

Mitsui Chemicals Group "ESG Report 2018"

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[Sustainability in the Mitsui Chemicals Group >](#)



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- Sustainability Management
 - The 2025 Long-term Business Plan Environmental and Social Targets
- Key Issues (Materiality)
 - Blue Value™ / Rose Value™

- Corporate Governance
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- Respect for Human Rights
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Message from the President

Message from the President

Incorporating an ESG Perspective in the Group's Management Approach Toward Achieving Sustainable Growth

Tsutomu Tannowa
President & CEO, Mitsui Chemicals, Inc.



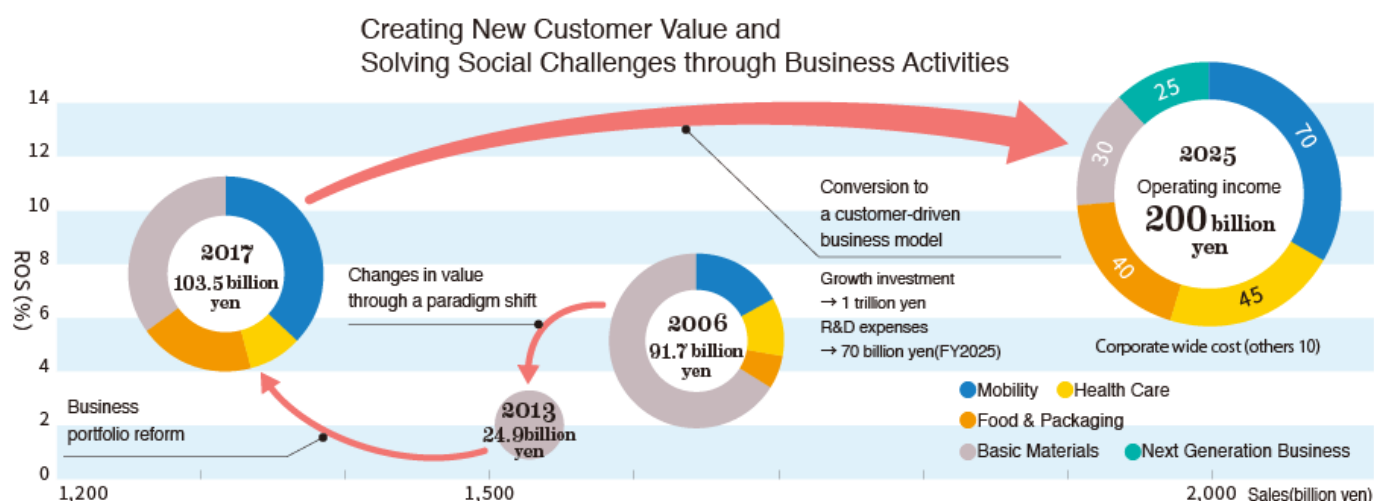
Progress under the Long-term Business Plan

Achieved Record-high Earnings as Signs of a Change in Employees' Awareness Begin to Emerge

In recent years, conditions surrounding the corporate sector have evolved at an increasingly fast pace. In moving forward, we recognize the important need to set specific targets and a long-term vision while flexibly adapting to change in order to secure sustainable growth and respond appropriately to prevailing conditions.

To date, the Mitsui Chemicals Group has continued to promote triple bottom line management, which focuses on balancing economic, environmental, and social concerns. In an effort to evolve even further, we put in place a long-term business plan, which takes the Group through to 2025, and are engaging in a host of new activities.

Fiscal 2017 was an important year in carrying out the Group's Long-term Business Plan. In similar fashion to the previous fiscal year, we again achieved record-high profit, and on this basis alone I am confident that we have taken a successful first step. Under the Long-term Business Plan, we have set the challenging operating income target of ¥200 billion. From the environmental and social perspectives, we have identified 13 goals that cover a wide range of endeavors. These targets include reducing GHG emissions, ensuring safety, and increasing the percentage of female managers. As we work toward achieving these goals, signs of a change in employees' mindsets are beginning to emerge. I can sense a genuine evolution within the Group as a whole.



Achieved Operating Income in Excess of Plans by Expanding Sales of Major Products

Anticipating an upswing in global demand, Mitsui Chemicals has positioned efforts to establish a stable supply system as an important management issue in the Mobility domain. We have decided to set up a European base for polypropylene (PP) compounds, a mainstay business, and continue to consider on an ongoing basis the options of expanding facilities or establishing new bases for other existing products where increased production is required.

In addition, we acquired ARRK Corporation, a company that boasts unique technologies across such wide-ranging fields as the design, experimental production, and analysis of automobiles. We are also strengthening our ability to provide solutions that address social needs, which include the growing trend toward electric vehicles together with lighter-weight components and parts as well as the creation of comfortable spaces.

In the Health Care domain, our performance has been mixed. On the one hand, we have witnessed steady growth in vision care materials, where we hold a top share in the global market, and such products as the highly functional nonwoven fabrics used in soft premium disposable diapers that offer outstanding comfort. On the other hand, we recognize the urgent challenge and need to address stagnant earnings and persistent harsh conditions in the dental materials field.

Currently, our ICROS™ TAPE, a protective tape used for semiconductor manufacturing and a mainstay earnings pillar, is exhibiting robust results in the Food & Packaging domain. Taking into consideration the strong performance of this product, we are promoting the construction of a new production base in Taiwan. In the agrochemicals field, where we work to support various endeavors including efforts to increase food production, we are partnering with leading agrochemical producers in Europe and the U.S. to promote the development of new insecticides and fungicides. We are looking to bring to the market a string of products around 2020 as the next step toward further growth.

Next Generation and Basic Materials Businesses

We Will Create Next Generation Businesses That Look to the Future While Further Reinforcing the Basic Materials Business

Looking 10 and 20 years into the future, we have positioned the Next Generation Business at the heart of efforts to create new solutions geared toward further growth. Signs that the PV plant diagnosis business, which draws on the Group's 20-odd year track record of providing encapsulant materials used in solar panels, is contributing to results are beginning to emerge. At the same time, we are working to commercialize our rapid diagnostic system for bacterial identification to help in the treatment of sepsis, an infectious disease with a high mortality rate as well as our iCAST™ advanced cultivation system, which controls the use of water and fertilizer, to help address shortages in the supply of food with a sense of urgency. Both systems are attracting increased demand from society. In addition to open innovation as a matter of course, we are also drawing actively on such alternatives as corporate venture capital (CVC) in efforts to set up new next generation businesses.

To date, we have implemented bold structural reforms in the Basic Materials Business. In addition to providing the materials that form the cornerstone of society and industry, the Basic Materials Business is for all intents and purposes the platform from which Mitsui Chemicals pursues opportunities in each growth business domain. Moving

forward, we will work to increase the efficiency of production while at the same time undertaking the necessary investment required to enhance quality in order to strengthen our long-term competitiveness as a chemical company.

Investment Geared Toward Growth

We Will Actively Undertake Investments Geared Toward New Growth

We will take bold steps and actively inject management resources in a bid to secure new growth under the Long-term Business Plan. Plans are in place to undertake growth investments of around ¥1 trillion. This is roughly three-times the amount undertaken over the past decade. Annual investments aimed at strengthening our operating platform and maintaining facilities are budgeted at between ¥30 and ¥35 billion. This recognizes the critical need to enhance the quality of safety. We will also work vigorously to introduce new gas turbines in a bid to realize an in-house power generation system and improve our operations through the use of cutting-edge AI and IoT technologies.

While we acknowledge the importance of strategic M&As as a means to expand each of these businesses, the simple pursuit of expansion does not necessarily ensure sustainable growth. Our goals are to incorporate unique technologies and know-how while at the same time generating synergies with existing businesses. This we believe is the surest route to new growth and the crux of our target M&A strategy.

Developing human resources and investing in R&D are also key to securing sustainable growth on a long-term basis. As far as R&D investment is concerned, we plan to double expenditures in fiscal 2025 compared with the previous Mid-term Business Plan, to ¥70 billion.

Corporate Sustainability Management

We Will Identify Opportunities and Risks from an ESG Perspective while Promoting Our Business Strategies

Sustainability has become a universal keyword since the United Nations identified specific Sustainable Development Goals (SDGs)*. Recently, ESG concerns are attracting increased interest as important criteria for investment.

Based on these societal trends, the manner and degree to which companies are promoting innovation while adopting business models that are capable of properly identifying opportunities and risks as the means to realize sustainable growth in concern with society is being brought into question.

Measures to address climate change and such offshore problems as micro plastics that drift in the ocean pose significant challenges to the chemical industry. In addition to confronting these challenges in a serious manner, we must ask ourselves what solutions chemicals can provide to increase people's quality of life going forward. Despite the daunting task of coming up with the innovations necessary to realize a sustainable society, we see the road ahead as a major opportunity.

Here, it is vital that the corporate sector take the initiative to properly ascertain all relevant opportunities and risks while identifying the role that it should play through business activities to achieve SDGs and resolve various social

challenges from an ESG perspective. As a group that continues to expand its operations globally, this is a critical theme and driving force for ensuring our sustainable growth.

* Sustainability Development Goals (SDGs) :

The 17 Sustainable Development Goals (SDGs) identified in the Transforming Our World: the 2030 Sustainable Development Agenda adopted at the United Nations Sustainable Development Summit in 2015.

Strengthening ESG Initiatives

Establishing the Corporate Sustainability Division Embodies the Group's Determination to Position ESG Concerns as a Central Feature of Management

Mitsui Chemicals set up the Corporate Sustainability Division in April 2018. The goals are to incorporate ESG concerns into the Group's management and business strategies while at the same time improving the disclosure of ESG information to stakeholders. In other words, our decision to establish this division reflects our determination to engage in corporate sustainability management with ESG as a central feature.

The Mitsui Chemicals Group has continued to engage in activities in a bid to achieve 13 environmental and social targets set under the Long-term Business Plan. Of these 13 targets, the Group is looking to lift the sales ratios of certified products and services for Blue Value™, representing environmental contribution, and Rose Value™, representing QOL improvement contribution, to 30% respectively in fiscal 2025 and for that purpose we are endeavoring to visualize social value improvements attributable to its business activities. Recognizing the task of resolving long-term social challenges as a business opportunity, we are working diligently to pinpoint what solutions we can provide, deepening our search for business opportunities, and ramping up efforts to expand certified products.

In terms of the governance function, the need to clarify opportunities and risks from an ESG perspective is becoming increasingly important amid the growing trend toward business globalization. In the future, we will engage in lively debate on matters pertaining to corporate sustainability at Board of Directors' and Group-wide Strategy Committee meetings and reflect all findings in the Group's management.

In order for employees to share the importance of corporate sustainability and remain acutely aware of social challenges on a daily basis, I feel it is imperative that we change the Group's mindset from within. As the requirements of society continue to evolve at a rapid pace, management must remain vigilant in order to properly grasp opportunities as they arise and more importantly to share this understanding with employees.

Corporate Sustainability Activities

Incorporate ESG elements in the Group's management and strategies

- Reflect ESG elements in strategic discussions and management at Board of Directors' and Group-wide Strategy Committee meetings
- Generate opportunities and advance innovation that involve business as

well as R&D operations

Improve the disclosure of ESG information

- Increase appeal to customers as well as investment and corporate sustainability rating agencies
- Deepen ESG dialogue

Special Feature: Place ESG at the Core of Management

Sustainability Management

Safety Initiatives

We Will Work to Ensure Safety and Increase Quality while Fulfilling Our Corporate Social Responsibility

One target under the Long-term Business Plan is to pursue thorough safety, high quality, and fairness across the entire supply chain. I am particularly interested in the need to pursue safety.

From a safety perspective, we must never forget the explosion and fire at our Iwakuni-Ohtake Works in 2012. At every opportunity, I have tried to convey to employees the need to put safety first in everything that we do. Despite these efforts, fires broke out at our Mobara Branch Factory in fiscal 2017 and at our Osaka Works in June 2018.

There is no easy path to ensuring safety. Treating these circumstances with the utmost gravity, I believe it is prudent that we review past initiatives and engage in steady and work earnestly to ensure safety.

Looking ahead, we will renew our commitment to ensuring safety and increasing quality across every process along the supply chain. At the same time, we will pursue effective global governance and fulfill our corporate social responsibility.

To Our Stakeholders

We Will Take the Initiative and Spearhead Efforts to Secure the Sustainable Development of Society and the Group



Mirroring the advance of cutting-edge technologies, growing interest and developments in AI and IoT, and the increased use of electric vehicles, society continues to undergo a major change. I am convinced that this period of transformation represents a significant opportunity for the chemical sector. In addition to its role as a cornerstone of industry, the chemistry field has consistently taken the lead in bringing innovation to society. This role remains unchanged irrespective of the era. Established in 1912, Mitsui Chemicals embarked on a number of endeavors. One such endeavor was the manufacture of raw materials for fertilizers, which the Company hoped would help address the shortage of food, a major social challenge of the day. Given the circumstances as they currently stand, I believe the time has once again arrived for the Mitsui Chemicals Group to play a principal role in triggering innovation in order to resolve a host of social challenges.

From a global perspective, the Mitsui Chemicals Group must work to resolve a multitude of social challenges. However, depending on the magnitude of the challenge, one corporate group is limited in its ability to come up with a solution. Rather than focusing on a principle of self-sufficiency, we recognize the important need to utilize open innovation and partner with other industries. At the same time, it is equally important that we properly recognize and build on our strengths.

It goes without saying that human resources are key to driving innovation. With this in mind, the Mitsui Chemicals Group will be required to adopt a spirit of “independence, self-support, and self-motivation” in the age to come. Against this backdrop, it is imperative that each employee fully recognizes his or her relationship with society. Individual employees must adopt a first-person approach and declare for themselves what they can and would like to do. Taking the initiatives in both thought and action, it is vital that the Group’s human resources trigger innovation. Drawing on the collective strengths of employees Group-wide, we must promote further advances in our triple bottom line management that balances economic, environmental, and social concerns while pursuing the sustainable growth of both society and the Group.

Special Feature: Place ESG at the Core of Management



Place **ESG** at the Core of Management



Around the world, initiatives to find solutions to social challenges including sustainable development goals (SDGs) are picking up pace. In line with this, expectations are rising for corporations. For the creation of a sustainable society, it is critical to continuously build social value while companies themselves grow by offering such solutions. For companies, this is why it is of ever-greater importance to gain a precise grasp of opportunities and risks that take into consideration ESG concerns, and to reflect such insights into management initiatives.

In April 2018, the Mitsui Chemicals Group newly established the Corporate Sustainability Division as an expression of our commitment to advance triple bottom line (economic, environmental, and social) management, and position ESG concerns at the heart of our sustainability management efforts. The objective of this division is to integrate the elements of ESG into management and business strategies, while strengthening the disclosure of ESG-related information to all of our stakeholders.

Sustainability in the Mitsui Chemicals Group

With sights fixed on the global ESG issues set forth in SDGs and other initiatives, the Mitsui Chemicals Group aims to achieve sustainable development for itself and society through the following efforts.

- ▶ Work to discover business opportunities, and to find solutions to problems through our business activities
- ▶ Recognize future risks while fulfilling its social responsibility as a corporate group

Issues to Address

Incorporate ESG elements in the Group's management and strategies

- Reflect ESG elements in strategic discussions and management at Board of Directors' and Group-wide Strategy Committee meetings

- Generate opportunities and advance innovation that involve business as well as R&D operations

Improve the disclosure of ESG information

- Increase appeal to customers as well as investment and corporate sustainability rating agencies
- Deepen ESG dialogue

Incorporate ESG elements in the Group's management and strategies

Undertaking sustainable management requires the promotion of innovation with an understanding that SDGs and other long-term social challenges are to be approached as business opportunities. Together with this, it is important to mitigate future risks and to heighten management resilience.

Positioning ESG as a core theme of our sustainability management issues, we will deliberate the direction to take at Board of Directors' meetings, Corporate Sustainability Committee and other venues, and move forward on applying this to strategies at each division. Within this, we will deepen deliberations with business and R&D departments so as to actively expand Blue Value™ and Rose Value™ products that contribute to the environment and society, as is defined as key performance indicators (KPIs) in our 2025 Long-term Business Plan.

In addition, in order to link ESG initiatives to the specific activities of each and every employee, it is essential that all of us become aware of just how important ESG is and transform our consciousness so as to think from the perspective of social challenges. To this end we are promoting discussions about ESG at each division, as well as activities such as social challenge workshops, laterally throughout our organization.



Improve the disclosure of ESG information

Amidst the rising importance of non-financial including ESG information, we strive to disclose useful information for our stakeholders, namely shareholders and investors, customers and others. We disclose information from both the risk and opportunity perspectives. This includes, for example, consideration of the impact our business activities have on the environment and society, initiatives aimed at solving social challenges, and the development of human resources who form the well-spring of sustainable value creation.

In addition, as an opportunity for dialogue, we hold IR meetings with regard to ESG for institutional investors and analysts. At the same time as briefing them on our initiatives, we seriously listen to their opinions, and work to improve how we reflect them to management and our disclosure of information.

Dialogue: Yukiko Kuroda, Outside Director ×Corporate Sustainability Division



Yukiko Kuroda
Outside Director
Director and Founder of People Focus Consulting Co., Ltd.

The Mitsui Chemicals Group set up the Corporate Sustainability Division and will strengthen sustainability management from an ESG perspective. With this in mind, we asked outside director, Yukiko Kuroda, for her thoughts on how the Group should go about targeting sustainable growth.

Corporate Sustainability Division

What are your thoughts on the Group's initiatives?

Yukiko Kuroda

The concept of sustainability that also encompass ESG concerns has already been thoroughly incorporated into Mitsui Chemicals' Corporate Mission and triple bottom line management approach as well as its 2025 Long-term Business Plan. I very much hope that the Corporate Sustainability Division will function in a way that substantively advances sustainability management while increasing the effectiveness of the Group's efforts to address ESG concerns.

While it may take some time to increase awareness and incorporate ESG concerns into the Group's business activities, I would like to see the Division proceed as quickly as possible. As the concept is understood by each organization within the Group, incorporated into targets and evaluations, and promoted through specific measures, I am confident that sustainability management will gather momentum.

**Corporate
Sustainability
Division**

We are looking to promote various measures in a bid to increase awareness. This includes lectures by experts and workshops. Our goal is for the Mitsui Chemical Group to adopt a concept that is based on social challenges.

Yukiko Kuroda

Incorporating an approach that draws on ideas that spring from social challenges for creating new products in conjunction with the R&D Division is in my opinion extremely effective. In order to promote this approach, one method is to logically break down social challenges from an SDG perspective, and to determine what the Group can do to assist in resolving each challenge. I believe that one further method is to move closer to frontline social challenges as well as the needs of each individual within society and to link the affinities that emerge to new ideas. Numerous products that contribute to society already exist. From the outside world, however, it is difficult to ascertain exactly what the chemical industry is doing to address social challenges. With this in mind, it is important for the Group to better visualize its contributions to society, and to present its initiatives in an easy to understand manner both internally and externally.

**Corporate
Sustainability
Division**

Blue Value™ and Rose Value™ have been created based on this concept. We plan to ramp up efforts aimed at distributing information and increasing awareness.

Yukiko Kuroda

Rather than settle for a sales ratio target of 30%, I would like the Group to raise the bar even higher for Blue Value™ and Rose Value™ products.

Despite the difficulties involved, I think it is also important to somehow numerically visualize the impact on society in a manner other than sales. For example, it would be good if through the use of Blue Value™ products, reductions achieved and improvements made were identified.

**Corporate
Sustainability
Division**

In closing, what are your expectations of the Group?

