aqua Solutions MCC KODA Mitsubishi Chemical Cleansui Wellthy Resindion Tai Young Chemical Mitsubishi Chemical Agri Dream Mikado Chemical M.F.G. KAITEKI Fresh Australia Mitsubishi Chemical Infratec Astro DIATEX Nitto Kako

# Advanced Moldings & Composites Business Domain

Quadrant Toyama Filter Tow Tosen Ryoko Sizing **TK** Industries Mitsubishi Chemical Carbon Fiber and Composites (U.S.A.) Challenge MCC Composite Products Aldila Wethje Carbon Composites Wethje Immobilien ALPOLIC Mitsubishi Chemical Composites America Ryobi Techno Shanghai Baoling Plastics Yuka Denshi **Dia Molding** 

#### New Energy Business Domain

MC lonic Solutions UK MC lonic Solutions US Qingdao Anode Kasei

#### | Corporate Domain

Mitsubishi Chemical Logistics Ryowa Logitem Mitsubishi Chemical Engineering Corporation Ryouei Ryoko Tekunika Hokuryo Mold Mitsubishi Chemical High-Technica

### Safety Data

All data below for years prior to and including fiscal 2016 are the sums of the figures for the previous Mitsubishi Chemical, Mitsubishi Plastics and Mitsubishi Rayon, before the formation of the current Mitsubishi Chemical.

#### Mitsubishi Chemical Group Process Safety Incidents in Japan

Classification	FY2013	FY2014	FY2015	FY2016	FY2017 (Apr.–Oct.)
Incidents	15	14	12	16	20
Serious incidents	1	0	0	0	0

#### Mitsubishi Chemical Group Occupational Accidents in Japan

Classification	FY2013	FY2014	FY2015	FY2016	FY2017 (Apr.–Oct.)
Non-lost-time accidents	72	53	45	50	38
Lost-time accidents	5	4	7	5	0
Serious accidents	15	11	20	11	4

#### Mitsubishi Chemical Group Accidents by Classification

Classification	FY2012	FY2013	FY2014	FY2015	FY2016	Total
Cuts and scrapes	1	2	1	1	6	11
Being caught and entangled in equipment	5	10	10	10	9	44
Falls on level surfaces	7	8	7	10	9	41
Chemical burns and toxicosis	2	2	2	3	6	15
Contact with hot or cold objects		2	1	3	2	8
Reaction to motion/ improper motion	3	4		1		8
Collisions		2		3		5
Falls from elevated surfaces	1	5	3	3	4	16
Flying/falling objects			1	3	1	5
Others	2	1	1	2	2	8

### **Environmental Data**

All data below for years prior to and including fiscal 2016 are the sums of the figures for the previous Mitsubishi Chemical, Mitsubishi Plastics and Mitsubishi Rayon, before the formation of the current Mitsubishi Chemical.

Pollutant	FY2012	FY2013	FY2014	FY2015	FY2016
NO <sub>x</sub>	10,900	9,900	8,800	8,000	8,200
SO <sub>x</sub>	3,100	3,200	3,000	3,100	2,900
COD	2,000	1,900	1,700	1,700	1,700
Dust	240	210	200	200	180
Total phosphorus	80	70	60	50	60
Total nitrogen	6,000	5,700	5,700	5,500	5,700
VOCs*	4,400	4,500	5,500	4,800	4,300

#### Mitsubishi Chemical Group Emissions of Pollutants into the Atmosphere and Water Systems (t)

\* Includes PRTR-regulated substances.

#### Mitsubishi Chemical Group Water Intake and Discharge Volumes (km<sup>3</sup>)

	Туре	FY2012	FY2013	FY2014	FY2015	FY2016
Intake	Tap water	32,000	30,500	29,300	28,400	31,300
	Groundwater	26,500	26,500	24,200	22,300	23,200
	Industrial water	120,200	115,600	109,800	102,000	97,800
	Seawater	509,400	517,700	473,100	457,800	463,100
Discharge	Oceans	573,700	577,100	522,400	493,900	495,100
	Streams and wetlands	28,300	46,400	42,300	51,200	48,300
	Sewerage	3,700	3,900	3,300	3,500	3,600

#### ISO 14001 Certified Mitsubishi Chemical Plants

Plant	Certification body	Registration date
Otake Plant	LRQA <sup>1</sup>	March 2016
Kurosaki Plant	JQA <sup>2</sup>	July 2000
Nagahama and Azai Plants	JQA	December 1999
Yokkaichi Plant	JCQA <sup>3</sup>	July 1999
Toyama Plant	LRQA	July 2016
Hiratsuka Plant	JQA	March 2000
Toyohashi Plant	LRQA	July 2016

Certification body	Registration date
JCQA	March 2000
JCQA	March 2001
LRQA	December 2000
JCQA	February 2000
JCQA	December 2001
LRQA	October 2016
JCQA	October 2003
	body JCQA JCQA LRQA JCQA JCQA LRQA

1 Lloyd's Register Quality Assurance Limited

2 Japan Quality Assurance Organization

3 Japan Chemical Quality Assurance Ltd.

# Together with Stakeholders Basic Policy

The Mitsubishi Chemical Holdings Group identifies its stakeholders as its customers, shareholders, investors, communities, employees, business partners and everyone else who supports its corporate activities, as well as society at large and the foundation upon which it is built, the Earth. Based on this understanding, Mitsubishi Chemical works to earn the trust of its stakeholders by valuing and respecting stakeholders, engaging in dialogue and proper disclosure, and reflecting the fruits of such efforts in all its corporate activities.

### **Basic Policy**

In line with the Mitsubishi Chemical Holdings Group Charter of Corporate Behavior, Mitsubishi Chemical (MCC) constantly strives to achieve customer satisfaction by keeping the promises made in contracts with them, ensuring the safety and quality of all the products and services it supplies, engaging in close customer communications and advancing R&D.