Yukiko Kuroda

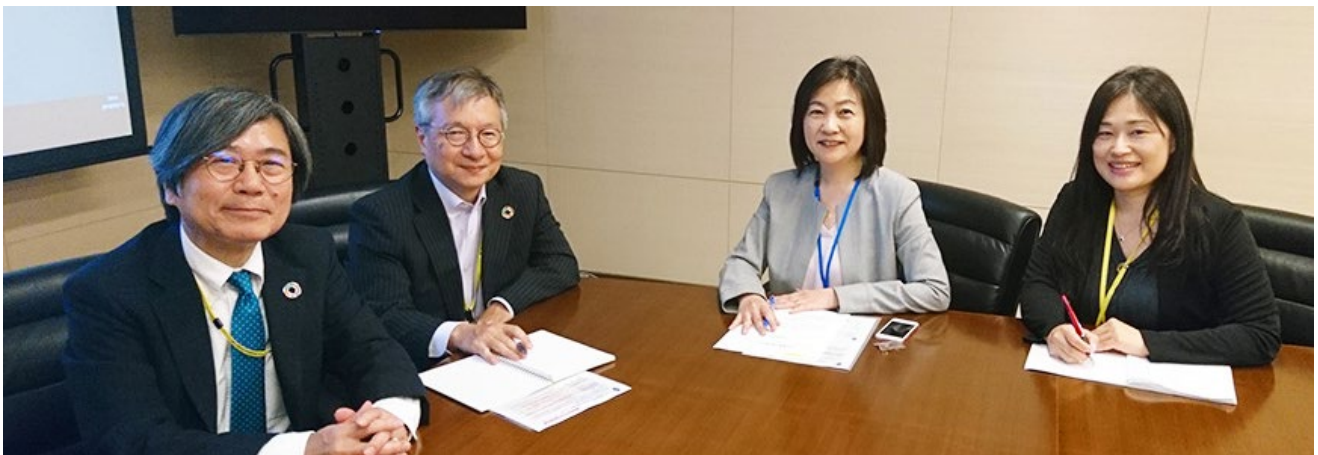
Corporate sustainability that incorporates ESG concerns differs from the conventional notion of corporate social responsibility. Looking beyond simply contributing to society, it entails the injection of management resources that will also lead to corporate sustainable growth in concert with society. For this reason, it does not mean that anything is acceptable so long as it benefits society.

In order for the Mitsui Chemicals Group to continue as a going concern to 2025 and beyond, it is important to question what investments need to be made, what goals should be pursued, and what direction the Group should take. I would hope that each and every employee would see this as an opportunity and think seriously about the path they need to follow.

The very fact that these discussions are taking place is in my opinion a step in the right direction. Moving forward, I would like to promote discussions regarding sustainability in the Mitsui Chemicals Group by raising ESG themes at outside director study groups.

**Corporate
Sustainability
Division**

We would very much like to receive comments and opinions from a wide variety of angles and to increase the effectiveness of Group's sustainability management, which include ESG initiatives. Our goal is to secure sustainable growth in both social and corporate value.



Yukiko Kuroda, Outside director and members of the Corporate Sustainability Division
(From left: Yoshiyuki Itoh; Ken Migita, General Manager; Yukiko Kuroda, outside director; and Reiko Abe)

Sustainability in the Mitsui Chemicals Group



The Mitsui Chemicals Group believes that creating new social value from an ESG perspective while fulfilling its social responsibility as a corporate group lies at the heart of the Group's sustainability. Based on this understanding, we are deepening our efforts directed toward achieving the environmental and social targets identified under our 2025 Long-term Business Plan as well as key issues (materiality). Through these means, we are working to secure the sustainable growth and development of society and the Group.

Sustainability Management

- Management System
- Support Initiatives

The 2025 Long-term Business Plan Environmental and Social Targets

Key Issues (Materiality)

- Process for Identifying Key Issues
- Key Issues and Initiatives

Blue Value™ / Rose Value™

- Visualization of Contributions to the Environment and Society
- Environmental Contribution Value, Blue Value™
- QOL Improvement Contribution Value, Rose Value™
- Blue Value™ / Rose Value™ Products

Sustainability Management

Management System

Support Initiatives

The Mitsui Chemicals Group will work to secure the sustainable growth and development of society and the Group by positioning ESG concerns at the heart of its sustainability management.

Management System

Policy

The implementation of initiatives aimed at resolving social challenges including SDGs is accelerating, and demands on the corporate sector are increasing. Against this backdrop, the chemical industry is both a cornerstone platform of society and responsible for driving innovation. As a part of this industry, we are aware of the significant responsibility that we have to help resolve global-scale social challenges.

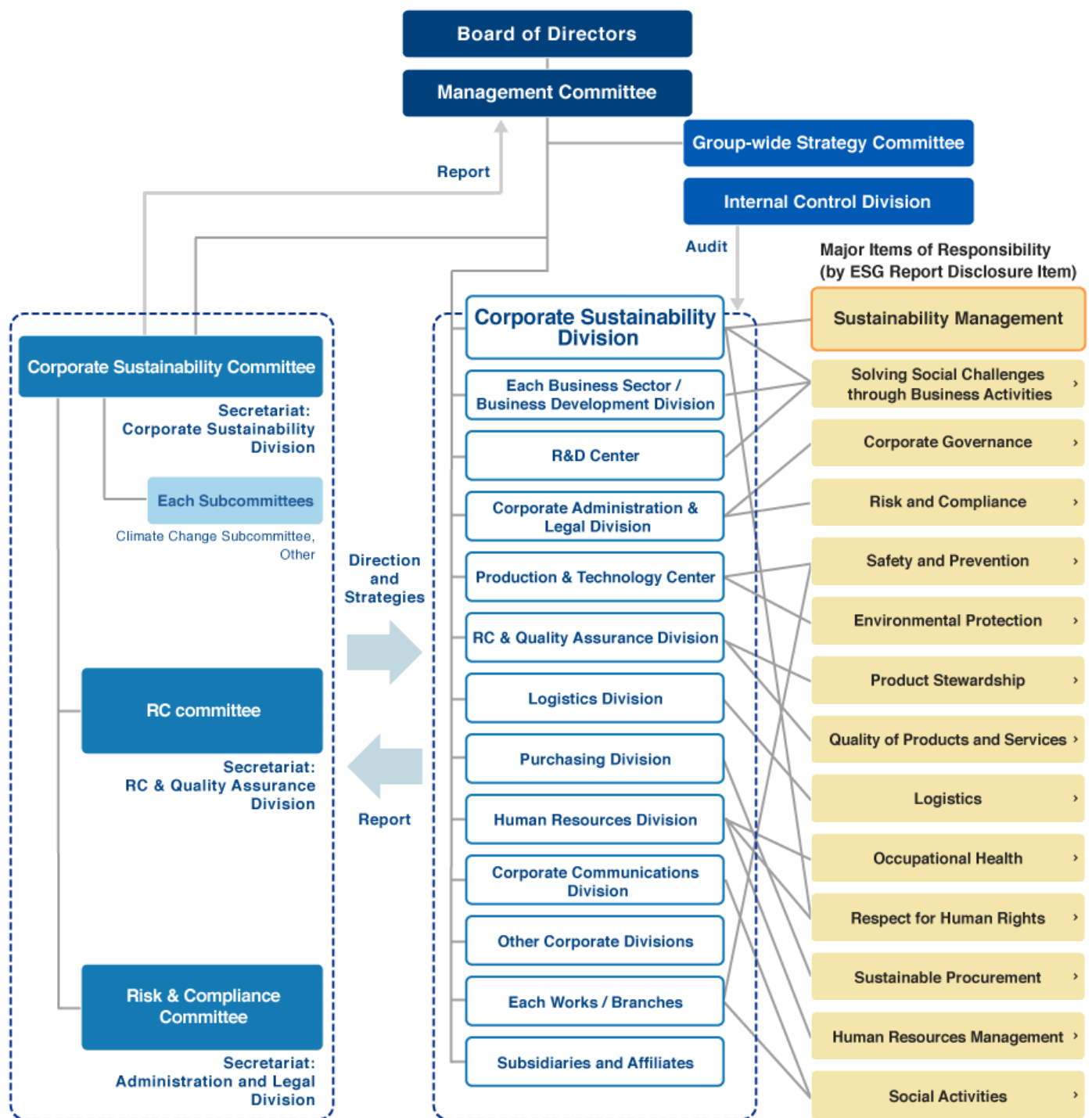
Working to promote sustainability management from an ESG perspective, the Mitsui Chemicals Group is exploring business opportunities and creating new social value, and recognizing and addressing future risks while fulfilling its social responsibility as a corporate group. Based on this understanding, we will work to secure the sustainable growth and development of society and the Group.

System and Responsible Officers

The person in charge is the responsible director in charge of Corporate Sustainability Committee.

With ESG concerns as a central feature of the Group's sustainability management, steps are being taken to discuss the Group's overall direction at various organizations including the Board of Directors and Corporate Sustainability Committee. In addition, the management of progress of environmental and social targets under the 2025 Long-term Business Plan as well as key issues (materiality) are also undertaken within this system.

Sustainability Management System



* Click to link to each page.

Corporate Sustainability Committee

The CSR Committee was reorganized as the Corporate Sustainability Committee in June 2018. This reorganization reflects the need to address the demands placed on the Company by society and to further bolster sustainability management initiatives from an ESG perspective. The roles of the committee are presented as follows.

- Deliberate on the Group's policies, strategies, plans, and measures as they relate to the promotion of ESG
- Clarify the important issues and direction of efforts to strengthen and improve initiatives of each committee (Responsible Care Committee, Risk & Compliance Committee)
- Conduct performance evaluations of the Group's ESG initiatives and oversee internal distribution of results
- Consider other important matters relating to ESG

In principle, this committee meets twice a year.

Should a critical matter arise, including the need to consider an important item relating to ESG or to put forward an initiative, the Chairperson of the Corporate Sustainability Committee establishes a subcommittee to assume responsibility for the item.

Details of the committee's deliberations and activity results are reported to the Management Committee. In addition, the Management Committee's authorization is obtained for matters of particular importance.

Composition of the Corporate Sustainability Committee

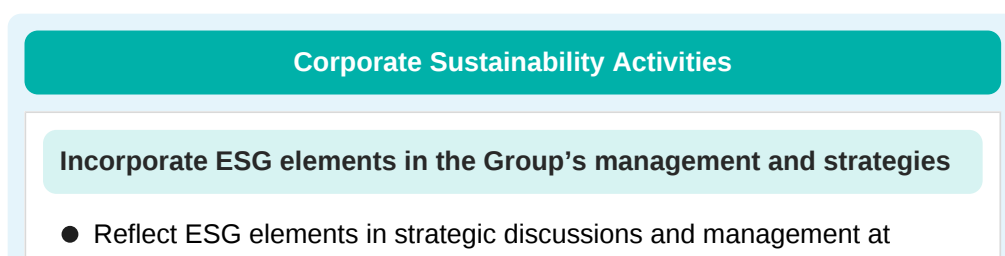
Chair	President
Vice Chair	Responsible director in charge of the Corporate Sustainability Committee
Members	Executive officers with specific titles, Business Sector presidents, Center Executive of the R&D Center, Center Executive of the Production & Technology Center, General Manager of the Corporate Planning Division, General Manager of the Human Resources Division, General Manager of the RC & Quality Assurance Division, General Manager of the Corporate Administration & Legal Division, General Manager of the Corporate Communications Division, General Manager of the Corporate Sustainability Division, other members appointed by the Chairperson
Secretariat	Corporate Sustainability Division

* Corporate auditors also attend committee meetings and are able to offer their opinions whenever necessary.

* The chairperson is able to call on the attendance of executive officers and general managers who have an interest in the matters being deliberated and ask for their explanation and opinion.

Review and Challenges

The Mitsui Chemicals Group established the Corporate Sustainability Division in April 2018. This reflects the Group's determination to deepen its management, which to date has revolved largely around the economic, environmental, and social fields, and to position ESG concerns at the heart of its sustainability management. Looking ahead, steps will be taken to incorporate ESG elements in the Group's management and business strategies, and to improve the disclosure of ESG information to all stakeholders.



Board of Directors' and Group-wide Strategy Committee meetings

- Generate opportunities and advance innovation that involve business as well as R&D operations

Improve the disclosure of ESG information

- Increase appeal to customers as well as investment and corporate sustainability rating agencies
- Deepen ESG dialogue

Support Initiatives

Signatory to the UN Global Compact

We signed up to the UN Global Compact in January 2008. In doing so, Mitsui Chemicals acknowledged its support and commitment to help tackle a wide range of global challenges and to promote sustainable growth as a responsible corporate citizen. In addition, Mitsui Chemicals participates in each of the subcommittees of the UN Global Compact Network Japan and is working to gather information. In fiscal 2017, the Company participated in each of the human rights education, reporting research, WEPS*, supply chain, anti-corruption, and SDGs subcommittees.

The Mitsui Chemicals Group will help resolve many of the challenges confronting the world today through its business activities while taking into consideration the 10 principles espoused under the United Nations Global Compact.



* WEPS: The Women's Empowerment Principles are a set of principles for business offering guidance on how to empower women in the workplace, marketplace, and community.

[United Nations Global Compact](#)

[The 10 principles of the UN Global Compact Cross-reference Table](#)

Commitment to ISO 26000

ISO 26000, the international standard for social responsibility, was released in November 2010. The standard provides guidance specifying an organization's social responsibilities and how they should go about fulfilling those responsibilities.

As a group that has made every effort to incorporate stakeholders' opinions, the Mitsui Chemicals Group recognizes that this ISO guidance helps the Group to reaffirm the importance of its initiatives and assign priorities.

[GRI Content Index / ISO 26000 Cross-reference Table](#)

Major Initiatives Supported by the Company; Major Organizations of which the Company is a Member

- [UN Global Compact](#)
- [KEIDANREN \(Japan Business Federation\)](#)

[Biodiversity.](#)

- [Japan Petrochemical Industry Association \(JPCA\)](#)
- [Japan Chemical Industry Association \(JCIA\)](#)

[Participating in Industry Association Responsible Care Activities](#)

[Participation in Industry Chemicals Management Initiatives](#)

[GRI Content Index / ISO 26000 Cross-reference Table](#)

- [International Council of Chemical Associations \(ICCA\)](#)

[Responsible Care Policy and Management](#)

[Participating in Industry Association Responsible Care Activities](#)

[Participation in Industry Chemicals Management Initiatives](#)

* For details of other support initiatives, please refer to 102-12 “External Initiatives” in the GRI Guidelines Cross-reference Table and each reporting page.

[GRI Content Index / ISO 26000 Cross-reference Table](#)

The 2025 Long-term Business Plan

Environmental and Social Targets

The 2025 Long-term Business Plan embodies our strong commitment toward realizing sustainable growth and development along with society. We will make every effort to contribute to solving social challenges through our business activities and engage in management that not only emphasizes “economic concerns,” but also strikes a proper balance with the environment and society.

2025 Long-term Business Plan

In formulating the 2025 Long-term Business Plan, we clarified our view of a targeted future society while revisiting our Corporate Mission and Corporate Target. This was after taking into consideration the requirements of society and other factors including mega trends and Sustainable Development Goals (SDGs). Based on this, the Mitsui Chemicals Group has identified three environmental and social targets under its 2025 Long-term Business Plan after giving due consideration to its contribution to and impact on society through its business activities. In addition, the Group took steps to reconsider key issues (materiality) when putting in place its 2025 Long-term Business Plan. Recognizing that efforts to promote key issues (materiality) will better allow us to resolve social challenges and achieve the targets set out under the 2025 Long-term Business Plan, we will continue to pursue key issues (materiality). Going forward, we will continue to confirm the expectations of society and issues associated with SDGs, and will work to make meaningful progress toward our 2025 Long-term Business Plan.

Corporate Mission

Key Issues (Materiality)



Environmental and Social Targets under the 2025 Long-term Business Plan

Maximize products and services to achieve a low carbon,

- ▼ **recycling-oriented, and cohesive society in harmony with the environment**

The Mitsui Chemicals Group will make every effort to stimulate innovation across the entire product lifecycle from raw materials through processing to use and disposal in a bid to protect the global environment while at the same time promoting economic growth.

▼ **Maximize products and services to achieve increased QOL and a smart society**

The Mitsui Chemicals Group will help realize a healthy and happy society as well as a smart society in which all people can lead rich and convenient lives.

- ▼ **Pursue thorough safety, high quality, and fairness across the entire supply chain**

The Mitsui Chemicals Group will work diligently to ensure the safety as well as high quality and fairness across the entire supply chain that is necessary to reform its business portfolio and expand globally.

Maximize Products and Services to Achieve a Low Carbon, Recycling-oriented, and Cohesive Society in Harmony with the Environment

Expand sales of environmentally oriented products and services

Expand products and services that help realize a low carbon, recycling-oriented, and cohesive society in harmony with the environment across the entire value chain

2025 Targets	FY 2017 Results	FY 2018 Targets, etc.
■Blue Value™ products sales ratio : 30% or more Environmental Contribution Value, Blue TM	■19%	• Introduce Blue Value™ perspective in the research and development Stage Gate System. • New Blue Value™ certifications:

Value		5 or more
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Reduce environmental load in production and logistics

Reduce GHG and environmentally harmful substance emissions and efficiently utilize resources throughout the Group as a whole

2025 Targets	FY 2017 Results	FY 2018 Targets, etc.
■GHG emissions reduction rate ^{*1}: 25.4% or more compared with FY 2005 (FY2030) Environmental Protection	■24.5%	GHG emissions reduction: 150 thousand tons or more compared with the previous fiscal year
Per-unit energy consumption reduction rate^{*2}: Continue by an average of over 1% per year over five years Environmental Protection	■0.9%	Per-unit energy consumption reduction rate: Average reduction of over 1% per year over five years, or an average annual reduction of over 1% based on the standard of FY2009.

Related SDGs	Related Key Issues
         	Measures to address climate change (reduction of GHG emissions) Air environment preservation Water resource protection and control Biodiversity Industrial waste control Efficient use of resources Low environmental-footprint products and services Development of renewable energy

^{*1} Mitsui Chemicals, Inc. and consolidated subsidiaries in Japan

^{*2} Mitsui Chemicals, Inc. only

Maximize Products and Services to Achieve Increased QOL and a Smart Society

Expand sales of products and services that contribute to a healthy and happy society

Expand products and services that can increase QOL by addressing such issues as the declining birth-rate and aging population,

extending healthy life expectancy, and the food problem

2025 Targets	FY 2017 Results	FY 2018 Targets, etc.
■Rose Value™ products sales ratio: 30% or more QOL Improvement Contribution Value, Rose Value™	■14%	- Introduce a Rose Value™ perspective in the research and development Stage Gate System. - New Rose Value™ certifications: 5 or more

Related SDGs	Related Key Issues
       	Shift to urbanization and smart cities Declining birth-rate and aging population Advancement of medical and Pharmaceutical fields Respond to the food problem

Pursue thorough Safety, High Quality, and Fairness across the Entire Supply Chain

Ensure safety

Maintain high levels of safety even in the face of increasingly diverse human resources, equipment and facilities as well as technologies in line with global growth and efforts to transform the business portfolio

2025 Targets	FY 2017 Results	FY 2018 Targets, etc.
■Incidence of major accidents : Continue at zero Safety and Prevention	■0	■0
■Work-related significant occupational injury frequency rate : Continue at less than 0.15 Safety and Prevention	■0.24	■0.15 or less

Provide high quality products and services

Ensure the stable supply of products that meet and satisfy customers' requirements at a high level

2025 Targets	FY 2017 Results	FY 2018 Targets, etc.
	Number of complaints	

■Incidence of customer non-conformance : Less than 10ppm Quality of Products and Services	(Company responsible): 15% reduction compared with the previous fiscal year, Mitsui Chemicals, Inc.)	Number of complaints (Company responsible): Over 10% reduction compared with the previous fiscal year, Mitsui Chemicals, Inc.)
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Implement product stewardship

Implement risk management across the supply chain through the risk assessment of products and provision of safety information to customers and other stakeholders

2025 Targets	FY 2017 Results	FY 2018 Targets, etc.
■Product risk assessment implementation rate : 99% or more (FY2020) Product Stewardship	■36% (Complete assessment of high-priority products)	Complete assessment of low-priority products
■Provision ratio of the latest safety information for all products: Continue at 100% Product Stewardship	■100%	■100%

Continue as a company that is fair and trusted by society

Thoroughly comply with all statutory and regulatory requirements and prevent misconduct in all global business activities

2025 Targets	FY 2017 Results	FY 2018 Targets, etc.
■Incidence of major legal and regulatory violations: Continue at zero Risk and Compliance	■1	■0

Exert an influence on the sustainability of business partners

2025 Targets	FY 2017 Results	FY 2018 Targets, etc.
■Supplier sustainability assessments and improvement support (sustainable procurement ratio of 70% or more). Sustainable Procurement	■39%(Mitsui Chemicals, Inc.)	- Exert an influence on suppliers based on sustainable procurement SAQ results - Review purchasing policy, raise awareness of CSR procurement policy both within and outside the Group

Enable Group employees to work in a vibrant manner and to fulfill their potential

2025 Targets	FY 2017 Results	FY 2018 Targets, etc.
■Ratio of women in line manager or higher positions^{*3}: 10% or more Human Resources Management	■2.7%	■3.2% (FY2018), 4.0% (FY2019)
■Increase employee engagement Human Resources Management	● Employee engagement survey method determined	Conduct the first survey, ascertain engagement level

Related SDGs	Related Key Issues
         	Safety and prevention Product stewardship Quality of products and services Employment and human resources Labor conditions Sustainable procurement Compliance

^{*3} Mitsui Chemicals, Inc. registered employees

* Please access respective links to view progress toward each target.

Key Issues (Materiality)

Process for Identifying Key Issues

Key Issues and Initiatives

The Mitsui Chemicals Group adopts a long-term management perspective based on the triple bottom line management approach outlined in its Long-term Business Plan. Against this backdrop, the Group is actively engaged in resolving social challenges in a bid to achieve environmental and social targets. Moreover, we continue to assess the various impacts that our business activities have on society and have identified key (materiality) issues that need to be addressed in order to ensure our targeted future society as a part of efforts to secure the sustainable growth and development of society and the Group.

Process for Identifying Key Issues

We at the Mitsui Chemicals Group believe that chemistry must play a prominent role in addressing a variety of environmental and social challenges. In accordance with its Corporate Mission of "keeping in harmony with the global environment," the Mitsui Chemicals Group has contributed to solving social challenges through its business activities that emphasize striking a balance between economic, environmental and social considerations. We have further clarified our in-house initiatives that are related to these environmental and social considerations by formulating the 2025 Long-term Business Plan and are also based on the Paris Agreement*, Sustainable Development Goals (SDGs), and recent social trends. Moreover, we will address issues found throughout the supply chain and are a concern for our various stakeholders.

On the basis of these initiatives and with the aim of reaching the environmental and social targets raised in the 2025 Long-term Business Plan, the Mitsui Chemicals Group has reviewed these key issues while taking into consideration the opinions of its stakeholders, the qualities of its businesses and the characteristics of the regions in which it operates, and international guidelines to measure the impact of the Group's business activities. We will review as necessary these key issues in light of social trends and changes in its business activities.

* The Paris Agreement

The Paris Agreement was adopted at the 21st Conference of the Parties (COP21) of the United Nations Framework Convention on Climate Change held in December 2015. The agreement has set a target of keeping global average temperatures from rising 2°C compared to temperatures before the industrial revolution by the end of the century while also urging parties to "pursue efforts" to limit it to 1.5 degrees. Advanced and emerging countries alike have also earnestly agreed to address the implementation of those SDGs under the agreement.

Step 1: Identification

First, screen issues based on international guidelines such as ISO 26000 and GRI as well as through engagement with various stakeholders. Identify environmental and social issues that the chemicals industry must help resolve from the standpoint of contributing to society through business activities.

Step 2: Prioritization

Assess the degree of importance of issues from the perspectives of stakeholders and the Mitsui Chemicals Group. Itemize issues with common characteristics in order to consider their importance and cross reference them from the standpoint of stakeholders as well as based on the original materials used by stakeholders to evaluate and analyze these issues. Based on this, consider measures that the Mitsui Chemicals Group needs to implement in order to address these issues. In assigning priorities to the issues from the standpoint of the Mitsui Chemicals Group, take into account the Group's Corporate Mission, Action Guidelines, and business strategies. Evaluating these items on a quantitative basis, select key issues and rank them in order of priority.

Step 3: Validation

Solicit opinions from outside experts and confirm the validity of issues through the Corporate Sustainability Committee after verifying the comprehensiveness of these identified issues.

Step 4: Review

Conduct a review of the key issues to establish detailed and quantitative targets based on business plans. Then, regularly review the process for identifying key issues at the Corporate Sustainability Committee level. As a part of this review, take steps to ensure that processes and the setting of targets are in line with social conditions. Then, confirm the status of implementation progress.

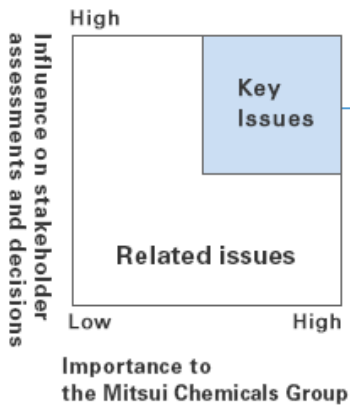
Key Issues (Materiality)

Process for Identifying Key Issues

Key Issues and Initiatives

Key Issues and Initiatives

The identified key issues were classified as " impact of the Mitsui Chemicals Group's business on society," "social challenges that the Mitsui Chemicals Group should help to resolve," and "basic subjects."



Impact of the Mitsui Chemicals Group's business on society	Social challenges that the Mitsui Chemicals Group should help to resolve
Measures to address climate change (reduction of GHG emissions)	Low environmental-footprint products and services
Air environment preservation	Development of renewable energy
Water resource protection and control	Shift to urbanization and smart cities
Biodiversity	Declining birthrate and aging population
Industrial waste control	Advancement of medical and pharmaceutical fields
Efficient use of resources	Respond to the food problem
Stable supply of industrial materials	
Optimization of production	
Safety and prevention	
Labor conditions	
Product stewardship	
Quality of products and services	
Employment and human resources	
Stakeholder engagement	
	Basic subjects
	Sustainable procurement
	Compliance

Social Challenges That the Mitsui Chemicals Group Should Help to Resolve

Low environmental-footprint products and services

The Mitsui Chemicals Group's Vision

Reducing environmental impact including addressing climate change, we are working to achieve a low-carbon, sound material-cycle society in harmony with nature over the long term that curbs environmental burdens to the greatest extent possible throughout the entire value chain.

The Mitsui Chemicals Group's initiatives

- **Reduce the use of raw materials**
- **Switch to non-fossil fuel resources and substances with lower environmental burdens**
- **Reduce environmental burdens mainly by lowering energy consumption in manufacturing and processing processes**
- **Develop lightweight materials for use mainly in automobiles**

[Blue Value™ / Rose Value™](#)

[The 2025 Long-term Business Plan Environmental and Social Targets](#)

Development of renewable energy

The Mitsui Chemicals Group's Vision

Meet the growing demand for energy accompanying the economic development of developing countries and emerging markets, reduce accompanying environment burdens, and realize a society that makes greater use of renewable energy.

The Mitsui Chemicals Group's initiatives

- **Develop components/materials for such items as power generation equipment and storage batteries to increase the use of renewable energy**
- **Improve photovoltaic power generation plant operational efficiency and assist with related investment decisions**

[Renewable Energy-related Business](#)

[Blue Value™ / Rose Value™](#)

Shift to urbanization and smart cities

The Mitsui Chemicals Group's Vision

Enhancement of smart society and urban functions that bring people and various things together by leveraging the advantages found in concentrating social infrastructure amid progressive urbanization.

The Mitsui Chemicals Group's initiatives

- **Develop and provide solutions through technologies and products that contribute to the spread of automated driving and robots**

[The 2025 Long-term Business Plan Environmental and Social Targets](#)

[Blue Value™ / Rose Value™](#)

Declining birthrate and aging population

The Mitsui Chemicals Group's Vision

Realization of a society that provides abundant, high-quality lifestyles to children and the elderly amid changing demographics.

The Mitsui Chemicals Group's initiatives

- **Develop and provide products that contribute to comfortable lifestyles in such areas as materials used to make disposable diapers and underwear**
- **Develop and provide products that contribute to comfortable lifestyles including innovative packaging that makes food easier to eat**
- **Develop and provide products that support extensive family care**

[Blue Value™ / Rose Value™](#)

[The 2025 Long-term Business Plan Environmental and Social Targets](#)

Advancement of medical and pharmaceutical fields

The Mitsui Chemicals Group's Vision

Realization of healthy and comfortable lifestyles in an aging society by improving the quality of medical treatments.

The Mitsui Chemicals Group's initiatives

- **Develop and provide products that help people use their entire bodies (head, neck, chest, hands, and feet) and five senses (sight, hearing, smell, taste, and touch)**
- **Develop and provide products that contribute to extend healthy life expectancy, including pharmaceutical packaging materials and infusion bags**
- **Develop and provide products that help prevent infectious diseases**

- **Develop diagnostic technologies that leverage an understanding of chemistry**

[Blue Value™ / Rose Value™](#)

[The 2025 Long-term Business Plan Environmental and Social Targets](#)

Respond to the food problem

The Mitsui Chemicals Group's Vision

Provide sufficient nutrition to everyone and improve dietary habits throughout society by increasing food productivity and reducing food loss and waste.

The Mitsui Chemicals Group's initiatives

- **Develop and provide products that help increase food production**
- **Develop and provide products that extend expiry dates and reduce food loss**
- **Develop and provide products that help reduce food waste while contributing stable food distribution**

[Blue Value™ / Rose Value™](#)

[The 2025 Long-term Business Plan Environmental and Social Targets](#)

Impact of the Mitsui Chemicals Group's Business on Society

Measures to address climate change (reduction of GHG emissions)

The Mitsui Chemicals Group's Vision

In light of the impact of climate change, significantly reduce and mitigate the effect of greenhouse gases emitted during the course of our business activities.

The Mitsui Chemicals Group's initiatives

- **Address climate change**

[Responsible Care Policy](#)

[Environmental Protection Management System](#)

[Climate Change](#)

[The 2025 Long-term Business Plan Environmental and Social Targets](#)

Air environment preservation

The Mitsui Chemicals Group's Vision

In addition to complying with the laws and regulations of individual countries, the Mitsui Chemicals Group controls gas emissions and reduces the impact of chemical substances leaking into the atmosphere.

The Mitsui Chemicals Group's initiatives

- **Manage substances subject to the PRTR Act**
- **Preserve the air environment**

[Responsible Care Policy](#)

[Environmental Protection Management System](#)

[Substances Subject to the PRTR Act](#)

[Air](#)

Water resource protection and control

The Mitsui Chemicals Group's Vision

Realization of environments that allow for the efficient use of water by complying with laws and regulations of individual countries, recycling, and appropriately managing and improving the handling of such water contaminants.

The Mitsui Chemicals Group's initiatives

- **Preserve water resources**

[Responsible Care Policy](#)

[Environmental Protection Management System](#)

[Water](#)

[Substances Subject to the PRTR Act](#)

Biodiversity

The Mitsui Chemicals Group's Vision

The Mitsui Chemicals Group takes into consideration biodiversity in its business operations across the entire value chain and is contributing to sustainable environmental conservation.

The Mitsui Chemicals Group's initiatives

- **Preserve Biodiversity**

Industrial waste control

The Mitsui Chemicals Group's Vision

We continue to minimize the amount of industrial waste produced at all of our domestic and overseas manufacturing sites and reduce final landfill waste volume.

The Mitsui Chemicals Group's initiatives

- **Reduce industrial waste**

Efficient use of resources

The Mitsui Chemicals Group's Vision

More efficiently use fuel and resources at domestic and overseas manufacturing sites (including product raw materials) and further undertake the creation of innovative process technologies.

The Mitsui Chemicals Group's initiatives

- **Develop environmentally friendly production technologies**

Stable supply of industrial materials

The Mitsui Chemicals Group's Vision

Stably provide industrial materials throughout the wide-ranging global supply chain in order to achieve sustainable economic growth and an abundant society.

The Mitsui Chemicals Group's initiatives

-

- **Restructure to realize stable procurement and supply**

[Safety and Prevention](#)

[Sustainable Procurement](#)

Optimization of production

The Mitsui Chemicals Group's Vision

The Mitsui Chemicals Group contributes to the sustainable development of regions by optimizing production systems and facilities that leverage its expertise throughout the global supply chain.

The Mitsui Chemicals Group's initiatives

- **Establish an optimal production system based on frontline capabilities**

[Safety and Prevention](#)

[Human Resources Development](#)

Safety and Prevention

The Mitsui Chemicals Group's Vision

Aim to be recognized by society as a company with an exemplary safety record.

The Mitsui Chemicals Group's initiatives

- **Safety and Prevention**

[Responsible Care Policy](#)

[Safety and Prevention](#)

[The 2025 Long-term Business Plan Environmental and Social Targets](#)

Labor conditions

The Mitsui Chemicals Group's Vision

Engage in health management by enhancing tangible measures such as improving work environments and facilities to enable employees to continue contributing to business sustainability as well as pursuing intangible measures that focus on healthcare.

The Mitsui Chemicals Group's initiatives

- **Create an employee-friendly working environment**

[Human Resources Management Management System](#)
[Employee-friendly Working Environment](#)
[Responsible Care Policy](#)
[Occupational Health](#)

Product stewardship

The Mitsui Chemicals Group's Vision

The Mitsui Chemicals Group strictly adheres to laws and regulations as well as its own voluntary standards throughout the entire supply chain. In addition, the Group will take steps to minimize the negative impact of chemicals on people's health and the environment by the year 2020 as part of its product stewardship activities.

The Mitsui Chemicals Group's initiatives

- **Engage in product stewardship**

[Responsible Care Policy](#)

[Product stewardship](#)

[The 2025 Long-term Business Plan Environmental and Social Targets](#)

Quality of products and services

The Mitsui Chemicals Group's Vision

The Mitsui Chemicals Group will improve quality control including upstream areas throughout the entire supply chain as well as increase customer satisfaction by winning their trust in the area of product quality.

The Mitsui Chemicals Group's initiatives

- **Engage in quality management**

[Responsible Care Policy](#)

[Quality of products and services](#)

[The 2025 Long-term Business Plan Environmental and Social Targets](#)

Employment and human resources

The Mitsui Chemicals Group's Vision

The Mitsui Chemicals Group is creating organizations that continue to drive innovation that takes into consideration equality, fairness, diversity, human rights, and living wages while giving our employees a sense of personal and professional motivation.

The Mitsui Chemicals Group's initiatives

- **Develop human resources**
- **Ensure diversity**

[Respect for Human Rights](#)

[Human Resources Management Management System](#)

[The 2025 Long-term Business Plan Environmental and Social Targets](#)

Stakeholder engagement

The Mitsui Chemicals Group's Vision

The Mitsui Chemicals Group meets the expectations of its stakeholders as a member of society while contributing to sustainable regional development by collaborating with our partners and the areas in which the Group operates to find solutions to social problems.

The Mitsui Chemicals Group's initiatives

- **Dialog with shareholders and investors**
- **Dialog with industry, government, and academia**
- **Working in harmony with local communities**
- **Social activities**

[Respect for Human Rights](#)

[Investor Relations](#)

[R&D and Technology](#)

[Social Activities](#)

Basic subjects

Sustainable Procurement

The Mitsui Chemicals Group's Vision

The Mitsui Chemicals Group will continue procurement activities throughout the supply chain that take into consideration its impact on society and the environment, fair and honest transactions, and respect for human rights.

The Mitsui Chemicals Group's initiatives

- **Address conflict minerals**
- **Supplier sustainability evaluation and improvement support**

[Respect for Human Rights](#)

[Sustainable Procurement](#)

[The 2025 Long-term Business Plan Environmental and Social Targets](#)

Compliance

The Mitsui Chemicals Group's Vision

The Mitsui Chemicals Group will foster a corporate culture that encourages all employees to observe laws, regulations, and rules in individual countries, take actions in a transparent and appropriate manner, and make decisions and conduct themselves in an ethical manner.

The Mitsui Chemicals Group's initiatives

- **Ensure legal compliance**

[Action Guidelines](#)

[Risk and Compliance](#)

[The 2025 Long-term Business Plan Environmental and Social Targets](#)

Visualization of Contributions to the
Environment and Society

Environmental Contribution Value, Blue
Value™

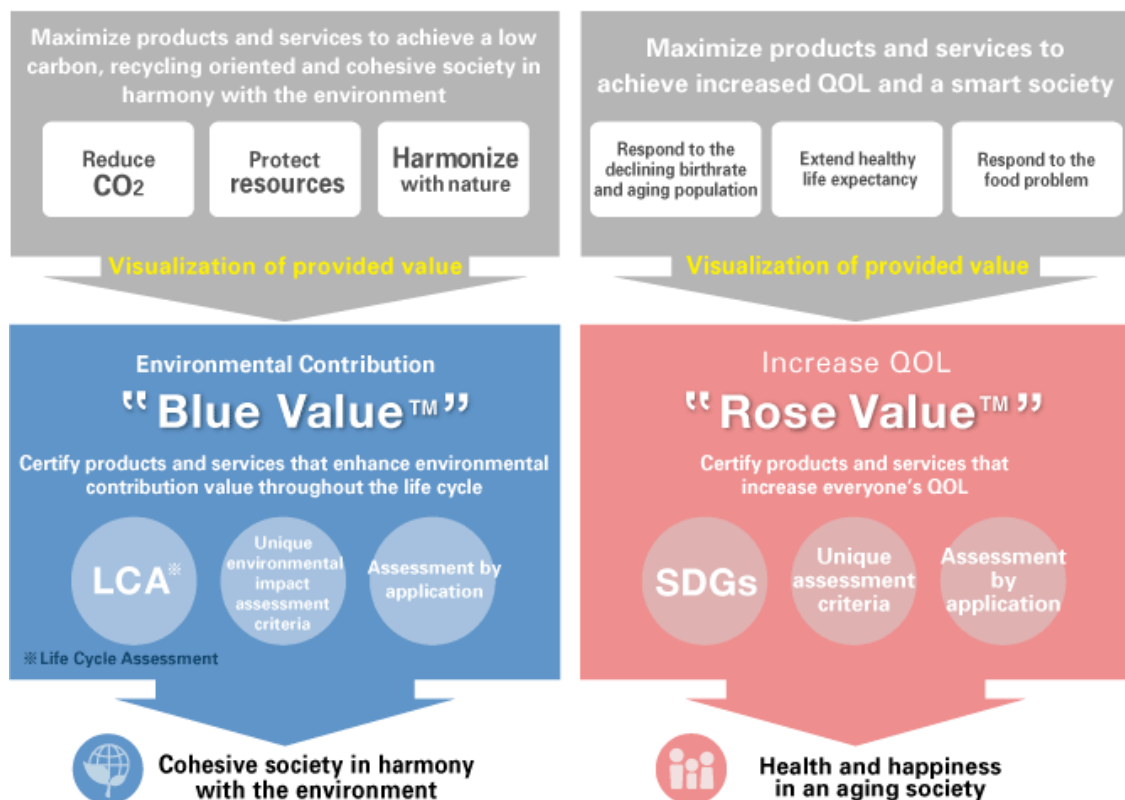
QOL Improvement Contribution Value,
Rose Value™

Blue Value™ / Rose Value™ Products

Visualization of Contributions to the Environment and Society

Establishing Blue Value™ and Rose Value™

The Mitsui Chemicals Group's ideals for a future society are to realize a "cohesive society in harmony with the environment" and "health and happiness in an aging society." In pursuit of this vision, we are presenting in visual form the contributions to the environment and society from the products and services we provide and sharing those values with all stakeholders. What enables this sharing are Blue Value™ and Rose Value™. By adopting Blue Value™ Index, Mitsui Chemicals Group's distinctive index used to assess environmental impact, and the Rose Value™ Index to assess quality of life(QOL) improvement contribution value, we certify products and services according to application with high environmental contribution value and high QOL improvement contribution value as Blue Value™ and Rose Value™ products and services, respectively.