### Making Product Information Available

Over 1,100 product information entries (approximately 530 in Japanese, 350 in English and 240 in Chinese), including information on the products of Group companies, are available on MCC's website. In addition, Safety Data Sheets (SDSs) and GPS Safety Summaries (GSSs) can also be accessed through the website (available in Japanese only).

For product information, please contact the department or Group company that handles the product in question. Lists of MCC's departments and Group companies with information on the products they handle are available on MCC's website.

If you are unsure which department to contact, please contact the call center for guidance.

Call center (+81) 3-6748-7300 9:00–12:00, 13:00–17:45 (Closed Saturdays, Sundays and national holidays)

### **Customer Satisfaction Surveys**

The Mitsubishi Chemical Holdings (MCHC) Group believes that close customer communication is essential to achieving accurate insight into social issues and the challenges that customers face and to finding solutions together. Accordingly, the Group has been conducting customer satisfaction surveys since fiscal 2012. Specifically, we survey customers in and outside Japan about products handled by our core businesses, covering such topics as quality, supply systems, sales promotion and technical support, as well as the attitudes and reliability of individual operating companies. By analyzing the results of these surveys and implementing a PDCA cycle, MCC aims to provide even better customer service and improve customer satisfaction.

#### **KAITEKI SQUARE**

KAITEKI SQUARE was established in October 2012 in our Tokyo headquarters as a showroom for the MCHC Group. It is an important platform for communication with our customers and clients, a place where we can interact and exchange ideas about a better future.

KAITEKI SQUARE comprises three zones. The first zone is the Special Exhibition Zone, which focuses on the role of science and technology in solving various challenges facing 21st-century society. The second zone is the Permanent Exhibition Zone, which highlights the technological capabilities and collective strength of the MCHC Group by showcasing products and technologies that the Group is working on that are aimed at realizing *KAITEKI*. The last is the Concept Zone, an interactive video exhibition that offers a glimpse into the societies of the future.

We look forward to welcoming more and more visitors to our showroom and having meaningful discussions on how to realize *KAITEKI* in the future together.



KAITEKI SQUARE at the Tokyo headquarters

Aiming to realize *KAITEKI*, an original concept created by the Mitsubishi Chemical Holdings (MCHC) Group, Mitsubishi Chemical (MCC) works with business partners to promote purchasing and procurement that take into account CSR-related considerations based on the Mitsubishi Chemical Holdings Group Charter of Corporate Behavior.

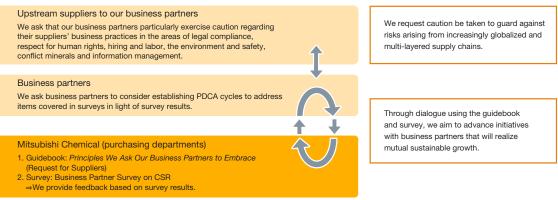
### **Promoting Communication**

We facilitate communication with raw materials and packaging materials suppliers using a guidebook and survey to ensure that said suppliers share our understanding of CSR issues and to confirm the status of related initiatives.

We utilize survey results to provide feedback to business partners and engage in dialogue about making specific improvements. By doing so, MCC aims to build sound relationships with its business partners that enable mutual growth and improvement.

In fiscal 2017, we plan to completely revamp the content of our business partner survey. We believe that updating the survey to reflect the new MCC's management policy and changes in external demands will allow us to more accurately express our commitments and priorities, and improve the quality of communications with business partners.

#### Mitsubishi Chemical's CSR Procurement



### Compliance with the Subcontract Act

To maintain sound relationships with its business partners, MCC has clearly articulated a system for ensuring compliance with the Subcontract Act and established internal rules, including the Subcontract Act Compliance Regulations, in which the specific scope of application and compliance requirements of the Subcontract Act are laid out. To ensure that transactions are conducted pursuant to such internal rules, MCC systematically implements internal training and audits of related departments.

# Together with Stakeholders Together with Employees

Mitsubishi Chemical (MCC) is implementing a range of initiatives aimed at enabling employees—upon whom realizing *KAITEKI* depends—to exercise their abilities to the fullest as well as at achieving sustainable corporate development based on a new relationship of trust between employees and management.

### **Basic Policy**

"Utilizing people's capabilities" is one of the fundamental management policies of the MCC Group. We practice health and productivity management and carry out management with the aim of empowering all Group members to work with enthusiasm, motivation and initiative, allowing each individual to exercise their abilities to the fullest while promoting diversity and viewing the diversity of human resources as a strength.

#### | The Human Resources and Organization We Aspire to Be

We, as individuals, aspire to:

- Think deeply about, take action according to, and take responsibility for our own duties and roles.
- Proactively embrace differences, respect one another and broadly connect with others.
- Look beyond the status quo and take new action to continuously and ambitiously seek to create value.

We, as an organization, aspire to:

- Share common goals and a common direction and create an organization where we can all thrive.
- Anticipate change and work together to take action quickly.
- Leverage diverse individuality and ways of thinking to continually seek value creation that is greater than the sum of our individual contributions (1 + 1 > 2).

#### Personnel Strategy for Sustainable Corporate Development

Kazuyuki Futamata Director of the Board and Managing Executive Officer Mitsubishi Chemical

In fiscal 2017, MCC is mainly implementing initiatives related to the following issues with the aim of utilizing people's capabilities.