Offering value through the Blue Value™ / Rose Value™ chain

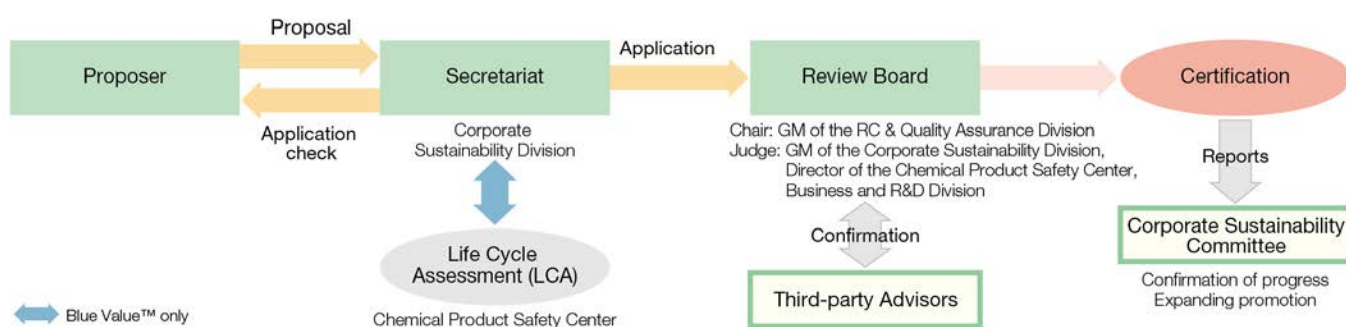


Features

- Visualize the contribution to the environment and society through our business activities
- Check the contribution of elements according to application in each stage of the product lifecycle
- Develop and offer products and services with a high contribution value, sharing benefits with stakeholders
- By building a Blue Value [™] and Rose Value [™] chain, we aim to realize our targeted future society

Review, Certification Process

The proposer nominating the candidate product or service conducts respective advance assessments with Blue Value [™] and Rose Value [™] Index, and then submits the proposal to the secretariat. The Review Board deliberates on the relevance of the subject's product concept and sales points versus its evaluation criteria, as well as the advantages of the contribution, its level and other factors. Those items that fulfill the standards are certified. Conducting certifications that emphasize fairness and objectivity with regard to assessment method and judgement standards is supported by accepting and utilizing third-party advice. In addition, these third-parties also confirm each review's details.



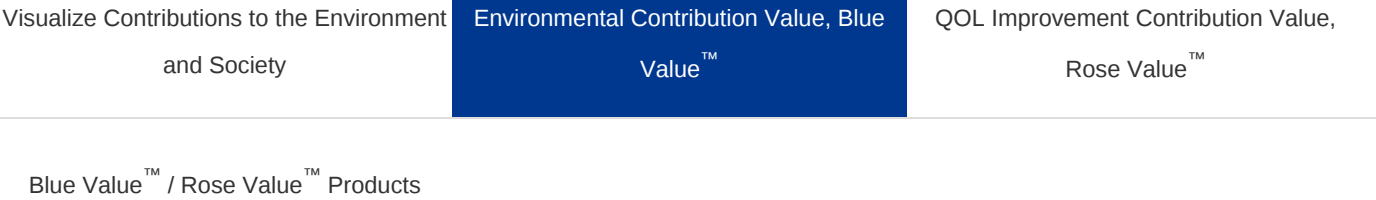
Setting of KPIs

We set the ratios to net sales of Blue Value [™] and Rose Value [™] products as one of the key performance indicators (KPIs) under our 2025 Long-term Business Plan. In addition, the Corporate Sustainability Committee deliberates on that progress, and this is tied to business strategy.

The expansion of the product sales ratio of certified products demonstrates steady progress toward realizing the Group's targeted future society. It is through such initiatives that we offer solutions to achieving sustainable development goals (SDGs) and solving other that confront society. We aim for sustainable development for both the Mitsui Chemicals Group and society.

Sales ratios of Blue Value™ and Rose Value™ products



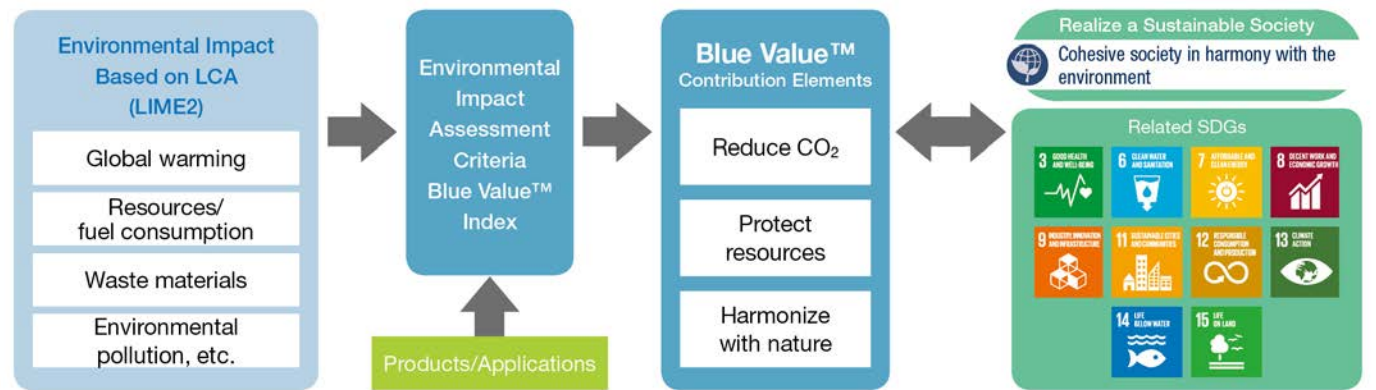


Environmental Contribution Value, Blue Value™

Numerous chemical products pass through a variety of life cycles, from manufacturing and processing to final disposal after use. At each life cycle stage, we visualize from the perspective of product stewardship how much we can reduce environmental impact and share this with a wide array of stakeholders, a practice that often leads to further environmental contributions. It was with these ideas in mind that we developed the environmental contribution value, Blue Value™, in 2015 in order to achieve our goal of realizing a “cohesive society in harmony with the environment”. Under the unique environmental impact assessment criteria Blue Value™ Index, the Mitsui Chemicals Group certifies products and services as having Blue Value™ that are deemed to reduce CO₂, protect resources, and harmonize with nature, thereby contributing to the environment in three elements.

Conducting comparative assessments targeting market-standard products and existing in-house products, Blue Value™ comprises certification requirements that not only involve passing evaluation standards but also not falling below these at each life stage. In addition, Blue Value™ incorporates qualitative and semi-quantitative assessments while becoming a system that enables simplified evaluations. On an as needed basis, Blue Value™ has become a framework to assess the superiority of specialized and quantitative environmental contributions by departments responsible for LCA*.

* LCA (Life Cycle Assessment) :
A method of quantitatively assessing the environmental impact of products at all stages, including development, manufacturing, transportation, use, and final disposal.



Contribution Elements	Environmental impact assessment criteria Blue Value™ Index	
	Evaluation criteria	Related assessment criteria

Reduce CO₂ 	Reduction of GHG emissions	• Reduce GHG emissions at the raw materials acquisition, manufacturing/processing, and end products use/disposal stages	
Protect resources 	3Rs, easy sorting, resource conservation	• Use reusable/recyclable materials at the manufacturing/processing stages for products, processed items, and end products as well as reduce material usage • Products, processed items, and end products based on reuse/recycling • Possible separation at the time of disposal	• Weight-saving / Volume reduction
Harmonize with nature 	Ecosystem conservation (human health)	• Reduce the impact on human health from chemical substances across product lifecycles; specifically, reduce the addition of chemical substances harmful to human health, curb their formation, use chemical substances that are less toxic, and use end products in the health & safety fields	• Extended service life • Natural energy sources • Non-fossil raw materials • Environmental cleanup
	Ecosystem conservation (environmental organisms)	• Reduce the impact on ecosystems from chemical substances across product lifecycles; specifically, reduce the addition of chemical substances harmful to ecosystems, curb their formation, use chemical	The above are assessed on contributions to all evaluation criteria

		substances that are less toxic
	Prevention of environmental contamination	Reduce the impact on the global environment excluding people/living organisms from environmental pollutants across product lifecycles; specifically, reduce the addition of environment pollutants harmful to ecosystems, curb their formation, and use substances that do not pollute the environment

* GHG emission-related global warming substances, chemical substances harmful to ecosystems, and environmental pollutants are targeted for substances whose characterization factors have been calculated in LIME2.

Examples of Blue Value™ Product Contributions across Product Life Cycle Stages

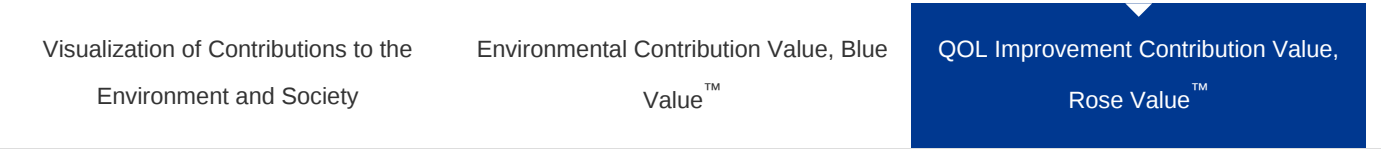
Business Domain	Product	Application(s)	Product Life Cycle Stage	Reasons for Blue Value™ Certification	Relevant environmental contribution elements		
					CO ₂	Resources	Nature
Mobility	TAFMER™	Bumpers	Manufacturing, Processing	Reduces energy consumption during manufacturing stage through use of catalysts (promoting chemical reactions) that enhance productivity	○		
	Mitsui EPT™	Weather-strip sponge	Manufacturing	Reduces energy consumption during manufacturing stage through use of catalysts (promoting of chemical reactions) that enhance productivity	○		
	Polypropylene (PP) compounds	Bumpers, instrument panels	Processing	Reduces GHGs by 13.3% by eliminating painting process	○	○	
				Enables 10-30%			

	ADMER™	Adhesive polyolefins for fuel tank use	Use	reduction in fuel tank weight through use of alternatives to metal tanks	○		
	ARLEN™	ABS pistons	Use	Enables weight reduction of 60% by replacement of metal parts	○		
	AURUM™	Turbo seals	Use	Enables weight reduction of 60–80% by replacement of metal parts	○		
Food & Packaging	STABiO™	Hardener for coatings	Materials, Processing	Reduces fossil fuel resource consumption and the use of solvents during painting through the use of bio-based raw materials	○	○	
	T.U.X™	Sealant films	Processing	Reduces energy consumption by lowering heat seal temperature and reduces resin usage by improving film strength	○	○	
	ECONEIGE™	Food packaging materials	Processing	Reduces amount of resin used by 20-30% by facilitating shielding properties with a void, negates need for white printing	○	○	
	BARIASTAR™	Coating agent for thermal paper labels	Processing	Reduces drying process by integral coating of three layers of thermal paper (undercoat, heat-sensitive and topcoat layers)	○	○	

	HIPRENE™	Textile base materials	Use	Contributes to improved safety during construction and prevention of environmental pollution because does not contain solvents			○
	SOLAR ASCE™	Encapsulant sheets for solar cells	Use	Controls potential-induced degradation (PID) and reduces power generation loss by improving ability to withstand high humidity and insulation durability	○		○
Health Care	Do Green™ MR-174	Eyeglass lens materials	Materials	Reduces fossil fuel resource consumption through the use of bio-based raw materials	○	○	
	Acrylamide	High-polymer flocculants	Manufacturing	Reduces energy consumption during manufacturing stage by lowering of production temperature through use of biocatalyst (enzyme)	○		
	AIRYFA™*	Disposable diapers	Use	Reduces fossil materials and waste materials, including incineration	○	○	
	ECONYKOL™	Sheets	Materials	Reduces fossil fuel resource consumption through use of bio-based raw materials	○	○	
	MOSTRON™-L	Rear doors	Processing	High rigidity enables replacement of metal parts. Realizes 30% reduction in weight	○		

Basic Materials	Evolve™	Extruded laminates	Processing	Saves energy by use of catalysts during manufacturing process and reduces amount of resin used during processing by enhanced sealing performance	○	○	
	AdBlue™	Exhaust gas (NOx) reduction agent	Use	Reduces NOx emissions, leading to fuel conservation	○		○
Next Generation Business	iCAST™	Cultivation systems	Use	Ensures agricultural sustainability through significant savings on resources (water, fertilizer)	○	○	○
	Photovoltaic Power Generation Diagnostics Services*	Diagnostics services	Use	Prevents deterioration of photovoltaic panel power generation and contributes to greenhouse gas reduction	○		

* Fiscal 2017 new certified products and services.

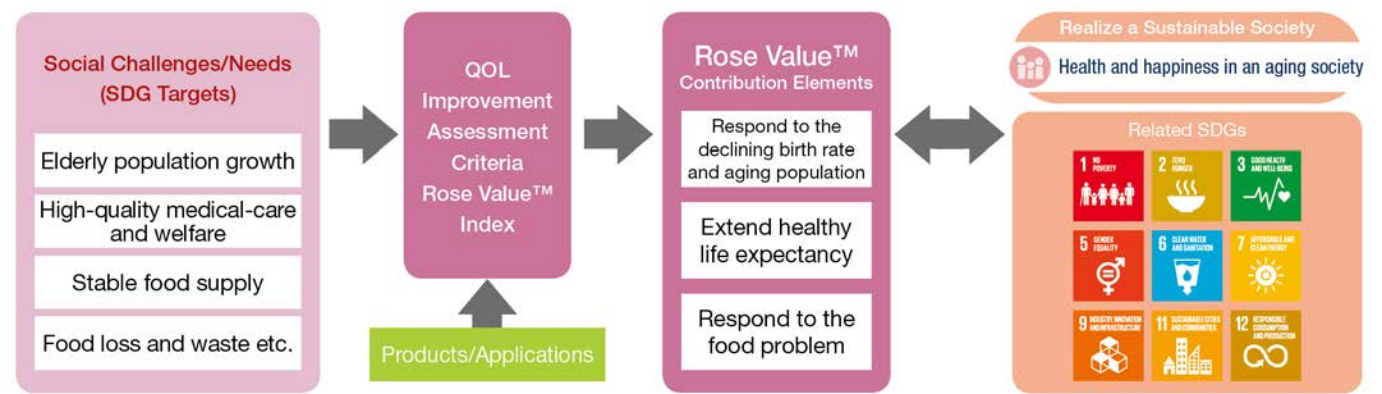


Blue Value™ / Rose Value™ Products

QOL Improvement Contribution Value, Rose Value™

The Group has set "health and happiness in an aging society" as a targeted future society vision. In moving toward the realization of that vision and to show what kind of value the Group can offer, we established the quality of life(QOL) improvement contribution value, or "Rose Value™" in 2016.

We conduct evaluations of QOL improvement contribution value using our distinctive Rose Value™ Index in light of the needs of society, including the sustainability development goals (SDG) and associated targets. We certify as Rose Value™ those products and services that fall into any of the three contribution element categories, namely those that either respond to the declining birth-rate and aging population, extend healthy life expectancy, or respond to the food problem. Rose Value™ sets easy-to-understand criteria that are qualitative and that take the perspective of universal design, universal health coverage, food security and other issues. The value offered through product or service functionality or concept is carefully scrutinized to confirm if it contributes to meeting the criteria for raising QOL.



Contribution Elements	QOL Improvement assessment criteria Rose Value™ Index	
	Evaluation criteria	
Respond to the declining birth-rate and aging population  	Support for products, buildings, and spatial issues with regard to the lives of a broad range of people, including infants, children, expectant mothers, and those with disabilities	
	Enhancing comfort in daily living	Provide products, buildings and spaces that take into consideration the needs of a variety of people
	Enhancing nursing	Specialized nursing and caregiving is a component of

	and caregiving	“enhancing comfort in daily living”
Extend healthy life expectancy   	Maintenance of one's own physical well-being, without dependency on daily and continuous medical or nursing care, and extension of lives with autonomous lifestyles	
	Support for physical well-being	Assist, improve and heighten functions throughout the body, either directly or indirectly
	Advancement of medical and pharmaceutical fields	Raise the level of medical technology and service in every phases of health, from pre-symptomatic disease to illness Or improve aspects of medicine functionality, quality and production
	Help prevent infectious diseases	Prevent or take action against infectious diseases
	Improving accessibility to nutrition and water	Simplify and/or improve production and/or the delivery of nutrition and water
Respond to the food problem  	Raising the level of food productivity, consumption without waste, and realizing worry-free, safe and stable supply	
	Enhancing food productivity	Raise food yields as well as work efficiency; improve related equipment capabilities
	Securing safe and stable food distribution	Secure and raise the level of safety and stability in food distribution
	Reducing food loss and waste	Reduce waste from the perspectives of maintaining food freshness, extending “best-before date,” packaging for contents separation and compartmentalization, loss when shipping, and other factors

Visualization of Contributions to the
Environment and Society

Environmental Contribution Value, Blue
Value™

QOL Improvement Contribution Value,
Rose Value™

Blue Value™ / Rose Value™ Products

Blue Value™ / Rose Value™ Products

We would like to introduce some of the Group's Blue Value™ and Rose Value™ products.



Blue Value™

Reduce CO₂

Protect resources

Harmonize with nature



Rose Value™

Respond to the declining birth-rate and aging population

Extend healthy life expectancy

Respond to the food problem



Reduce CO₂

Protect resources

Bumper and instrument
panel materials

PP compounds

Reduce GHG emissions
by 13% without the need
for any painting process.



Reduce CO₂

Adhesive polyolefin for
plastic fuel tank

ADMER™

Reduce weight of fuel
tanks by 10-30% by using
plastics instead of metals.

Reduce CO₂

Harmonize with nature

Exhaust gas (NOx)
reduction agent

AdBlue™

Reduce NOx emissions.
Contribute to fuel
conservation.
Contribute to fuel
conservation.



Reduce CO₂

Protect resources

Seat cushion material

ECONYKOL™

Reduce fossil fuel
resource consumption
through use of bio-based
raw materials.



* AdBlue™ is a trademark of the VDA (Verband der Automobilindustrie).



Reduce CO₂

Protect resources

Food packaging milky-white film

ECONEIGE™

Deliver a white finish by diffusing light on layers of air created inside films. Reduce the amount of resin used by 20-30% without the need for white printing.



Reduce CO₂

Protect resources

Respond to the food problem

Sealant film

T.U.X™

Saves energy by lowering the heat seal temperature and reduces resin usage by improving film strength. Its excellent sealing performance and impact resistance reduce the amount of food wasted in food production and distribution processes.

Reduce CO₂

Harmonize with nature

Encapsulant sheets for solar cells

SOLAR ASCE™

Reduces power generation loss by improving ability to withstand high humidity and insulation durability.



Reduce CO₂

Diagnostics and Consulting Services for Solar PV Power Plants

Our PV Module Due Diligence service contributes to the reduction of GHG emissions, which in turn assists clients in preventing yield reduction of Solar PV Power Plants.





Extend healthy life expectancy

Ophthalmic lens materials

MR™

Series • UV+420cut™

Contribute to eye health and comfort in addition to correcting for visual acuity.



Respond to the declining birth-rate and aging population

Nonwoven for disposable diapers

SYNTEX™

Search for high performance, such as comfort and a snug fit in addition to such basics as being leak proof, having breathability, and causing no diaper rash.

Reduce CO₂

Protect resources

Respond to the declining birth-rate and aging population



Nonwoven for disposable diapers

AIRYFA™

Reduce the amount of waste by using a fiber structure that combines “softness” and “strength.”

Supporting the comfortable lives of babies and child caregivers through disposable diapers.

Respond to the declining birth-rate and aging population

Food packaging materials

CMPS™

Film makes things easy to open even for children and the elderly.





Reduce CO₂

Protect resources

Harmonize with nature

Respond to the food problem

Crop cultivation system
for agriculture

iCAST™

Ensures agricultural
sustainability through
significant savings on
resources (water,
fertilizer).



Respond to the food problem

Insecticide

TREBON™

Contribute to stable and
enhanced crop
production.

Respond to the food problem

Hybrid rice

Mitsuhikari

Rice that can
accommodate multiple
harvests as well as the
shifting of harvest periods
therefore contributing to
improved food
productivity; the rice
harvested is of
exceptional high quality
and taste.



Extend healthy life expectancy

Insecticide

Vectron™

Controls mosquitoes that
transmit malaria and other
infectious diseases.
Contributes to eradicating
malaria.





Respond to the food problem

Keep-fresh film

SPASH™

Inhibit the wilting and discoloration of fruits and vegetables thereby contributing to reduction in the amount of food waste.

Corporate Governance



The Mitsui Chemicals Group is working to upgrade and expand its corporate governance as well as risk and compliance structure and systems in order to earn the trust of stakeholders including shareholders, customers, and the local community, while fulfilling its corporate social responsibilities.

► Corporate Governance

► Risk and Compliance

► Management System

► Risk Prevention Measures

► Compliance

► Bribery Prevention

Risk and Compliance

▼ Management System

► Risk Prevention Measures

► Compliance

► Bribery Prevention

To earn the trust of our shareholders, customers, members of the local community and all of our other stakeholders, and to fulfill our corporate social responsibilities, it is crucial to effectively engage in risk and compliance management. Here at the Mitsui Chemicals Group, we are committed to reinforcing our management framework in order to provide stronger foundations for our corporate activities.

Management System

Policy

In February 2016, the Mitsui Chemicals Group formulated its Group Action Guidelines, which provide the basis for the actions of all its personnel, and laid out the guidelines “always act in good faith” and “have a high regard for people and society” as its two mainstays. In accordance with these action guidelines and risk management rules (company regulations), we carefully control all risks that could potentially threaten our business activities, to earn the trust of our stakeholders and to fulfill our corporate social responsibility.

The Mitsui Chemicals Group has also stipulated its Group Risk Management Policy to serve as the principles by which risk management is conducted with respect to daily tasks and duties.

The Mitsui Chemicals Group Risk Management Policy

Objectives

1. To confirm that all employees are fully aware of the importance of risk management
2. To confirm that a structured and systematic risk management system is in place
3. To confirm that the line management of risks is firmly entrenched and that definitive steps have been taken to employ a PDCA cycle

Stance

1. Line managers steadfastly carry out PDCA procedures as a part of efforts to manage the risks that arise in the natural course of daily business activities
2. All employees who have come into the possession of risk-related information report to their line managers in a timely manner
3. All employees proactively share with other departments any risk-related information that has come into their possession while also seeking cooperation
4. Each and every employee must take the initiative and realize that he or she maintains the same responsibilities as the officer in charge of risk management. Every effort must be made to constantly fine tune sensitivities toward risk

System and Responsible Officers

The director in charge of the Risk & Compliance Committee is the responsible officer.

We have introduced the Mitsui Chemicals Group Risk Management System to quickly identify risks and prevent them from materializing. Within the annual budget of each Group company or division, we are specifying the top priority risks, based on risk models and procedure documents and steadily implementing measures and controls for risk. We also use tools such as compliance checklists as part of a risk management PDCA cycle that is designed to monitor the progress of risk management measures and prevent risks from materializing.

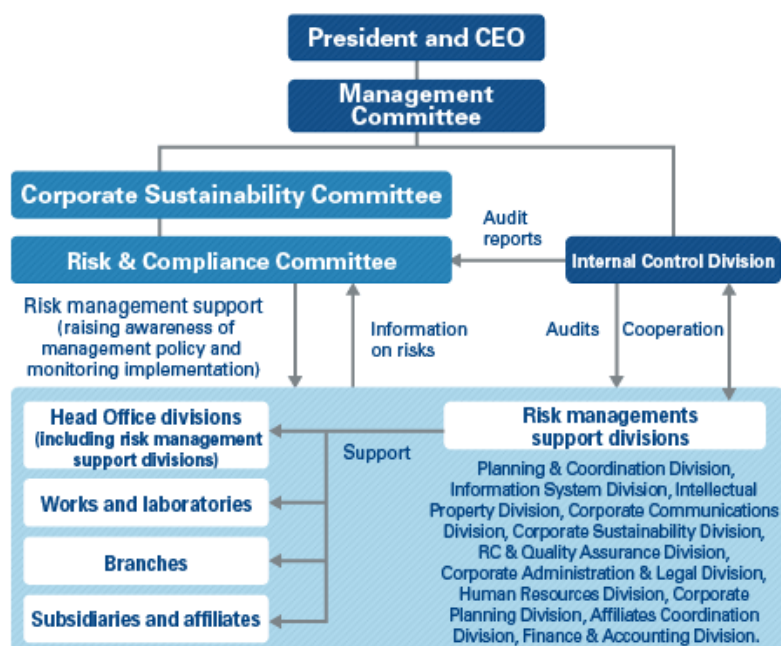
► [Procedures for Identifying Risks and Specifying / Managing Priority Risks](#) 

► [Risk Models \(Examples of specific assumed risks\)](#) 

To maintain and operate the Risk Management System, the Risk & Compliance Committee (chaired by the responsible director in charge of the Risk & Compliance Committee) was established with responsibility for putting in place specific policies, strategies, and plans that address risk as well as compliance concerns.

In addition to sharing measures, management targets and the status of achievements with regard to top priority risks, this Committee considers and supports appropriate countermeasures in response to priority issues that have newly emerged or that are considered to have a large impact on the entire Group, or on an as needed basis.

Structure of the Group Risk Management System



Monitoring Methods

The Risk Management System has been incorporated into the Group's internal control systems. The status of internal control system implementation is reported to the Board of Directors.

We established the Internal Control Division to continually monitor and assess the implementation and operational status of internal controls within the Mitsui Chemicals Group, as required under the Companies Act and the Financial Instruments and Exchange Act, and to ensure that operational risks are kept within tolerable levels at all times. In addition to maintaining and improving internal control standards throughout the Mitsui Chemicals Group, internal audits are conducted to ensure that operations are being carried out appropriately and efficiently. Furthermore, any important matters arising from the results of audits are shared with the Risk & Compliance Committee. The Internal Control Division specifically focuses on the following areas.

- Self-assessment-based internal audits relating to legal and regulatory compliance
- The conduct of self-assessment-based internal audits relating to legal and regulatory compliance; the introduction and operation of internal audit processes based on the aforementioned self-assessment-based internal audits with respect to business divisions as well as affiliates in Japan and overseas
- Compliance with the Financial Instruments and Exchange Act (submission of internal control reports)
- The implementation of annual assessments to determine the effectiveness of internal controls relating to financial reporting; the establishment of internal controls as well as operating policies including their assessment with respect to the Company in accordance with the implementation standards of Japan's Financial Services Agency.

Goals and Results

KPI	Scope of Compilation	FY2017			FY2018	Medium to Long-term
		Goals	Results	Level Achieved	Goals	Goals
Incidence of major legal and regulatory violations	Mitsui Chemicals Group	0	1	×	0	0 (FY2025)

Review and Challenges

Having decided on KPIs for social and environmental targets under the 2025 Long-term Business Plan, we state the figures for significant breaches of statutory or regulatory requirements, including those that affect the Group's social standing, business operations, earnings and other key parameters. One incident occurred in fiscal 2017. In addition to formulating preventive measures, we will continue to implement a variety of initiatives in a bid to ensure compliance.

With regard to risk management, in fiscal 2017 steps were taken to put in place countermeasures concerning matters in the Company-specified top priority risks that had yet to be achieved and to share the details with the Risk & Compliance Committee. Going forward, we will endeavor to change our business portfolio and expand business, while uncovering new risks that arise in response to changes in the external environment and minimizing those risks.

Procedures for Identifying Risks and Specifying / Managing Priority Risks

1. Risk Identification

Identify risks at each department by performing a full review of each responsible operation and relevant laws/regulations, and taking into consideration the status of priority risk management during the previous fiscal year.

2. Risk Categories

Identified risks are assessed according to impact and likelihood of occurrence, and then categorized from I to IV within the matrix shown below.

Criteria

◆ High Impact

- Very high level of monetary impact (damages, earnings reduction)
- Casualties incurred
- Organizational survival and strategic targets significantly impacted
- Company image and reputation severely damaged
- Local communities heavily affected

◆ High Likelihood of Occurrence

- High likelihood of occurrence at least once during the fiscal year
- Actual occurrence during the past three years
(However, possible to establish evaluation criteria tailored specifically to the circumstances of each department)

Impact	High	II	I
	Low	IV	III
		Low	High
		Occurrence potential	

3. Specifying Priority Risks

Based on the categories listed above, one or more priority risks are selected from risks categorized under I (II if there is no I; from III if there is no I or II)

4. Establishing Risk Countermeasures, Management Items and Targets

Establish countermeasures for priority risks as well as management items and targets in order to implement these countermeasures (it is desirable to establish quantitative management items/targets to extent possible, but it is possible to set these on a qualitative basis if obtaining qualitative items proves difficult)

Risk Model (Examples of specific assumed risks)

Categories	Table of Contents	Assumed Risk (Examples)
External operating conditions	Competitors	Competing company's enhanced production capacity
		Market entry of inexpensive, imported products; decline in market conditions due to oversupply
		Mergers, business tie-ups between competing companies
		Influx of alternative products
	Customers, Markets	Fall in demand
		Outward flow of customers overseas
		Deficiencies in customer responses due to increase in internal business tasks
	Suppliers	Skyrocketing prices for raw materials
		Accident at raw materials manufacturer, termination of supply due to insolvency
	Shareholders	Shareholder class action
Business strategies	Legal Revisions, Regulatory Changes	Cost increases due to compliance with more stringent regulations
	Country Risks (Overseas Safety)	Deteriorating economic situation in trading partner country, import/foreign investment controls
		Events involving overseas employees (acts of terrorism, kidnapping, threats)
		Political instability, worsening security (civil war, riots)
	Media	Inadequate responses to media at the time of an emergency
	Budget/Planning	Budget formulation not in line with actual situation
	Strategy Formulation	Formulation of new business strategy by prioritized targets
		Delayed decision to withdraw from a business
	Product Lifecycle	Shortening of a product's life cycle
	Business Portfolio	Error in core/sub-core business certification
Compliance	Management Resource Distribution	Investment in business with poor prospects
	Product Development Capacity	Delays in new product development
	Comprehending External Conditions	Underestimation of changes in external environment
	Unlawful Actions	Violation of antitrust law, commercial code, administrative regulations (governing fire prevention, the environment, etc.)
		Illegal export of strategic materials
		Corruption, fraudulent provision of profits to particular shareholders
		Breach of contract
		Procedural omissions in applications to regulatory authorities
	Corporate Regulatory Infractions	Contravention of employment regulations
	Employee Misconduct	Misappropriation of funds, breach of trust, insider trading, departure from authority
	Employee Antisocial Actions	Sexual harassment, discrimination
	Management of Confidential Information	Leaks of research/technological knowhow
Environment/safety/quality		Employee internal accusations
	Management of Intellectual Property	Infringement of another company's patent
	Environmental Issues	Environmental contamination (air, water, soil, groundwater, etc.)
		Consumer/civic movements with regard to environmental problems
	Safety Issues	Plant explosion, fire, facility obsolescence
		Accident during product transportation
		Occupational accidents and injuries
		Natural disasters (earthquake, typhoon, etc.)
	Quality Issues	Product defect, customer complaint, technical service shortcomings
		Product liability (PL) lawsuit
		New product safety test defect
		Inadequacies in Material Safety Data Sheet (MSDS), product's written specification
Finances	Credit Management	Increased unease with regard to client/business partner credit associated with deterioration in economic conditions
	Foreign Currency Exchange	Foreign exchange losses
	Financing	Credit crunch, rise in interest rates
	Tax Issues	Double taxation incurred due to transfer price taxation
Personnel/labor system	Employee Health Management	Mental health, death from overwork
	Personnel Loss	Headhunting
	Employee Morals	Reduced morale due to change in working conditions
	Pensions/Funds	Increased retirement benefit obligation due to lower discount rate
	Labor/Management Relations	Labor dispute
Information systems	Information Infrastructure	Flaw in backup system during system crash
	Access to Information	Leak, destruction of data by illegal access, virus

Risk and Compliance

▸ Management System

▼ Risk Prevention Measures

▸ Compliance

▸ Bribery Prevention

Risk Prevention Measures

Risk Hotline

Our Risk Hotline enables any Group employee who has obtained information relating to risks, including details of illegal activities going on within the Company, to directly report the matter to and seek advice from the Risk & Compliance Committee or an outside attorney. The hotline is open not only to directors, corporate auditors, and employees, but also to all parties with an interest in the Company's business activities including the families of employees, contractors at our works or other sites and suppliers. Any and all information relating to risks received through the hotline is immediately and appropriately reported to the Company's corporate auditors.

[Reporting and Points of Contact for Advice]

[Reports to/consultation with the Company's Risk & Compliance Committee]

For the attention of:

The Secretariat, Risk & Compliance Committee

General Affairs/Legal Division

Mitsui Chemicals, Inc.,

Shiodome City Center, 1-5-2, Higashi-Shimbashi, Minato-ku, Tokyo 105-7122, Japan

E-mail : Risk@mitsuichemicals.com

[Reports to/consultation with external points of contact [attorneys]]

For the attention of:

Mitsui Chemicals, Inc. Hotline

Daiichifuyo Law Office, Kasumigaseki Building 12F, Kasumigaseki, 3-2-5, Chiyoda-ku, Tokyo 100-6012, Japan

E-mail : risk-MCI@daiichifuyo.gr.jp

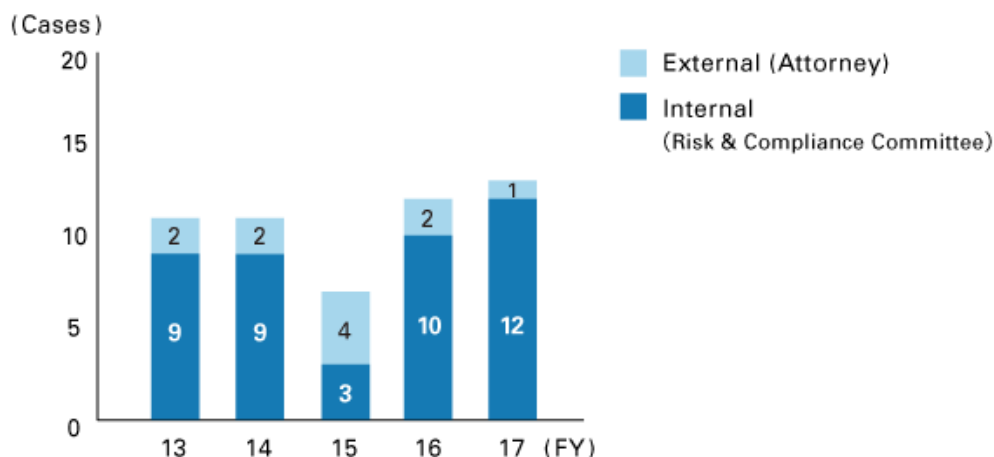
Target Case Studies

■ Corruption ■ Bribery ■ Human Rights ■ Employment Environment ■ Environmental Contamination
■ Compliance with Laws and Regulations ■ Procedures Relating to Business Law ■ Other

(Risk Hotline Operational Management)

- The Company restricts those able to view E-mails and letters received by the Risk & Compliance Committee or the external point of contact to only some of the members of the Committee. Furthermore, those able to view correspondence strictly observe confidentiality with regard to the name or location of any person using the hotline to report or seek advice or to the content of their report, which for the purposes of investigation is not disclosed to anyone other than the minimum number of officers and employees or to attorneys. Internally stipulated regulations safeguard the information against further disclosure or leakage (including the name or location of any person using the hotline to report or seek advice, or acts that would make it easy to ascertain the content of their report).
- The Company will keep confidential from anyone other than those involved any information relating to those cooperating for the purpose of the investigation or information gained through the investigation.
- Any person using the hotline to report or seek advice is not to be subject to penalty by reason of having written a report or sought advice. However, this limit will not apply in cases where the person who used the hotline to report or seek advice had done so for the purpose of deceiving others, for example by deliberately conveying false information, or in cases in which a report was made for the purposes of unlawful activities, such as coercion or blackmail.
- Anonymous reports and requests for advice by letter or E-mail are accepted. However, please be aware that in the event that a person cannot be contacted by the Company, there will be cases where the situation will not be fully understood and steps, such as an appropriate investigation or response, will not be taken.

Risk Hotline Operating Performance



Apart from the Risk Hotline, we are operating a system by which a harassment consultant is located at each of our business sites.

Business Continuity Plans (BCPs)

Due to the ever-present risks, such as large-scale disasters, an outbreak of a new type of influenza and large-scale accident at a production site, the Company prepares for crises that may have serious consequences for the Mitsui Chemicals Group, has established a system to promptly and appropriately respond to each function, such as Head Office, production site or supply chain, and formulated a Business Continuity Plan (BCP) to fulfill its supply responsibility to customers.

For the BCP to be executed in the event of a major earthquake in the Tokyo Metropolitan area, the plan establishes certain systems and outlines that, in the event that the Company's Head Office is unable to operate properly, its functions will be transferred to a main base such as the Osaka Works. An emergency headquarters will quickly establish a chain of command, and emergency customer response centers will be established to provide our customers with support quickly and effectively. BCPs have also been put in place in preparation for an outbreak of any new-type influenza and for a large-scale accident at a production site.

Based on such scenarios as the high probability of a Nankai Trough earthquake and a major earthquake in the Tokyo Metropolitan area, we intend to continue on from fiscal 2017 and again organize extensive BCP training, incorporating flexible measures aligned to changing conditions and situations, while also covering the potential risk of a major earthquake in the Tokyo Metropolitan area in fiscal 2018. Following on from that, we also intend to review regulations and our BCP, focus on raising awareness in the workplace while taking stock of and maintaining essential equipment. At production sites, we regularly conduct earthquake and tsunami readiness training and ensure that safe operational shutdown procedures and employee evacuation systems are in place. From the business management standpoint, we are adopting a range of measures. With regard to some of the important raw materials, we are purchasing from multiple sources and ensuring back-up sources to safeguard the supply chain, building a production system at multiple business sites for the Group's main products, and maintaining a certain level of inventory.