- KAITEKI Health and Productivity Management
- Respect for human rights and promoting diversity
- Effective placement and human resource development



In implementing initiatives related to the first of these, *KAITEKI* Health and Productivity Management, we are focusing on both health support and workstyle reforms, aiming to improve health at the individual and workplace levels. That is, we are working to realize workstyles that facilitate health and job satisfaction for every employee as well as workplace environments that allow each individual to thrive and utilize their abilities to the fullest. MCC is working strategically—investing and building frame-works—to make this happen. We are encouraging every employee to proactively examine their own health, work and workplace, ask what they can do to enhance their own health and vigor at work, and take action accordingly. We believe that this approach will help each employee achieve a greater sense of satisfaction and achievement both at work and in their everyday lives. Furthermore, individuals and organizations backed up by health exert a positive influence their families and communities. In this way, I am confident that we can contribute to society through our businesses and thus contribute to realizing *KAITEKI*.

As for the second issue, respect for human rights and promoting diversity, we want the MCC Group to be an organization in which all employees respect one other's diverse individuality and values, including nationality, race, religion, age, gender, sexual orientation and disability or lack thereof, and together fulfill the Group's corporate social responsibility while enabling every individual in the Group to exercise their abilities to the fullest. Aiming to lay the foundations and create support to enable diverse human resources to thrive, we are further developing our existing initiatives related to respect for human rights, hiring people with disabilities, enabling woman to succeed, and providing support for child care and nursing care. At the same time, we are working to create environments that are accommodating of all employees, regardless of nationality, and to foster understanding and provide support for LGBT individuals.

The third issue is effective placement and human resource development, an area in which we aim to enable every employee to work with enthusiasm, motivation and initiative and to exercise their abilities to the fullest. Specifically, we are engaging in personnel placement on a Group-wide basis to meet the demands created by globalization. We have also adopted a career development program—a system for medium- to long-term strategic personnel placement and development with the aim of encourag-ing employees to pursue self-directed growth. Going forward, based on this program, while clearly delineating the roles of the Group in Japan and the regional headquarters, we will advance effective placement and human resource development across the MCC Group as a whole.

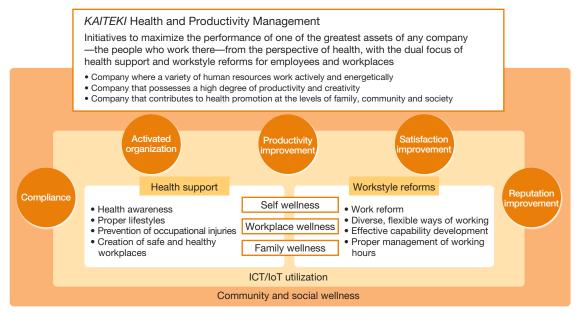
### **Employee Perception Surveys**

Once a year, the MCC Group conducts an employee perception survey of its employees in Japan and those temporarily stationed overseas. The survey covers a diverse range of topics, including employees' mindsets and values regarding work and their workplace conditions. The survey results provide useful information on employee satisfaction, one of the items in the MOS Indices, and we use them with the results of other surveys to reflect employee perspectives in management.

### **Basic Policy**

Mitsubishi Chemical (MCC) is implementing *KAITEKI* Health and Productivity Management, aiming to ensure not only employee safety and health but that every employee can thrive and find purpose and satisfaction in their job. Before the merger, the three companies that formed the new MCC were each implementing their own health and productivity management initiatives. We have redefined these initiatives and their goals under a new name that incorporates our ideal of *KAITEKI—KAITEKI* Health and Productivity Management. Accordingly, we are strategically investing management resources in order to maximize the performance of one of the greatest assets of any company—the people who work there—from the perspective of health.

#### KAITEKI Health and Productivity Management at Mitsubishi Chemical



We are implementing *KAITEKI* Health and Productivity Management initiatives with the dual focus of health support and workstyle reforms. To achieve the goals of these initiatives, we have designated themes like those shown above and are carrying out concrete activities and measures in line with said themes. Furthermore, we have built a framework to implement a PDCA cycle, including monitoring criteria to confirm the progress of such activities.

We are advancing *KAITEKI* Health and Productivity Management with particular awareness of the three forms of wellness shown below. We are also working with our health insurance union and promoting information sharing and coordination with Group companies.

#### Self Wellness

#### Being Healthy Ourselves

In line with the principle that the primary responsibility for one's health lies with oneself and to ensure that we can work effectively, we will each take the initiative to manage our own well-being.

#### Workplace Wellness

#### **Creating Healthy Workplaces**

We will respect the individuality of the people we work with and support one another in order to build vibrant, creative workplaces by improving workplace environments and work processes.

#### Social Wellness

#### Building Healthy Families and Nurturing Our Ties to the Community

By enhancing self wellness and workplace wellness, we will aim to broadly contribute to society as members of our respective families and communities.

### Health Support

#### Basic Policy for Managing and Enhancing Health

MCC has laid out necessary rules for managing employees' physical and mental health in its Health Management Regulations. We maintain a health and safety management system and provide health checkups and stress check tests in compliance with relevant laws and regulations. While duly respecting our employees' privacy, we actively work to maintain and improve their physical and mental health and implement health management activities. Managers and specialized staff, including human resource department staff and industrial physicians, each aware of their own roles and duties, coordinate to maintain and improve conditions, namely working hours, work content and burden, and work environments. Furthermore, should any physical or mental health problems that may affect an employee's ability to do their job arise, said staff responds appropriately.

#### | Occupational Accident Countermeasures Focusing on Human Factors

#### KAITEKI Exercises and Safety Fitness Tests

In Japan and within the company, falls are one of the most frequently occurring causes of occupational injury. We have made company-wide efforts to prevent such falls, including improving facilities, revising work practices and implementing various forms of training, but these initiatives have not reduced the number of occupational injuries caused by falls.

To address this problem, in addition to existing measures, we have begun focusing on human factors, namely physical strength and dexterity. Specifically, we are advancing fall-prevention physical training as part of *KAITEKI* exercises and carrying out safety fitness tests to assess employees' ability to avoid falls. Though such measures, we are working to help employees of all ages develop the physical strength and skills to prevent falls.

#### Raising Health Awareness and Improving Lifestyle Habits

#### Adopting Health Support Tools That Use ICT/IoT

We have introduced i<sup>2</sup> Healthcare, a system to support employee health, as infrastructure to back up *KAITEKI* Health and Productivity Management. We are using the system as part of our initiatives to improve lifestyle habits, seeking to increase health awareness and help employees improve their lifestyle habits.

To this end, we are loaning wearable activity tracking devices to employees who request them. Fitting like a wristwatch, such devices allow users to monitor their physical condition, including heart rate and the amounts of exercise and sleep they are getting. Data collected from such devices are being used with the i<sup>2</sup> Healthcare system to enhance employee health.

### Workstyle Reforms

#### Work Reform

By achieving radical innovations at the workplace level under the leadership of on-site managers, we are eliminating inefficiencies and freeing up time. By doing so, we aim to pursue more value-creating work and improve work-life balance. To support such work reforms, shared function departments, such as human resources and administration, suggest guidelines for running meetings and preparing documents and e-mails while providing enhanced IT communication tools. We are advancing work reforms in coordination with the UP!20 company-wide productivity improvement initiative.

#### Proper Management of Working Hours

As part of workstyle reforms under *KAITEKI* Health and Productivity Management and to prevent excessive working hours and ensure compliance, MCC is working to appropriately manage working hours.

#### Eliminating Excessive Working Hours and Increasing the Paid Vacation Usage Rate

To accurately track actual working hours, our attendance system records when employees log on and off of the computers they use. This helps prevent discrepancies between actual and reported working hours.

We are also implementing awareness-raising activities, such as presentations for managers about the proper management of working hours, aimed at reducing overtime through self-directed work improvement in each department.

Furthermore, we are working to make it easier for employees to take time off using such programs as the refresh leave system<sup>1</sup> and by setting planned annual days off.<sup>2</sup> Furthermore, to support employees' self-directed social contribution efforts, we have established a volunteer leave system (up to five days per year) and donor leave system (as many days as needed).

### **Promoting Flexible Workstyles**

#### **Remote Work System**

In November 2017 we introduced a remote work system, enabling employees to work from home or elsewhere.<sup>3</sup> Eligibility for this system is not limited to employees engaged in child care or nursing care; all daytime employees who have been with MCC for a year or more can use the system up to two days a week. We believe this system will benefit employees, helping to improve work-life balance and reduce the burden of commuting.

- 1 Once a year, employees who take two or more consecutive annual paid vacation days can receive one additional day off on the following business day. Employees who have been with MCC for more than a year as of April 1 are eligible to use this system.
- 2 A system that makes it easier for daytime employees to use their annual paid vacation by designating certain days for everyone in the company to take off at once. Up to three days per year.
- 3 The status of system implementation varies by location.

#### **Overview of Leave Systems**

MCC has established the following leave systems to enable employees to balance their work and private lives.

#### Main Leave Systems (Besides Child Care and Nursing Care Leave)

Leave to accompany a spouse on overseas assignment; volunteer leave with the Japan Overseas Cooperation Volunteers; fertility treatment leave

#### Livelihood Support Leave

Employees can accumulate up to 40 expired annual paid vacation days (which are valid for two years after being granted) as days they can use under the livelihood support leave system. These days can be used by employees if they are ill or injured, pregnant, engaged in nursing or child care, undergoing fertility treatment, victims of a natural disaster or volunteering.

#### Principal Special Types of Time Off

Bereavement/memorial service leave; marriage leave; menstrual leave; leave for employees directly affected by or unable to get to work due to a natural disaster; volunteer leave; donor leave; workplace transfer leave; home visit leave; refresh leave; jury duty leave; public service leave; maternity leave; paternity leave; nursing care leave

# Together with Stakeholders Respect for Human Rights and Promoting Diversity

### **Basic Policy**

Mitsubishi Chemical (MCC) regards respect for human rights as the basis of its management and the development of diversity as part of its management strategy. MCC has established its Basic Policy on Respect for Human Rights and the Development of Diversity to focus efforts on these issues.

#### Basic Policy on Respect for Human Rights and the Development of Diversity

Within the MCC Group, all employees shall respect one other's diverse individuality and values, including nationality, race, religious beliefs, age, gender, sexual orientation and disability or lack thereof, and together fulfill the Group's corporate social responsibility. Building on this foundation, we aim to enable every individual in the Group to develop their abilities to the fullest.

#### **Respect for Human Rights**

In line with the Mitsubishi Chemical Holdings Group Charter of Corporate Behavior, we shall respect the dignity and rights of all people and shall not unfairly discriminate under any circumstances. Furthermore, each employee shall endeavor to correctly understand human rights and related issues and realize workplaces that realize *KAITEKI* and are free of discrimination and harassment.

#### **Developing Diversity**

In line with the Mitsubishi Chemical Holdings Group Charter of Corporate Behavior, we shall build organizations that take strength from diversity, in which each individual is aware of their role, strives to enhance their abilities as needed, and utilizes said abilities to the fullest to contribute to the creation of *KAITEKI* value. Furthermore, we shall endeavor to balance our work and personal lives and, by deepening dialogue and mutual understanding, create a workplace culture that is rich in drive and energy and that realizes *KAITEKI*.

To promote respect for human rights and diversity on a company-wide basis, we have established the Human Rights and Diversity Development Committee, chaired by the Supervising Officer (in charge of Human Resources) and comprising the chief operating officer of each business domain and common function department. The members of this committee implement PDCA cycles, discuss their implementation policies and plans and monitor and periodically and report on performance.