Risk and Compliance

▸ Management System

▸ Risk Prevention Measures

▼ Compliance

▸ Bribery Prevention

Compliance

As an indication of the priority given to compliance with laws and regulations over any pursuit of profit, the Mitsui Chemicals Group has identified compliance with all laws and regulations as the first item in its Group Action Guidelines formulated in February 2006. In addition to putting in place a risk management framework that includes the Risk & Compliance Committee and Risk Hotline, Mitsui Chemicals is acutely aware of the critical need to have its employees, who drive its risk management framework forward, strictly adhere to all laws and regulations. With this in mind, the Company has undertaken four initiatives in an effort to ensure compliance. In addition to preparing the Compliance Guidebook, we conduct workplace discussions covering case studies of violations of laws and regulations as well as compliance awareness training in order to strengthen the understanding of employees. From a skills and knowledge perspective, we also conduct legal and regulatory compliance training.

→ Action Guidelines

Compliance Guidebook

The Compliance Guidebook (issued in 2006) summarizes basic points that Group directors, corporate auditors, and employees should consider when carrying out their duties. It is a tool that emphasizes the need to comply with all laws and regulations, a key component of the Mitsui Chemicals Group Action Guidelines. As circumstances dictate, steps are taken to revise the content of the Compliance Guidebook to include specific examples of violations of the laws and regulations of each country as well as instances of bribery or the falsification of data, issues that are attracting widespread media interest in Japan, and to increase awareness within the Group as a whole. In addition to the existing Japanese and English editions, we compiled a new Chinese edition containing information on Chinese laws and regulations in 2009. Distributed mainly to our subsidiaries in China, these guidebooks help ensure compliance on a day-to-day basis. In fiscal 2017, we added points to bear in mind with regard to company and personal information when using social networking services (SNS).

▸ [Compliance Guidebook \(Excerpt\)](#) (PDF : 70KB) 

Example-based Workplace Discussions on Legal and Regulatory Violations

The Company and its domestic subsidiaries and affiliates have been organizing example-based workplace discussions on legal and regulatory violations since fiscal 2008. These discussions involve members of staff in each workplace discussing examples of compliance violations at Mitsui Chemicals and at other companies, with a focus on the causes, preventive measures, and the potential for similar occurrences in their own workplace. The aim is to raise awareness of legal and regulatory compliance and reinforce interactive communication with senior members of staff. Discussions have received a positive response in many of our workplaces, with some departments voluntarily increasing the frequency of discussion sessions and others picking out examples of particularly relevant violations at other departments. In fiscal 2017, we conducted discussions at 56 company departments and 21 subsidiaries and affiliates.

Compliance Awareness Training

The awareness of individual directors, corporate auditors, and employees is the most important factor to ensure compliance. The required level of awareness varies however depending on each individual's position within the Company. We therefore tailor the contents of compliance awareness training to suit every level, from new recruits to employees newly promoted to a management position, newly appointed line managers, and each management rank. Our goal is for individuals at every level to take the initiative and set an example for others, thereby raising levels of compliance awareness throughout the Group and creating a more open corporate culture.

→ Human Resources Development Key Achievements of Rank-specific Development Training

Legal and Regulatory Compliance Training

Here at the Mitsui Chemicals Group, we organize legal and regulatory compliance training in order to improve employees' knowledge. Training is provided via e-learning or group training sessions, both of which cover specific laws and internal regulations that our employees need to be aware of in order to carry out their duties. We also organize customized training sessions for individual divisions or subsidiaries and affiliates on request.

Required subjects vary depending on the contents of each employee's duties. We also require employees to re-take courses on a regular basis to ensure that they are aware of recent developments. Participation in these training initiatives is audited by the Internal Control Division. In this manner, we place the utmost importance on participation.

e-Learning and Training Themes

- Industrial safety and health legislation
- Process safety legislation
- Environmental legislation
- Quality control
- Harassment
- Finance and taxation
- Intellectual property
- Information management
- Contracts
- Antimonopoly legislation
- Credit control
- Export control
- Purchasing



~For compliance with laws and rules~

Compliance Guidebook

Mitsui Chemicals, Inc.

~For compliance with laws and rules~

Compliance Guidebook

December 1, 2003	First Edition
May 30, 2006	Second Edition
December 1, 2012	Third Edition(Electronic Publishing)
February 1, 2016	Fourth Edition(Electronic Publishing)
November 1, 2016	Fifth Edition (Electronic Publishing)
July 1, 2017	Sixth Edition(Electronic Publishing)

MITSUI CHEMICALS, INC. Corporate Administration & Legal Division

This Guidebook is based upon Japanese law, regulation and customs and refers to Japanese cases. It may be possible that the cases in the Guidebook do not apply in any jurisdictions except Japan.

Aiming to Become a Reliable Mitsui Chemicals Group - Striving to Be a Trusted Entity -

In February 2006, we established “Mitsui Chemicals Group Action Guidelines” as part of our Corporate Social Responsibility (CSR) strategy. These Guidelines were compiled to present the guidelines for actions for the officers and employees of the Mitsui Chemicals Group. These Guidelines are intended to be referred to by them when they consider what they should value most in their behavior in order for the Group to continue to contribute widely to society and become an entity that earns the trust of its stakeholders. The top priority item set forth in these Guidelines is “Compliance with the laws and regulations”.

At the outset of the Action Guidelines, the Mitsui Chemicals Group declared “We will give priority to compliance with laws and regulations over pursuit of any profit”. If you are forced to choose either profit or compliance with laws and regulations, please do not hesitate to give priority to compliance with laws and regulations. We should never repeat the violation of the High Pressure Gas Safety Law or cartels (for polypropylene, gas distribution pipe, etc.), among other things.

In recent years in Japan, cases of violations of laws, regulations and rules have been frequently reported by the press. These cases include the incidents of product data fabrication and accounting fraud by listed companies and an emission gas scandal of a powerful carmaker having global operations. Society is keeping an ever increasingly sharp eye on these corporations having committed the offenses. In these situations, they are facing a possibility that as a consequence of their single breach of a law, regulation or rule, they may devastatingly lose their social confidence that they have built over many years and the foundation of their existence as corporations may be shaken. We must have a strong realization that compliance with laws, regulations and rules is the major premise of the existence of any corporation and without it any corporation can neither continue to exist nor fulfill its social responsibility.

Furthermore, in light of the global development of our businesses that are growing year by year, it is all the more important for us to have a greater awareness of the importance of compliance with the laws, regulations and rules of foreign countries as well as those of Japan. We are required to have an accurate understanding of various regulations of foreign countries and consider at all times whether or not our own actions are appropriate. In particular, the concerns about the problems of injustice and corruption including cases of bribery involving foreign public officials are rapidly growing in the world. This is an issue to be seriously addressed by the whole Mitsui Chemicals Group for the sake of our moving forward with global business operations, among other reasons.

I firmly believe that if all of our officers and employees take actions in good faith, keeping compliance with laws, regulations and rules in mind, we will gain greater social confidence and be able to lay the foundations for the sustainable development of our Group.

February, 2016



Tsutomu Tannowa, President

~For compliance with laws and rules~

Compliance Guidebook

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Bribery Prevention

The Mitsui Chemicals Group Policy on Bribery Prevention

Overview and Declaration

With business taking on an increasingly global nature with each passing year and in light of the world's heightened focus on bribery in recent years, the further development and strengthening of an international bribery prevention framework is an important task to be addressed by the Mitsui Chemicals Group as a whole. The Mitsui Chemicals Group will comply with all regulations aimed at preventing bribery in the countries and regions in which the Mitsui Chemicals Group is engaged in business, including the Unfair Competition Prevention Act of Japan, the Foreign Corrupt Practices Act of the U.S., and the Bribery Act of the U.K. (all such regulations, the "Bribery Regulations"). Whenever it is faced with choosing between profits or compliance, the Mitsui Chemicals Group will never hesitate in prioritizing compliance.

With the aim of preventing bribery by clearly stating matters such as the basic stance of the Mitsui Chemicals Group towards bribery and the rules to be followed by its personnel, the Mitsui Chemicals Group has formulated this Policy.

This Policy applies to all personnel of the Mitsui Chemicals Group.

December 1, 2016
Tsutomu Tannowa
President

Matters to be complied with

1. Prohibition of bribery

Personnel of the Mitsui Chemicals Group will not engage with any other person in any act of making or receiving a bribe.

2. Development of a bribery prevention framework

The Mitsui Chemicals Group will strive to operate its compliance-related departments, and whistleblowing notification centers in a fair and equitable manner, and will maintain and operate organizations and systems designed to prevent acts of bribery.

3. Education and training

The Mitsui Chemicals Group will continually provide education and training to personnel in order to further ensure an ethical mindset aimed at preventing bribery and to secure the operation of its bribery prevention framework.

4. Audits and system reviews

The Mitsui Chemicals Group will perform periodic audits to confirm whether its bribery prevention framework is actually functioning and, based on the results of such audits, will continually review the effectiveness of the bribery prevention framework of the Mitsui Chemicals Group (including this Policy) and make improvements as necessary.

5. Recording and storing of transaction details

In order to evidence its compliance with the Bribery Regulations of each country and with this Policy, the Mitsui Chemicals Group will use appropriate internal control systems to factually and accurately record approval documents, accounting books, and the like relating to expenditures, and will appropriately store all relevant ledgers and forms.

6. Disciplinary action

If an employee violates this Policy, the Mitsui Chemicals Group will take appropriate and swift disciplinary action in accordance with work rules and the like.

Definition of Terms

(1) "Making a bribe" means giving, or offering or promising to give, any money or other benefits to a public officer, etc., directly or indirectly, for the purpose of having the public officer, etc. act or refrain from acting in a particular way in relation to his or her duties, or having the public officer, etc. use his or her position to influence another public officer, etc. to act or refrain from acting in a particular way in relation to that officer's duties, in order to obtain illicit gains in business.

For example, providing hospitality or gifts to an instructor or staff member of a national public university, or to a physician or staff member of a national public hospital, would constitute "making a bribe."

(2) "Receiving a bribe" means receiving, or demanding or promising to receive, any money or other benefits in

relation to one's own duties for the purpose of obtaining illicit gains for oneself or a third party.

(3) "Bribery" means the act of making a bribe or receiving a bribe.

(4) "Public officer, etc." includes any of the following persons:

- ① A person engaged in public duties for the national or local governments of his or her own or a foreign country ("Governments");
- ② A person who engages in the affairs of an entity established under a special law or regulation to carry out specific affairs related to the public interest;
- ③ A member of staff of any of the following public companies or entities ("companies, etc.") granted special privilege by a Government:
 - (i) A company, etc. in which a Government directly or indirectly holds a majority of the voting shares or paid-in capital;
 - (ii) A company, etc. the majority of whose officers are appointed or nominated by a Government;
 - (iii) A company, etc. otherwise substantively controlled by a Government;
- ④ A political party or a staff member thereof;
- ⑤ A candidate for public office;
- ⑥ A person engaged in public duties for a public body;
- ⑦ A person engaged in the affairs of Government or public body as authorized thereby; or
- ⑧ Any other person similar to any of ① through ⑦ above.

(5) "Personnel" means all officers, employees, and temporarily employed persons of the Mitsui Chemicals Group.

Including the Mitsui Chemicals Group Policy on Bribery Prevention and other content on bribery, the Compliance Guidebook increases awareness throughout the Group. With regard to high-risk areas, we prepare and distribute manuals to employees and are focusing on initiatives, such as group training sessions, to prevent bribery. Audits conducted by the Internal Control Division also include content on bribery. Moreover, the Risk Management System has been incorporated into the Group's internal control systems. The status of internal control system implementation is reported to the Board of Directors.

Responsible Care



Responsible care is an activity that the world's chemical industry is integrally promoting to improve the quality of life (QOL) by chemical products and to contribute to the sustainable development of society. All companies voluntarily implement activities designed to ensure safety, health and quality as well as protect the environment throughout the entire life cycles of their chemical products, publicize the results of their activities and engages in dialog with the local communities where they operate. As responsible care activities span entire life cycles, it is believed that the philosophy behind these activities is applicable not only to the chemical industry that manufactures the chemical products but also universally by all industries that use them.



To contribute to the sustainable development of society, the Mitsui Chemicals Group develops business activities in accordance with its Corporate Mission, Action Guidelines and Responsible Care Policy. On the basis of legal compliance with regard to not only chemical substances and chemicals but also to all the products handled, the Company works on ongoing improvements in safety, health, environmental platforms and quality as well as to maintain favorable communications with the stakeholders and corporate entities involved.

▶ Responsible Care Policy and Management

▶ Management System

▶ Responsible Care Audits

▶ Participating in Industry Association Responsible Care Activities

▶ Roll Out to Subsidiaries and Affiliates

▶ Safety and Prevention

▶ Management System

▶ Major Accidents and Work-related Occupational Injuries

▶ Initiatives to Prevent Major Accidents

▶ Safety and Prevention Training

▶ Fundamental Safety Initiatives

▶ Safety and Prevention Drills

▶ Environmental Protection

▶ Management System

▶ Water

▶ Climate Change

▶ Biodiversity

▶ Industrial Waste

▶ Environmental Accounting

▶ Substances Subject to the PRTR Act

▶ INPUT⇒OUTPUT

▶ Air

▶ Environmental Compliance

▶ Product Stewardship

▶ Management System

▶ Quality of Products and Services

▶ Management System

► Strengthening the Management System

► Quality Improvement Initiatives

► Product Stewardship Initiatives

► Logistics

► Management System

► Transporting Products Safely

► Initiatives to Reduce Environmental Impact in Logistics

► Occupational Health

► Management System

► Occupational Health Initiatives

Responsible Care Policy and Management

▼ Management System

▶ Participating in Industry Association Responsible Care Activities

▶ Responsible Care Audits

▶ Roll Out to Subsidiaries and Affiliates

The Mitsui Chemicals Group has put in place a Responsible Care Policy that outlines the fundamental requirements for its Responsible Care activities.

Guided by this Policy, the Group engages in various Responsible Care activities in such areas as safety and prevention, environmental protection, occupational health, product stewardship, the quality of products and services, and logistics.

Management System

Policy

The Mitsui Chemicals Group has identified certain basic elements of the Responsible Care activities undertaken by the Group in accordance with the Responsible Care Policy. Through its Responsible Care activities, the Company and Group are committed to addressing the expectations and earning the trust of society as well as the local community while also contributing to the sustainable development of the public at large and the chemical industry.

This policy is upheld in the “Philosophy and Policy Relating to Ensuring Safety” of the Mitsui Chemicals Group.

The Responsible Care Policy was formulated based on the philosophy of the Responsible Care Global Charter^{*1} drawn up by the International Council of Chemical Associations (ICCA).

^{*1} Responsible Care Global Charter :

Announced by the ICCA in 2006 to create a common global vision for Responsible Care, the Charter also pays special attention to Sustainability and Product Stewardship while improving the environmental, health and safety activities of chemical companies. Revised in 2014, the Charter has been signed by the CEOs of more than 500 chemical companies

→ Responsible Care® Global Charter 

→ Company Signatories to the 2014 Responsible Care® Global Charter 

Responsible Care Policy

Based on its Corporate Mission and Action Guidelines, the Mitsui Chemicals Group acknowledges that its business challenge is not only to comply with laws and regulations of the countries in which it does business, but also to continuously contribute to the improvement of safety, health, the environment, and quality, for the sustainable development of society. We will expand our business focus while continuing to improve and maintain good communication with all our stakeholders and business partners.

- We pledge that safety is our top priority and will focus on achieving zero accidents and occupational injuries.
- We will assess the risks to people and the environment from our products throughout their lifecycles, while working to ensure the health and safety of all persons and to reduce the environmental impact of those products.
- We will contribute to improve quality of life and protect the environment through our business activities by developing beneficial technologies and products.
- We will provide high-quality products and services that satisfy the needs of our customers and respond to the trust that they place in us.
- We will actively promote the well-being of all our employees.

These Rules shall come into full force as of October 1, 1997.

These Rules as revised shall remain in full force and effective as of September 1, 2015

We also produced guidelines to better ingrain the Responsible Care Policy throughout the Mitsui Chemicals Group. We translated the Responsible Care Policy and guidelines into eight languages, including English, Chinese, Korean and Malay, and sent them to overseas subsidiaries and affiliates.

▶ Responsible Care Policy Guidelines 

In addition, to further expand Responsible Care activities at subsidiaries and affiliates, Mitsui Chemicals drew up (in Japanese, English, and Chinese editions) the Shiodome Manifesto. Based on the articles of the Responsible Care Global Charter, the Manifesto serves as a declaration that promotes the Group's Responsible Care policy and frameworks for subsidiaries and affiliates. The presidents of all Group subsidiaries and affiliates that fall within the scope of Responsible Care support*², as deemed under Company regulations, signed off in acknowledgement of their commitment.

*2 Subsidiaries and affiliates that fall within the scope of Responsible Care support:

Subsidiaries and affiliates that manufacture or handle chemicals (Excluding subsidiaries and affiliates within factory premises where the parent works manager bears the responsibility for Responsible Care implementation.)

► [Responsible Care Shiodome Manifesto](#) 

System and Responsible Officers

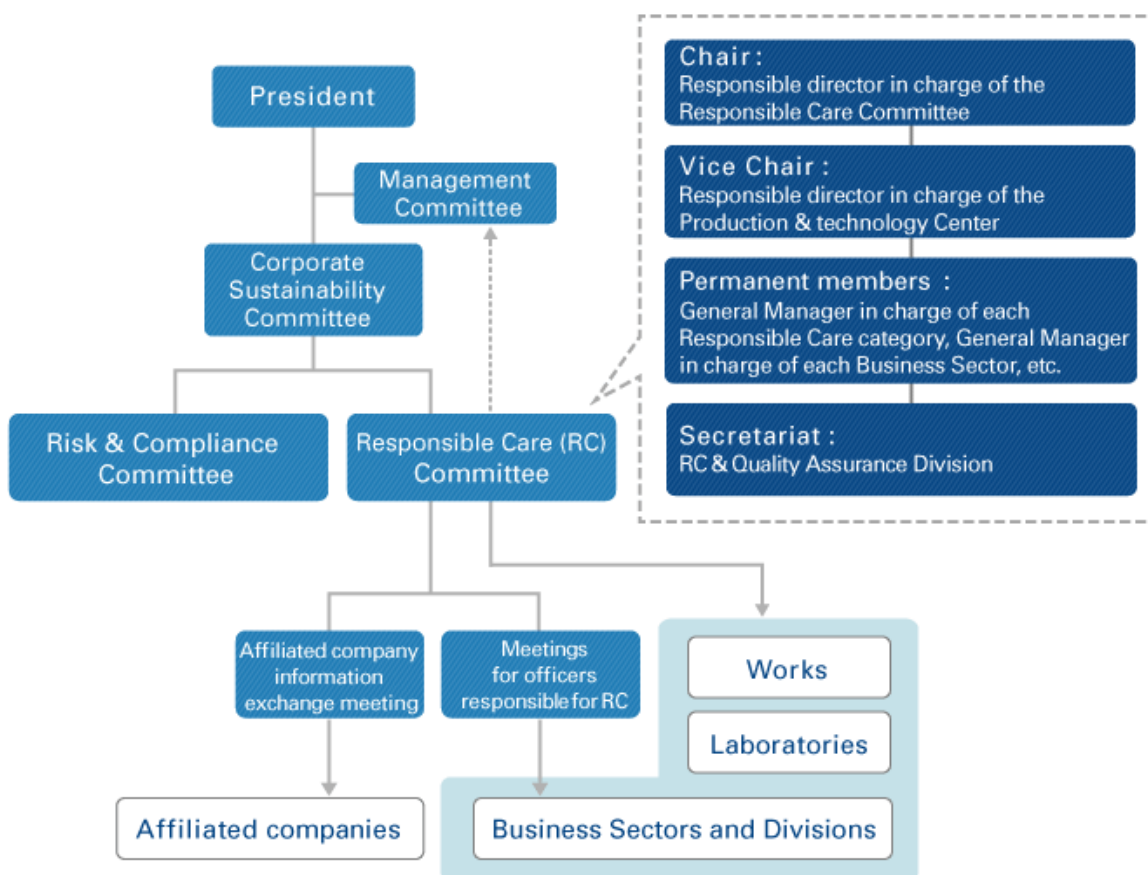
Chaired by the responsible director in charge of the Responsible Care Committee, the Responsible Care Committee convenes three times a year, formulates policies, strategies and plans with regard to Responsible Care activities, conducts performance evaluations and reviews Responsible Care related systems.