### **Respect for Human Rights**

The Mitsubishi Chemical Holdings (MCHC) Group has established the Mitsubishi Chemical Holdings Group Global Policy on Respecting Human Rights, Employment and Labor. In light of the Universal Declaration of Human Rights and United Nations Global Compact, MCC has adopted this policy as its action guidelines.

In addition to implementing the necessary education to ensure respect for individual dignity and rights, MCC forbids child labor and forced labor and strives to maintain proper working conditions. Through these efforts, MCC seeks to fulfill its corporate social responsibility to ensure that the rights of all its stakeholders are respected.

To this end, we maintain systems for dealing with issues in this area appropriately. Specifically, we are implementing a variety of educational and other initiatives, including rank-specific training, aimed at deepening awareness and knowledge of human rights. In addition, at each plant, we have appointed harassment counselors, to whom employees can go to seek help or guidance related to harassment or human rights issues.

### **Enabling Women to Succeed**

In line with its basic policy on promoting diversity and as part of efforts to utilize its people's capabilities, MCC is providing support to enable its female employees to achieve greater success. As a result of enhancements to systems to support employees in balancing their work and personal lives, we have almost eliminated the gender gap in the number of years that employees stay with us, but the rate at which women are promoted to management positions remains an issue. In light of this, we have formulated the action plan below based on the Act on Promotion of Women's Participation and Advancement in the Workplace. We are advancing a range of measures in line with said plan.

#### **MCC's Action Plan**

We have established the following action plan to support the development and success of female employees.

#### 1. Plan Duration

April 1, 2017-March 31, 2021 (four years)

#### 2. Numerical Target

Double the percentage of management positions (line manager or equivalent and above) held by women from the 2017 level

#### 3. Initiatives

- (1) Implement systematic career development support for female employees
- (2) Develop female managers
- (3) Enhance educational opportunities for motivated employees
- (4) Implement workstyle reforms and develop workplace culture

### Balancing Work and Personal Lives

To effectively promote diversity and enable every employee to utilize their abilities, employees must be able to balance their work and personal lives. MCC supports its employees with numerous systems designed to meet the needs attendant to a range of life stages.

#### | Main Systems to Support Employees in Balancing Their Work and Personal Lives

- Child care leave: Until the April 30 after the child's third birthday
- Reduced work hours for child care: Until the end of the child's third grade school year
- Nursing care leave: One year per qualifying family member
- Reduced working hours for nursing care: Maximum two-hour reduction in working hours per day (as long as necessary)
- Reduced work days for nursing care: Maximum five-day reduction in working days per month (as long as necessary)
- Life support leave (system for accumulating expired annual paid leave): Can be used for recovery from illness or injury, child care, nursing care, etc.
- Declaration of desired place of work: Allows employees to specify their desired place of work to accommodate family circumstances
- Leave to accompany a spouse on overseas assignment: Allows employees to take leave of up to three years to accompany their spouse on an overseas work assignment
- Remote work system: Employees whose work is suitable for telecommuting can do so up to two days a week
- Day care cost stipends
- Day care information service
- Nursing care stipends and financial support
- Home care worker stipend
- Establishment of external nursing care consultation points

In addition, we have formulated the action plan below based on the Act for the Promotion of Measures to Support the Nurturing of the Next Generation. We are advancing measures in line with said plan.

#### **Together with Stakeholders**

# Respect for Human Rights and Promoting Diversity

#### MCC's Action Plan

To facilitate balanced work and personal lives for employees and enable all employees to exercise their abilities, we have established the following action plan and are creating accommodating work environments.

#### 1. Plan Duration

April 1, 2017-March 31, 2021 (four years)

#### 2. Targets and Initiatives

Target 1: Create environments that facilitate the success of employees engaged in child care

- Monitor the usage of systems to support employees in balancing their work and personal lives as well as the results of related initiatives and share findings broadly with employees
- Provide support to help employees continue working and return to work smoothly and promptly after child care leave

Target 2: Develop a workplace culture that is supportive of employees balancing work and home responsibilities

- Foster increased understanding of company systems
- Respect employees' diverse values and workstyles while creating a workplace culture in which each employee recognizes their role and can exercise their abilities to the fullest
- Reduce working hours
- Encourage the use of paid leave

Target 3: Carry out other initiatives to support the development of the next generation

- · Provide opportunities for children to come into contact with workplaces, such as plant tours
- Foster understanding of the meaning of work among young people and provide work experience opportunities

### Support to Enable People with Disabilities to Exercise Their Abilities

MCC is advancing initiatives to promote the hiring of people with disabilities and enable them to exercise their abilities. Each business site partners with special-needs schools and institutions to proactively provide work experience opportunities. We also accept job applicants with disabilities, matching them to workplaces and seeking to retain them. Furthermore, we are advancing such initiatives as making bathrooms barrier-free, improving workrooms to suit the needs of people with disabilities and making work hours more flexible.

In 1993, we established the special subsidiary Kasei Frontier Service, Inc., which provides PC data entry and printing services, to help people with disabilities achieve growth by taking on work responsibilities and thus contribute to society. As of June 2017, said company had 69 employees with disabilities (of 105 total employees).

# A Company Where People with and without Disabilities Work as One to Take on Ambitious Goals

Koji Nakano Managing Director Kasei Frontier Service, Inc.

At Kasei Frontier Service, Inc., although we provide both tangible and intangible accommodations to enable people with disabilities to thrive at work, we do not give such employees special treatment. This is because our aim is to be a company where people with and without disabilities work as one to take on ambitious goals.



In managing Kasei Frontier Service, we continually strive to make the company an organization we can be proud of as a

team of human beings. To that end, it must be a company where anyone can work comfortably in a friendly but competitive environment. At the same time, as employees age, their circumstances and abilities change. Even so, we must cooperate and help one another to develop working environments that offer each employee the joy of working and a true sense of participating in and contributing to society.

In June 2017, 2.05% of Group employees were people with disabilities, above the legally mandated rate of 2.00%. MCC's basic policy is to ensure that the individuality of every employee, disabled or not, is respected and that all employees can thrive. At each site and at Kasei Frontier Service, we are encouraging the hiring of people with disabilities and providing support to enable such employees to exercise their abilities on an ongoing basis.

#### **Together with Stakeholders**

## Effective Placement and Human Resource Development

### **Basic Policy**

At Mitsubishi Chemical (MCC), we aim to achieve our vision—realizing *KAITEKI*. To that end, we strive to secure and retain human resources who are understanding of diverse values, identify issues on their own, and involve those around them as they continually take on new challenges.

### Hiring

We do not hire individuals less than 18 years old, and practice fair, non-discriminatory hiring.

### Effective Placement and Human Resource Development

#### Basic Policy

We aim to realize optimal personnel placement on a Group-wide basis to meet the demands created by changes in the business environment and globalization. To this end, we have also adopted a career development program—a system for medium- to long-term strategic personnel placement and development with the aim of encouraging employees to pursue self-directed growth. Specifically, we are working to effectively place and develop the next generation of executive management candidates for the MCC Group and promising human resources in each region.<sup>1</sup>

With regard to the next generation of executive management candidates, we are working with the regional headquarters<sup>2</sup> established in April 2017 to implement unified global management, identifying key positions and preparing succession plans for them as well as monitoring the placement of management candidates who are expected to fill such positions in the future. The company-wide HR Committee convenes on a regular basis to manage such efforts. Furthermore, we are applying these initiatives not only to MCC employees but expanding them to include the entire MCC Group, including overseas companies, working to implement more systematic and efficient human resource development and placement.

At the same time, with regard to promising resources in each region, the regional headquarters implement systematic human resource development and placement within their respective regions.

Based on the above policies, in April 2017 we introduced a new personnel system for employees of MCC in Japan as described below.

- 1 Refers to the four regions that the MCC Group has designated as its units for global business development, namely the Americas; Europe, the Middle East and Africa; the ASEAN region, India and Australia; and China and Hong Kong.
- 2 The following four companies, established to accelerate Mitsubishi Chemical's overseas business development by supporting business and revenue growth in their respective regions.
- Mitsubishi Chemical America, Inc.
- Mitsubishi Chemical Europe GmbH
- Mitsubishi Chemical (China) Co., Ltd.
- Mitsubishi Chemical Asia Pacific Pte Ltd.

#### | Career Design

As a part of personnel measures designed to encourage employees to think about their careers, we have introduced career design interviews. Such interviews involve an employee and their supervisor discussing the employee's current situation and how said employee plans to grow over the medium to long term. This approach is designed to help employees take the initiative and grow.

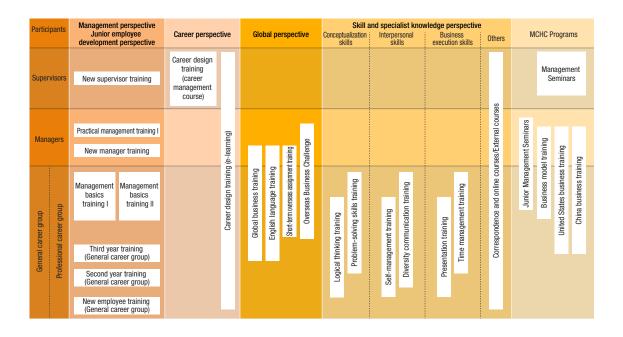
Employees work to identify their own strengths and consider how they can hone and utilize those strengths to contribute to society. At the same time, the company systematically examines ways to utilize and enhance each individual's strengths in order to achieve corporate growth.

### Human Resource Development System

MCC believes that on-the-job training—learning through actual, on-site work experience—is the foundation of employee growth. We expect on-the-job training to lead employees to grow autonomously through the process of indentifying issues in the course of their ordinary work and solving said issues with support from those around them.

To support and reinforce this process, we have introduced measures to enable employees to proactively design their own careers. We also maintain an off-the-job training program that enables employees to learn how to fulfill their expected roles.

Furthermore, we organize training programs according to five perspectives that are based on business, workplace and individual needs. These are the junior employee development perspective, management perspective, global perspective, skill and specialist knowledge perspective and career perspective. Using such training programs, we support the growth of each employee while encouraging self-directed career development.



At the same time, Mitsubishi Chemical Holdings (MCHC) holds such programs as Management Seminars and Junior Management Seminars that provide management literacy training as well as a Global Executive Program and Group New Executive Training for executives. The MCC Group actively sends its employees to participate in these programs, which offer opportunities for employees to develop themselves through friendly competition within the MCHC Group.

### **Global Executive Development**

The MCC Group is forcefully globalizing its management structure. To encourage the development of the human resources needed to handle global management, we are carrying out a range of training and other programs in and outside Japan.

The development of globally oriented management personnel requires the cultivation of global mindsets and amassing of global experience. To this end, we offer rank-specific programs to develop global mindsets in Japan. We also provide overseas dispatch programs, including the Overseas Business Challenge Program, which combines foreign language training with internship programs at overseas Group companies, and the Overseas Survival Experience, a short-term program in which participants work to solve problems on their own in a multicultural environment. Through such work experience, overseas experience, language study and other programs, we provide opportunities for employees to gain global business and living experience tailored to the specific level of each individual.