The general managers of each division (the general managers from the RC & Quality Assurance Division; Safety and Environment Technology Division; Planning & Coordination Division Production & Technology Center; Logistics Division; and Human Resources Division), who are the Committee's permanent members, report on the Responsible Care activities in their respective jurisdictions at Responsible Care Committee meetings.

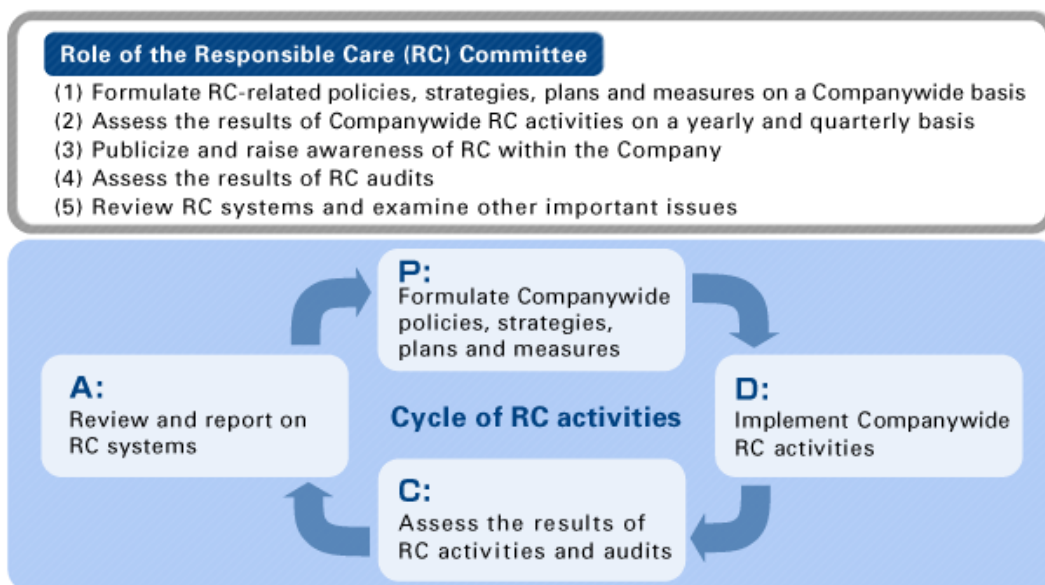
The responsible director in charge of the Responsible Care Committee also bears the responsibility for the deliberations and discussions held at the Committee, and outlines of their content are reported to the Management Committee, thereby ensuring a senior management-level commitment to Responsible Care.

→ Corporate Governance Framework

Responsible Care System Centered on the Responsible Care Committee



Operational Flow of Responsible Care Activities



We constantly exchange information between divisions in charge of Responsible Care and engage in Responsible Care activities that involve the Company as a whole. Regular meetings are held by the representatives of each department on a monthly basis.

We also appoint a member of staff to be in charge of Responsible Care (RC Officer) at each business division and in each department and roll out Responsible Care -related policies and strategies across the Mitsui Chemicals Group as a whole through RC Officer meetings (held twice a year). Based on these policies and strategies, specific Responsible Care activities are carried out by individual departments, including each works and business division.

The Mitsui Chemicals Group as a whole also promotes Responsible Care, including support for specific activities for domestic and overseas affiliated companies as well as departments with various functions. Meetings are also held twice a year with domestic subsidiaries and affiliates to exchange information. Moreover, steps are taken to share policies related to Responsible Care activities as well as activity results. Turning to overseas subsidiaries and affiliates, SHE* meetings are held by region. In addition to sharing policies and strategies relating to Responsible Care, every effort is being made to promote Responsible Care throughout the Group as a whole.

* SHE: Safety, Health, and Environment.

Monitoring Methods

Internal Audits

The implementation status of Responsible Care is evaluated and guided by periodic audits, and the plans for the following fiscal year formulated on the basis of the audit results, which are then reported to the Responsible Care Committee. For more details, please refer to "Responsible Care Audits."

Responsible Care Audits

Reports Sent to Chemical Industry Associations in Each Country

We report the results of our RC activities to each association and are working to maintain the transparency of the chemical industry in the eyes of society.

Report recipients: Japan Chemical Industry Association (JCIA), Association of International Chemical Manufacturers (AICM, China), Singapore Chemical Industry Council (SCIC), Federation of Thai Industries (FTI), and the American Chemistry Council (ACC)

Review and Challenges

We have steadily achieved the items listed as annual targets and are maintaining favorable implementation conditions. In conducting activities from a longer-term perspective in the years ahead, we set various Responsible Care -related environmental and social targets in our 2025 Long-term Business Plan. The Responsible Care Committee discusses Responsible Care activities in connection with these targets.

* For details of specific activities, please refer to the relevant page for each Responsible Care category.

Guide to the Responsible Care Policy

The Mitsui Chemicals Group pursues sustainable business activities while fulfilling its responsibilities to society in line with the ideals advocated in its corporate mission of “Contribute broadly to society by providing high-quality products and services to customers through innovations and the creation of materials, while keeping in harmony with the global environment”.

The mindful actions of officers and personnel of the Mitsui Chemicals Group are important in cultivating the trust and confidence of our stakeholders and society. To realize sustainable development of society and our group while contributing to our stakeholders, we will continue to “act in good faith”, “cherish people and society”, and provide “creative and innovative solutions” in line with our action guidelines.

Responsible care initiatives originated in unique activities of the chemical industry to ensure ongoing improvements in safety, health, and environmental platforms. Although originating in the chemical industry, the principles are universal to all industries.

Responsible care at the Mitsui Chemicals Group is not limited to chemical products and materials. Its ideals cover all aspects of the product lifecycle from development, logistics, use, and disposal. It is the self-implemented management and improvement of measures related to safety, health, the environment, and quality.

In accordance with our corporate philosophy and action guidelines, we will meet the expectations of and fulfill our responsibilities to the community and society by not only complying with rules and regulations but by also contributing to and advancing safety, health, and environmental initiatives as well as bolstering quality for the continued sustainability and growth of society. The Mitsui Chemicals Group recognizes these to be its most important responsibilities to society and will make every effort convey its activities and principles by better communication with stakeholders and corporate entities while expanding its business focus and activities.

◆ **We pledge safety is our top priority and focus on achieving zero accidents and occupational injuries.**

Everyone recalls the April 22, 2012 tragedy at Iwakuni-Ohtake Works where an explosion and fire claimed the life of one of our young employees. This accident resulted in a loss of society's trust toward our company. We all pledged that, "We must never let an accident like this to happen again". To be true to this promise, we have strictly implemented fundamental safety activities. However, the establishment of a safety culture does not happen overnight. We will steadfastly continue our safety efforts, one step at a time, so that we may become a "corporate group with the highest level of safety".

Additionally, the Mitsui Chemicals Group aims for safe and stable operations in the event of natural disasters including earthquakes, tsunamis, and typhoons, by conducting daily response drills and by preparing equipment measures for emergency actions such as emergency shutdowns. These efforts aim to regain the trust of society and "realize an industrial infrastructure that is in harmony with the local communities".

◆ **We make efforts to assess risks of our products throughout their lifecycles to ensure the health and safety of all persons and to protect the environment by reducing their environmental impact.**

Mitsui Chemicals engages in sound chemical substance management as a part of efforts to support the international pledge of the World Summit on Sustainable Development to minimize the negative impact of chemicals on people and the environment by the year 2020. To this end, we have assessed the risk of chemical substances on humans and the environment throughout the product life cycle, and are working to ensure human health and reduce environmental load. We provide assessment results to our stakeholders and contribute to creating a secure society.

◆ **We contribute to improving quality of life and protecting the environment through our business activities by developing beneficial technology and products.**

The Mitsui Chemicals Group aims to contribute to social issues such as a society coexisting in harmony with the environment and "successful aging" where all people can enjoy good health and happiness in an aging society through our business activities. To this end, we are actively developing technology and

products that contribute to improving quality of life and protecting the global environment.

◆ **We provide high quality products and services that satisfy customer needs and respond to the trust that they place in us.**

When providing products and services, we believe it is important to ensure quality from the perspective of the customer and respond to the trust they place in us. Therefore, we make every effort to understand the uses of our products by our customers, and provide products that our customers can use with confidence and satisfaction.

◆ **We actively promote the well-being of all our employees.**

“Employee well-being is directly linked to the company’s well-being.” “Improving the health of our employees is in itself a contribution to society.” With this in mind, the Mitsui Chemicals Group is actively involved in efforts to improve the health of all persons working within the Group. Not only is physical health but also mental health an important issue. To this end, we will support employees in their voluntary efforts to ensure good health and promote the creation of lively work environments.

September 1, 2015

The Mitsui Chemicals Group pursues the fulfillment of its responsibilities to society based on its corporate philosophy to “Contribute broadly to society by providing high-quality products and services to customers through innovations and the creation of materials, while keeping in harmony with the global environment”.

Therefore, to earn the trust of society, the Mitsui Chemicals Group will voluntarily pursue Responsible Care activities which assure protection of the environment, safety, occupational health, and quality throughout the entire lifecycle of a product from its development, manufacture, transport, use, consumption, and final disposal.

As a member of the Mitsui Chemicals Group, I pledge that my company will adhere to the following commitments:

1. Take leadership in promoting Responsible Care activities and cultivate a culture of active participation in Responsible Care activities by all employees.
2. Safeguard people and the environment through continual improvement of the system and performance regarding environmental preservation, process safety, occupational safety and health, chemical safety, quality management, and logistics safety.
3. Implement sound chemical management to aim for higher performance beyond regulatory compliance for chemicals.
4. Aim to further improve safety management by providing logistics partners and product users with product safety information and methods to appropriately handle the products.
5. Continue efforts to secure the confidence of local communities by sharing the results of safe operation performance and information on chemical safety whenever necessary to local municipalities and communities.
6. Contribute to the sustainable growth of the Mitsui Chemicals Group and by extension the sustainable development of society by steadily implementing Responsible Care activities.

Signature _____

Name: 101

Title: SAMPLE

Company: SAMPLE

Date: _____

Responsible Care Policy and Management

► Management System

▼ Participating in Industry Association Responsible Care Activities

► Responsible Care Audits

► Roll Out to Subsidiaries and Affiliates

Participating in Industry Association Responsible Care Activities

The Mitsui Chemicals Group is in the position to promote responsible care activities via each country's chemical industry association.

At the Japan Chemical Industry Association (JCIA), the general manager of the RC & Quality Assurance Division has been a JCIA board member since the 2010 establishment of a Responsible Care Committee and, also since 2010, has worked as a member of the Chemical Management Committee, thereby contributing to the development of responsible care in Japan. In addition, Mitsui Chemicals employees participate as members of exchange meeting working groups in an effort to make contact with JCIA members and, in turn further share best practices for Responsible Care activities. In May 2018, the president of Mitsui Chemicals assumed the chairmanship of the JCIA.

At the International Council of Chemical Associations (ICCA), the Company's president has been a director since 2014, and from 2016 the Company's councilor has included the vice-chairperson of the Responsible Care Leadership Group (RC-LG) and chairman of the Asia-Pacific Responsible Care Organization (APRO). Our employees have also chaired the Joint Capacity Building Task Force of each Leadership Group and the Energy and Climate Change Leadership Group since 2015 and 2018, respectively, and are contributing to the development of international responsible care.

 Participation in Industry Initiatives for Chemicals Management

Responsible Care Policy and Management

▶ Management System

▶ Participating in Industry Association Responsible Care Activities

▼ Responsible Care Audits

▶ Roll Out to Subsidiaries and Affiliates

Responsible Care Audits

We conduct environment & safety (environmental protection, process safety and disaster prevention, occupational safety), occupational health, quality, and chemical safety audits every year, in order to objectively evaluate the effective implementation of Responsible Care activities at our works, business divisions, laboratories as well as subsidiaries and affiliates all over the world, and to provide guidance. Auditors, who are selected after completing specific procedures and include the heads of the Internal Control Division and the RC & Quality Assurance Division as well as industrial physicians, conduct audits focusing primarily on the progress made with respect to key challenges in each department and the level of improvement regarding observations issued following the previous year's audit.

Working with the relevant supervising division, worldwide subsidiaries and affiliates are audited on a regular basis. In addition to ascertaining the current status of Responsible Care activities and providing guidance, audits are also aimed at improving the overall standard of Responsible Care activities throughout the Mitsui Chemicals Group. We make every effort to carry out audits as effectively as possible, and determine the frequency of audits and key criteria carefully, taking into account such factors as the level of environment & safety and quality management at each subsidiary or affiliate.

These audits are conducted in accordance with the Responsible Care Code of the Japan Chemical Industry Association and ISO 9001.

At the parent company, audits encompass business facilities that handle chemical products such as Works and laboratories (quality and chemical safety audits encompass business divisions and offices that ship chemical products). Audits also basically cover companies that fall within the scope of Responsible Care support at subsidiaries and affiliates.

【 Audits Conducted in Fiscal 2017 】

All audits were completed according to the annual plan of fiscal 2017.

Audits were completed regarding environmental & safety and quality at 95% and 92% of all business facilities (respectively) subject to audits during the three-year period from 2015 to 2017. In addition to confirming the proper implementation of Responsible Care activities, proposals were put forward in areas where further improvement was considered possible. Plans are in place to complete audits of the remaining business facilities that fall within the scope of audits during the period from 2018 to 2021. In addition, in fiscal 2017, chemical safety audits were conducted at six business divisions, one office, and two laboratories, while quality audits were conducted at six business divisions.

Status of Third-party Certification and the Implementation of Internal Audits by the Company's Head Office (2015-17)

Country Region	Company	Business Sites	Environment & Safety Occupational Health			Quality	
			Third-party certification		15-17 Results	Third-party certification	15-17 Results
			ISO 14001	OHSAS 18001		ISO 9001	
	Mitsui Chemicals, Inc.	Ichihara Works	○	○	○	○	○
		Mobara Branch Factory	○	○	○	○	○
		Nagoya Works	○		○	○	○
		Osaka Works	○	○	○	○	○
		Iwakuni- Ohtake Works	○	○	○	○	○
		Omuta Works	○	○	○	○	○

Japan		Sodegaura Center			○		* 7
	Kyowa Industrial Co., Ltd.	Head Office (Sugue Factory)			○		—
		Large-Parts Manufacturing Factory			○		—
	Saxin Corporation	Factory	○		○	○	○
	Sun Alloys Co., Ltd.	Factory			○	○	○
	Sun Medical Co., Ltd.	Factory			○	ISO 13485	—
	Sunrex Industry Co., Ltd.	Factory	○		○	○	○
	Shimonoseki Mitsui Chemicals, Inc.	Factory	○		○	○	○
	Japan Composite Co., Ltd.	Shimizu Factory	○		○	○	○
	Toyo Beauty Supply Corporation	Factory			○	○	○
	NIPPON ALUMINUM ALKYLs, LTD.	Osaka Works	○		* 1	○	○
	Prime Polymer Co., Ltd.	Head Office			* 2		○
	Hokkaido Mitsui Chemicals, Inc.	Factory			○	○	○
	Mitsui Chemicals Agro, Inc.	Head Office			* 2		○
	Utsunomiya Chemical Industry Co., Ltd.	Utsunomiya Works			○	○	* 4
		Funaoka Factory			○	○	* 4
		Shinshiro Factory			○	○	* 4
		Tosu Factory			○	○	* 4
	Mitsui Chemicals MC Co., Ltd.	Head Office, Shimizu Factory	○	○	○	○	○
		Kaibara Factory	○		○	○	○
	Mitsui Chemicals Industrial Products, Ltd.	Head Office			* 2		○
		Saitama Office	○		○	○	○
		Otake Office	○	○	* 1	○	○
	Mitsui Chemicals Tohcello, Inc.	Head Office			* 2	○	○
		Katsuta Factory	○		○	○	* 5
		Ibaraki Factory	○		○	○	* 5
		Koga Manufacturing	○		○	○	* 5

		Dept., Ibaraki Works					
		Hamamatsu Factory	○		○	○	* 5
		Anjo Factory	○		○	○	* 5
	Shikoku Tohcello Co., Ltd.	Factory	○		○	○	* 5
	Mitsui Fine Chemicals, Inc.	Head Office			* 2		○
	Mitsui Chemicals & SKC Polyurethanes Inc.	Head Office			* 2		○
		Tokuyama Factory	○		○	○	○
	Yamamoto Chemicals, Inc.	Head Office, Yao Factory	○		○	○	○
		Omuta Works	○		○	○	○
China	Mitsui Chemicals (China) Co., Ltd.	Head Office			* 2		○
		Technical Center			○		* 7
	Tianjin Cosmo Polyurethane Co., Ltd.	Tianjin Works	○		○	○	○
		Suzhou Works	○		○	○	○
	Mitsui Chemicals Nonwovens (Tianjin) Co., Ltd.	Factory			○	○	○
	Shanghai Sinopec Mitsui Elastomers Co., Ltd.	Factory	○		○	○	○
	Mitsui Advanced Composites (Zhongshan) Co., Ltd.	Factory	○		○	○IATF 16949	○
	Zhang Jia Gang Free Trade Zone Mitsui Linkupon Advanced Material, Inc.	Factory	○		○	○QC 080000	○
	Foshan Mitsui Chemicals Polyurethanes Co., Ltd.	Factory			○	○	○
South Korea	KOC Solution CO.,Ltd	Factory			In the planning stage	○	—
	Grand Siam Composites Co., Ltd.	Works	○ISO 50001	○	○	○ISO 16949	○
	Mitsui Hygiene Materials (Thailand) Co., Ltd.	Factory	○ISO 50001	○	○	○	○
	Siam Mitsui PTA Co., Ltd.	Works	○ISO 50001	○	○	○	○
	Siam Tohcello Co., Ltd.	Works	○	○	○	○	* 5
	Thai PET Resin Co., Ltd.	Works	○ISO 50001	○	○	○	○

Southeast Asia	Thai Mitsui Specialty Chemicals Co., Ltd.	Works	○	○	○	○	○
	Cosmo Scientex (M) Sdn. Bhd.	Works	○	○	○	○	○
	MCNS Polyurethanes Malaysia Sdn Bhd	Works	○		○	○	○
	PT. MCNS Polyurethanes Indonesia	Works	○	○ SMK3	○	○	○
	P.T. PETnesia Resindo	Works	○	○	○	○	○
	Mitsui Chemicals Singapore R&D Centre Pte. Ltd.	Laboratory			○		* 7
	Mitsui Elastomers Singapore Pte. Ltd.	Factory	○	○	○	○	○
	Mitsui Phenols Singapore Pte. Ltd.	Factory	○	○	○	○	○
	Prime Evolve Singapore Pte. Ltd.	Factory	○	○	○	○	* 6
	SDC Technologies Asia Pacific, Pte. Ltd.	Factory			In the planning stage	○	In the planning stage
	Mitsui Chemicals India, Pvt. Ltd.	Head Office			* 2		○
	Mitsui Prime Advanced Composites India, Pvt.Ltd.	Factory	○		○	○	○
USA	Mitsui Chemicals America, Inc.	Head Office			* 2		○
	Advanced Composites, Inc.	Ohio Plant	○	○	○	○IATF 16949	○
		Tennessee Plant	○	○	○	○ISO 16949	○
	Advanced Composites Mexicana, S.A. de C.V.	Factory	○ INDUSTRIA LIMPIA		○	○	○
	Anderson Development Company	Factory	○ RC14001		○	○	○
	Image Polymers Company, LLC	Factory	○	○	* 3		○
	SDC Technologies, Inc.	Factory			○	○	○
	Mitsui Prime Advanced Composites do Brasil Indústria e Comércio de Compostos	Factory			○	○	○

	Plásticos S.A.						
Europe	Mitsui Chemicals Europe GmbH	Head Office			* 2		○
	Acomon S.R.L.	Factory	○		In the planning stage	○	○

*1 Included in the audit of Mitsui Chemical parent company works

*2 Does not maintain a manufacturing or other applicable department and therefore falls outside the scope of audit requirements

*3 Located within the place of business of another company and therefore falls outside the scope of audit requirements

*4 Conducted by Mitsui Chemicals Agro, Inc.