### **Building New Labor-Management Relations**

The former Mitsubishi Chemical, Mitsubishi Plastics and Mitsubishi Rayon, which merged in April 2017 to create the new Mitsubishi Chemical, each had their own labor union, namely the Mitsubishi Chemical Labor Union, Mitsubishi Plastics Labor Union and Mitsubishi Rayon Labor Union. The three labor unions continue to exist and have changed their names to the Mitsubishi Chemical MC Labor Union, Mitsubishi Chemical MP Labor Union and Mitsubishi Chemical MR Labor Union, respectively. The status of these unions' membership or non-membership in umbrella organizations and the particular umbrella organizations to which they belong may vary. While respecting the pre-merger state of relations with each union, Mitsubishi Chemical is working to provide opportunities, such as holding meetings of management and all three unions together, for sound discussion aimed at building new labor-management relations.

### **Basic Policy**

In line with the Mitsubishi Chemical Holdings Group Corporate Citizenship Activities Policy, the Mitsubishi Chemical (MCC) Group provides not only monetary and material support, but contributes to actual activities (providing human support) in such areas as creating an inclusive society, fostering the development of the next generation, protecting the global environment, communicating with local communities and disaster support.

#### | Mitsubishi Chemical Holdings Group Corporate Citizenship Activities Policy

The Mitsubishi Chemical Holdings (MCHC) Group strives to deepen its understanding of the culture and customs of the communities and countries where it operates and to contribute to society through its businesses. Furthermore, as a good corporate citizen, the MCHC Group works to meet the demands and expectations of society and communities and realize *KAITEKI*.

#### Approach

- Conduct corporate citizenship activities in communities and countries where we operate from a viewpoint 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 in their volunteer activities.

### Social Contribution Activities

#### | Creating an Inclusive Society

In April 2017, MCC signed an agreement to become an official partner of the Japanese Para-Sports Association (JPSA).

MCC agrees with JPSA's mission of creating a vibrant, inclusive society and seeks to contribute to the realization of a society that is healthy both physically and mentally, where everyone can enjoy the benefits of sports and each individual's individuality is respected. As an official partner of JPSA, MCC works to contribute to the realization of a vibrant, inclusive society by supporting JPSA's activities and thus helping to further spread and develop sports for people with disabilities.



May 2017 Volunteers at the Japan Para Wheelchair Rugby Championship venue

#### | Fostering the Development of the Next Generation

The MCC Group holds chemistry experiment workshops at various locations, aiming to spark an interest in chemistry and science among children, who represent the next generation.

Furthermore, by performing chemistry experiment shows for children at events held by the Yume Kagaku-21 Committee, we actively support the committee's activities. (The Yume Kagaku-21 Committee comprises the Chemical Society of Japan; Society of Chemical Engineers, Japan; Japan Association for Chemical Innovation; and Japan Chemical Industry Association.)

#### Protecting the Global Environment and Communicating with Local Communities

The MCC Group has participated in Tokyo Greenship Action since 2015. Under this initiative, every spring and autumn the Tokyo Metropolitan Government, NPOs and companies together undertake activities aimed at preserving nature conservation areas in Tokyo. At our business sites, we enthusiastically participate in woodland conservation and local area and waterway cleanup activities. Furthermore, on a regular basis, we participate in local events, invite local residents to events at plants, and open our sports fields and athletic facilities to the public. We also proactively host tours for elementary, junior high and high school students as part of ongoing efforts to communicate with local communities.

#### | Disaster Support

The MCHC Group provides ongoing support to the areas affected by the Great East Japan Earthquake through monetary and material donations and by backing the volunteer activities of employees.

As part of efforts to support recovery in the Tohoku region, every year we hold exhibitions of local specialty products from lwate, Miyagi and Fukushima prefectures at the Group headquarters, where many employees buy a wide variety of products, supporting recovery.

In November 2016, we held Let's Go to Tokyo, an event in which we invited elementary school students and their guardians from Iwate's Kamaishi City and Otsuchi Town to Tokyo. The participants visited Tokyo Disneyland, went sightseeing at TOKYO SKYTREE and learned about chemistry at the Group headquarters. 2016 marked the fifth time we have held this event. With help from MCHC Group employee volunteers, we put together a fun schedule for the children and their guardians that included a chemistry experiment workshop, a tour of the MCHC Group's KAITEKI SQUARE showroom, and a visit to the observation floor of the Group's head office building.

The MCHC Group will continue to pursue activities that support the recovery of the Tohoku region.

The MCHC Group has also provided support to areas affected by the 2016 Kumamoto Earthquake and July 2017 northern Kyushu floods in the form of monetary and material contributions and support for the volunteer efforts of its employees. Overseas, the Group donated U.S. \$100,000 to support the recovery of areas on the east coast of the United States that suffered tremendous damage from Hurricane Harvey and Hurricane Irma in August 2017.



June 2017 Tokyo Greenship Action (Kiyose Matsuyama nature conservation area)



May 2017 Sakawa River coordinated cleanup



June 2016 Toyohashi Plant tour for students of Aichi Prefectural Toyokawa Technical High School



August 2017 Volunteers in areas affected by the northern Kyushu floods

### **Basic Policy**

Based on Mitsubishi Chemical Holdings Corporation's medium-term management plan, we are working to effectively use internal and external technological resources to expand and deepen our existing technologies, accelerate the development of current and new technologies, and thus contribute to new business creation. To achieve this, we are implementing measures in the following three areas.

#### 1. Actively Promoting Collaboration with External Research Institutions

Utilizing external research resources, we are increasing the odds of success in R&D, shortening R&D lead times needed to bring technologies to commercialization and reducing development costs over the long term. We are also striving toward disruptive innovation, which is difficult to achieve through internal R&D alone. Furthermore, by using external R&D resources with untapped potential, we are working to identify research themes that will lead to new businesses.

#### 2. Securing New Core Technologies Through External Collaboration

By integrating technologies and expertise secured through external collaboration with our in-house technologies, we are creating differentiated products and services. At the same time, we are working to strengthen the core technologies that will be necessary to new businesses in the future.

#### 3. Globalizing Research and Development

By collaborating with institutions in and outside Japan that boast cutting-edge technologies, we are further enhancing our in-house technologies and thus continuously developing world-leading products. To this end, we are promoting and expanding joint research, principally in Japan, the United States, Asia and Europe, working to build a global R&D network. At the same time, we are developing globally oriented human resources with the ability to take a broad, global perspective and produce results in a diverse society.

### Collaboration in Fiscal 2016

#### 1. United States

- Comprehensive partnership with the University of California, Santa Barbara (UCSB), to develop advanced functional materials
- · Partnership with Georgia Institute of Technology to develop photoelectric materials

#### 2. China

 Comprehensive partnership with Dalian University of Technology for organic synthesis and process development

#### 3. Japan

- Summer internship program for students of the University of Tokyo Graduate School of Engineering Department of Chemical System Engineering ("Todai Practice School")
- Partnership with the National Research and Development Institute for Materials Science (NIMS) for functional inorganic materials development
- Evaluation of organic devices as a member of Chemical materials Evaluation and REsearch BAse (CEREBA)

All of the above are collaborative efforts undertaken by the pre-merger Mitsubishi Chemical.

## **Employee Composition**

#### Employees Working at Mitsubishi Chemical

By g	ender	By employment type	By employment type		group
		Open ended	11,980	29 or younger	1,778
Male	11,178			30 to 39	3,259
		Fixed term (rehired retirees, contractors)	975	40 to 49	4,242
Female	1,777			50 to 59	2,855
		Other (part-time, etc.)	-	60 to 69	812

Total: 12,955

As of April 2017

#### Employees Employed by Mitsubishi Chemical

By g	gender	By employer		Average age
Male	14,307	Mitsubishi Chemical	12,724	
		Group companies		43.4
			3,911	
Female				
	Total: 16,635			

As of April 2017

# Together with Stakeholders Company Data (Social)

#### Managers Employed by Mitsubishi Chemical

Male	4,712 (94%)
Female	286 (6%)
Total	4,998

As of April 2017

#### New Hires to Mitsubishi Chemical

Male	181 (83%)
Female	38 (17%)
Total	219

Individuals hired during the regular annual hiring period, whose employment began April 1, 2017 (includes individuals other than new college graduates).

#### Third-Year Employee Turnover Rate

Male	5.4%
Female	9.7%
Average	6.3%

Calculated as the percentage of employees who joined the company on April 1, 2014 who were no longer employed by the company as of March 31, 2017.

#### Employment of People with Disabilities

Full-time positions held by employees with disabilities	340.5
Total number of employees used to calculate the percentage of employees with disabilities	16,625
Percentage of employees with disabilities	2.05%

As of June 1, 2017

#### Total Working Hours

Average total annual working hours	1,974 hours
Average monthly overtime pay	¥41,087

Year ended March 31, 2017

#### Paid Time Off Usage

Paid time off usage rate		73.4%
Employees who used mater	nity leave	76
Employees who used child	Male	22
care leave	Female	154

Year ended March 31, 2017

#### **Employee Union Membership Rate**

65.7% (As of March 31, 2017)

\* Data for the year ended or as of March 31, 2017 are totals or averages of the figures for the previous Mitsubishi Chemical, Mitsubishi Plastics and Mitsubishi Rayon prior to the merger that formed the new Mitsubishi Chemical.

## About Mitsubishi Chemical Company and Group Overview

The new Mitsubishi Chemical Corporation was formed on April 1, 2017 through the merger of the previous Mitsubishi Chemical Corporation, Mitsubishi Plastics, Inc. and Mitsubishi Rayon Co., Ltd. As of September 2017, Mitsubishi Chemical Corporation and its 368 Group companies operate in business areas that include performance products and industrial materials.

#### Mitsubishi Chemical Corporation Overview

Established	August 31, 1933 (current company established April 1, 2017)
Head office	Palace Bldg., 1-1 Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8251, Japan
Representative Director, President & CEO	Hitoshi Ochi
Paid-in capital	¥53,229 million
Employees	12,955 (non-consolidated basis)
Listings	Unlisted
Website	https://www.m-chemical.co.jp/en/

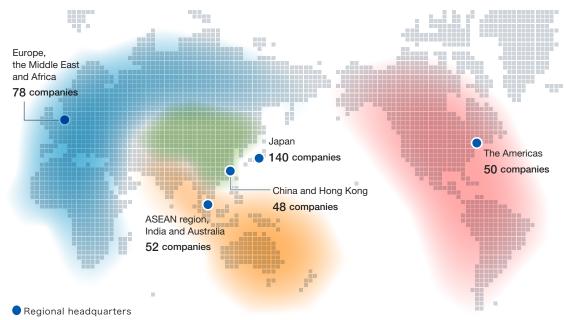
As of April 2017

#### Group Overview

Subsidiaries	311
Affiliates	57
Total	368
Employees	40,914 (Consolidated basis; total of the figures for the three pre-merger operating companies as of March 31, 2017)

As of September 2017

#### **Group Network**



#### Business Domains

By providing solutions to issues related to people, society and the Earth, Mitsubishi Chemical is accelerating the growth of its businesses. As challenges in such areas as the intensification of climate change, uneven distribution of water resources, growing and graying populations, and food and agriculture continue to emerge and evolve, the company's business domains related to each will work together to create new value and provide comprehensive solutions.

#### Social Issues That Mitsubishi Chemical Addresses

- Efficient use of resources and energy
- Climate change (reducing CO<sub>2</sub>)
- Securing clean water resources
- Food and agriculture problems
- · Health maintenance and disease treatment
- · Smart society

#### **Business Domains**

- Petrochemicals
- Carbon
- MMA
- Advanced Polymers
- High Performance Chemicals
- Electronics & Displays
- High Performance Films
- Advanced Moldings & Composites
- Environment & Living Solutions
- New Energy



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