*5 Conducted by Mitsui Chemicals Tohcello, Inc.

*6 Conducted by Prime Polymer Co., Ltd.

*7 Falls outside the scope of audit requirements because it is not part of the product shipment process.

* Additions to ○ in the Third-party Certification column indicate that extra certifications have been acquired

Responsible Care Policy and Management

▸ Management System

▸ Participating in Industry Association Responsible Care Activities

▸ Responsible Care Audits

▼ Roll Out to Subsidiaries and Affiliates

Roll Out to Subsidiaries and Affiliates

Mitsui Chemicals is rolling out Responsible Care activities to subsidiaries and affiliates in Japan and overseas as a part of efforts to promote Responsible Care across the Group as a whole.

Global Network and SHE Meetings

Mitsui Chemicals is building an information network across the five regions where its subsidiaries and affiliates operate: China, Asia, Europe, the Americas, and Japan as its center. This network gathers Responsible Care-related information from industry associations located in each region, which after being summarized and analyzed by the head office is shared throughout the Mitsui Chemicals Group.

As part of the Responsible Care activity programs in each region, the Company holds SHE (Safety, Health, and the Environment) meetings that gather together the staff in charge of Responsible Care of various subsidiaries and affiliates. SHE meetings provide opportunities for participants to learn from each other by analyzing process accidents, occupational injuries and other case studies as well as learning best practices.

China

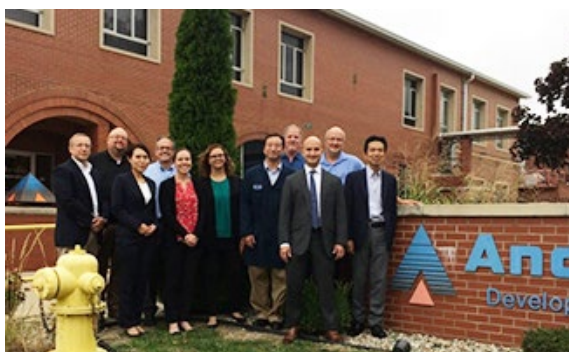
Eight affiliates took part in the SHE meeting held in Chongqing in June 2017 for affiliates in the China region. At this meeting, Sustainable Development Goals (SDGs) were showcased by headquarters, while discussions were held on each company's products/activities and SDG-related topics. In addition, each company introduced and shared with each other its own SHE initiatives.



SHE Meetings

Americas

Six companies from the Americas region participated in the Americas RC Meeting held in Michigan in September 2017. During the meeting, participants shared issues related to chemical regulations, approaches to dealing with them, and other topics. In addition, an explanation was provided on efforts to bring the Long-term Business Plan's environmental and social targets into accordance with Responsible Care policies.



RC meeting in the Americas

Evaluation of the Responsible Care Activities of Affiliates

Overseas subsidiaries and affiliates are also attracting high external praise for their Responsible Care activities.

Thailand

MITSUI HYGIENE MATERIALS (THAILAND) CO., LTD. was awarded the National Safety Performance Award for 2017 by the Thai Department of Labour Protection and Welfare in June 2017.

Indonesia

In December 2017, the Indonesian Ministry of Industry awarded P.T. PETNESIA RESINDO Green Industry Level 5, the highest level of the Green Industry Award, which recognizes companies that engage in environmentally friendly production activities.

Singapore

MITSUI PHENOLS SINGAPORE PTE. LTD. received a special award at bizSAFE Conversation 2018 held in February 2018. bizSAFE is a five-step program that provides support for increasing the WSH* performance of companies in order to achieve dramatic improvements in workplace safety and hygiene standards.

At the Singapore Chemical Industry Council's (SCIC) RC Award 2017 held in March 2018, MITSUI PHENOLS SINGAPORE PTE. LTD. was awarded the Gold Medal in recognition of its successes in the areas of "regional awareness and emergency responses" and "employee health and safety," while also receiving an achievement award for its regulations (codes) related to pollution prevention and process safety. Moreover, seven companies received awards under the SCIC-SCDF Responsible Care Collaboration and Recognition Scheme.

* WSH:
Workplace Safety and Health

China

In June 2017, Mitsui Chemicals was presented the 2017 RC Merit Award by the Association of International Chemical Manufacturers.

Presented biannually to companies with an outstanding track record, this award recognized the Group's extensive ongoing Responsible Care activities as well as its contributions to the sustainable development of the Chinese chemical industry and Chinese society as a whole. In addition to the efforts by Mitsui Chemicals Group companies in China to help local communities and the environment, the Group received high praise for its support to the next generation which includes sponsoring chemical industry design contests for national university students.

Mexico

In June 2017, ADVANCED COMPOSITES MEXICANA S.A. DE C.V. received the Green Industry Certificate from the Aguascalientes State Environmental Protection Agency. This certificate is awarded to companies that develop and steadily implement environmental projection management systems.

Safety and Prevention

▼ Management System

▶ Initiatives to Prevent Major Accidents

▶ Fundamental Safety Initiatives

▶ Major Accidents and Work-related Occupational Injuries

▶ Safety and Prevention Training

▶ Safety and Prevention Drills

Based on our management policy of putting safety is our top priority in everything that we do, we have continued to implement a range of safety activities throughout the Mitsui Chemicals Group. Nevertheless, the explosion and fire occurred at the resorcinol production facility inside our Iwakuni-Ohtake Works in 2012. Reflecting on that incident, we have been implementing a series of measures to prevent major accidents and fundamental safety initiatives to ensure that nothing like that ever happens again.

In fiscal 2017, a fire broke out at the Company's Ichihara Works Mobara Branch Factory. We recognize that there are also many points that apply to the incidence at our Iwakuni-Ohtake Works on which we must reflect. In addition, a fire broke out at our Osaka Works in June 2018. We take this latest incident very seriously and will strive to prevent any future recurrence.

Reaffirming their heartfelt commitment to the pledge that "safety is essential and for the benefit, not only of ourselves, but also our families, colleagues, and society as a whole," while thinking carefully about what they can do to ensure safety, all employees will act appropriately to raise safety levels.

* Please refer here for details of fires that broke out at the Mobara Branch Factory and Osaka Works in July 2017 and June 2018, respectively.

▶ [Fire at Mobara Branch Factory](#) 

▶ [Fire at Osaka Works](#) 

Management System

Policy

In the Responsible Care Policy, we pledge that "safety is our top priority and focus on achieving zero accidents and occupational injuries." In addition, we are working to ensure safety and prevention in accordance with the Company rules on environmental safety management, which set out basic matters concerning safety and prevention (occupational safety as well as process safety and disaster prevention).

System and Responsible Officers

Assigning the president as the Chief and the director in charge of the Production & Technology Center as the person directly responsible, the Safety & Environment Technology Division formulates, disseminates and promotes the safety and prevention strategy. For example, through regularly holding all base meetings, they also collaborate with business divisions, production sites and affiliated companies to ensure safety and prevention.

The Company holds Health and Safety Committee meetings that include the participation of the responsible officers and labor union members for each site. At these meetings, the attendees report on and deliberate issues relating to occupational safety and health, including occupational accidents.

Monitoring Methods

The Safety and Environment Technology Division regularly checks the achievement of the priority issue targets relating to safety and prevention at domestic bases and ascertains the progress made. In addition, the Division collects, consolidates, and analyzes information on the occurrence of any serious accident and information on occupational accidents in the entire Group and shares that information throughout the Group. Every year, safety and prevention audits are carried out at the Company's business sites and at the manufacturing sites of companies eligible for Responsible Care support.

→ Responsible Care Audits

Goals and Results

		FY2017	FY2018	Medium to
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KPI	Scope of Compilation				Long-term	
		Goals	Results	Level Achieved	Goals	Goals
Number of major accidents*1	Mitsui Chemicals Group	0	0	○	0	0 ongoing (FY2025)
Number of abnormal conditions/accidents*2	Mitsui Chemicals Group	Less than 5	6	×	5	—
Frequency rate of work-related significant occupational injuries*3	Mitsui Chemicals Group	Less than 0.15	0.24	×	Less than 0.15	Less than 0.15 (FY2025)

*1 Major accidents:

Accident with a severity level of 18 points or more, as specified by the Japan Petrochemical Industry Association (JPCA) under Center for Chemical Process Safety (CCPS) evaluation procedures.

*2 Abnormal conditions/accidents:

Although under JPCA accident criteria having an intensity level of less than 18 points, conditions/accidents that the Company judges should be monitored under Company standards in consideration of the relevant laws and regulations.

*3 Work-related significant occupational injuries (WSOI):

Occupational accidents and injuries that are directly related to operations and result in days away from work cases or fatality or restricted work, or transfer to other job and medical treatment cases that are caused by a major incident and have the potential to result in fatality or days away from work cases.

Review and Challenges

Although we have achieved our target of zero major accidents for the past few years, six abnormal conditions/accidents occurred in fiscal 2017. With regard to the fire (abnormal condition/accident) that broke out at the Ichihara Works Mobara Branch Factory on July 27, 2017, the Company completed countermeasures planning following analysis of the direct causes and in-depth cause analysis in fiscal 2017.

In comparison with the Japanese all-industry and Japanese chemical WSOI frequency rates, the WSOI frequency rate for the Mitsui Chemicals Group remains high, and the Company has yet to achieve the highest global standard of 0.15 or below.

Based on the above, the Company believes that its long-term tasks include the nurturing of human resources with a high awareness of dangerous situations and the ingraining of a safety culture throughout the Group.

Safety and Prevention

▶ Management System

▼ Initiatives to Prevent Major Accidents

▶ Fundamental Safety Initiatives

▶ Major Accidents and Work-related Occupational Injuries

▶ Safety and Prevention Training

▶ Safety and Prevention Drills

Initiatives to Prevent Major Accidents

Never forgetting the lessons learned from the explosion and fire that broke out at the resorcinol production facility at Mitsui Chemicals' Iwakuni-Ohtake Works on April 22, 2012, we will steadily implement our safety activities and strive to prevent any recurrence.

Top Management's Strong Commitment to Safety and Prevention

On Safety Day and during National Safety Week, the Company president repeatedly conveys to all Mitsui Chemicals Group employees that they follow the management policy of "making safety their top priority in everything they do." The fiscal 2017 results are as follows.

- Instructions to make safety the top priority provided directly to Head Office staff during the opening address (simultaneously broadcast to all domestic sites)
- Broadcasting the President's Safety Day message
- Communicated safety instructions directly to employees at Head Office on Safety Day (simultaneously broadcast to all domestic sites)
- Pledge to make safety the top priority published in Safety Day-related Company newsletters
- Direct safety instructions provided during Works visits (control room, auditorium, etc.)

We are working to ensure active involvement with worksites that includes the vice president and the Center Executive of the Production & Technology Center by conducting tours of each Works and overseas sites.

Thorough Risk Assessments

Learning the lessons from the resorcinol production facility explosion and fire at the Iwakuni-Ohtake Works, Mitsui Chemicals has completed risk assessments related to emergency shutdowns. In addition, the Company has been conducting non-routine risk assessments on a continuous and constructive basis. The Company will continue to undertake thorough risk assessments in the event of non-routine or emergency situations.

Fiscal 2013-14

Based on the inspection procedures established during emergency shutdowns by operating model plants at all Works on a trial basis, the Inspection Group organized at each Works conducted inspections of emergency shutdown procedures at all plants. Finally, Head Office staff conducted follow-ups on the inspection results for each Works.

Fiscal 2014-17

The Company conducted verifications of the assessment methods, for which both "What if *1" and batch HAZOP *2 were utilized, at several model plants. Then, in fiscal 2015, at the Osaka Works and Ichihara Works, we began risk assessments related to the non-routine operation "startup" at all Works and, in fiscal 2016 and again in fiscal 2017, applied those procedures to other Works.

Fiscal 2018 Plan

While conducting risk assessments related to the non-routine operation "startup" at all Works, in fiscal 2018 we will start risk assessments of shutdown operations, beginning with those plants that have completed their non-routine operation "startup" risk assessments.

*1 What-if:

A method for analyzing, from the implementer's ideas, what kind of measures are necessary to avoid cases in which a function intended in a design is lost or cases in which there has been a malfunction and what the equipment and system status would be.

*2 HAZOP:

Hazard and Operability Study. Method of identifying all risks inherent within the Works and systematically evaluating safety measures to ensure that they are adequate.

Measures to Boost Seismic Resistance of Existing High-pressure Gas Facilities

In response to a notification issued by Japan's Ministry of Economy, Trade and Industry in May 2014, the Company has almost finished an assessment of the seismic resistance of its existing high-pressure gas facilities. Based on the results of the assessment, the Company has formulated a repair plan and is systematically undertaking seismic enhancement work.

Fostering HAZOP Leaders

At Mitsui Chemicals, HAZOP has been implemented for safety assessments when installing new facilities as well as when expanding or improving existing facilities, and for the removal of hazards from plants, to prevent accidents.

The role of the HAZOP leader, who is the leader of the analysis, is an important one.

To foster HAZOP leaders at the Company, since fiscal 2013 we have been holding training sessions for manufacturing workplace staff and others for them to learn more about analysis methods and investigation concepts at each Works.

We are also utilizing HAZOP for non-routine risk and will plan to periodically hold these training sessions to foster HAZOP leaders and to improve the level of HAZOP.

Safety Culture Diagnostics

In fiscal 2016, the Mitsui Chemicals Group collaborated with Niigata University and the Graduate School of System Design and Management at Keio University to undertake safety culture diagnostics, which enable the visualization of a workplace's strengths and weaknesses. By repeated in-house discussions on all rank-specific gaps, the diagnostic can also be used as a tool to improve workplace communications.

In fiscal 2017, diagnostics took place at five works operated by two domestic affiliates. Diagnostics are scheduled for the second time at key parent company works from fiscal 2018 onward. There are plans to expand the diagnostics' scope in the case of the domestic affiliates. The Mitsui Chemicals Group acknowledges that these diagnostics are an effective way of fostering a workplace safety culture and will accordingly continue to utilize them.



Briefing at an affiliate (Utsunomiya Chemical)

Status of Undertaking Safety Culture Diagnostics

		Results			Plan	
		~FY2015	FY2016	FY2017	FY2018	FY2019
Mitsui Chemicals, Inc.	Ichihara Works*	●			●	
	Mobara Branch Factory*	●	●			●
	Nagoya Works*	●			●	
	Osaka Works*	●				●
	Iwakuni-Ohtake Works*	●			●	
	Omuta Works*	●				●
Domestic Subsidiaries & Affiliates		● Toyo Beauty Supply Corporation	● Sun Alloys Co., Ltd. ● Sunrex Industry Co., Ltd.	● Mitsui Chemicals & SKC Polyurethanes Inc. Tokuyama Factory ● Utsunomiya Chemical Industry Co., Ltd. Utsunomiya Works, Funaoka Factory, Shinshiro Factory, Tosu Factory	● Shimonoseki Mitsui Chemicals, Inc. ● Yamamoto Chemicals, Inc. Yao Factory, Omuta Works ● Mitsui Chemicals Industrial Products, Ltd. Saitama Office ● Honshu Chemical Industry Co., Ltd. Wakayama Factory	
			● Mitsui			

Overseas Subsidiaries& Affiliates	Hygiene Materials (Thailand) Co., Ltd. ● Mitsui Chemicals Nonwovens (Tianjin) Co., Ltd.			
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* Including subsidiaries and affiliates within factory premises where the parent company works manager bears the responsibility for Responsible Care implementation.

Receipt of Third-party Assessments of Process Safety Capability

On an ongoing basis, the Mitsui Chemicals Group receives process safety capability assessments from the Japan Safety Competency Center. Aimed primarily at manufacturing industries dealing with petroleum and petrochemical products, the assessments cover security from the viewpoint of safety infrastructure and safety culture and enable the visualization of strengths and weaknesses with regard to safety capability by means of numerical values. Through its process safety capability assessments, the Japan Safety Competency Center is aiming to raise the safety level of the Japanese chemical industry, a purpose with which the Company is in full agreement. Following on from the Osaka Works and the Ichihara Works, in April 2018 the Iwakuni-Ohtake Works conducted a self-assessment of its safety capability and then underwent an evaluation by the Japan Safety Competency Center. We will continue to utilize advice from the Japan Safety Competency Center, a third party, in our future safety and process safety activities.



Assessment result report meeting
(Iwakuni-Ohtake Works)

Summary of Results

Safety Infrastructure	① The average assessment level for safety infrastructure significantly exceeds the 3.0 that is said to be the pass level for petrochemical and oil refining companies. As an average, the safety infrastructure management level is extremely high and considered to be the top level in the industry. ② The average level of each of the 10 major items is higher than 3.0, the variation for each item is small, and thus it can be said that the management level is very high. ③ Although most of the assessment items are at level 3.0 or higher, we found several items that we believe to be in need of improvement.
Safety Culture	① The average safety culture assessment level was significantly higher than the 3.0 that is said to be a solid level of safety culture and can thus be considered to be at the top level of the industry. ② The average level of each of the seven major items exceeds 3.0, the variation for each item is small, and thus it can be said that safety culture is at a high level. ③ Currently, memories of the explosion and fire at the resorcinol manufacturing facility in 2012 remain strong. The value judgment of making safety a top priority is shared, from the top management to the frontline operator, based on the determination that an accident should not occur again. Meanwhile, the awareness that six years have passed since the accident continues to take hold. The number of employees who have no direct experience of an accident is increasing, so giving consideration regarding how to continue sharing that value judgment is expected to become necessary in the future.

Safety and Prevention

▸ Management System

▸ Initiatives to Prevent Major Accidents

▼ Fundamental Safety Initiatives

▸ Major Accidents and Work-related Occupational Injuries

▸ Safety and Prevention Training

▸ Safety and Prevention Drills

Fundamental Safety Initiatives

Mitsui Chemicals takes extremely seriously the resorcinol production facility explosion and fire at its Iwakuni-Ohtake Works, which occurred on April 22, 2012. Five years have now elapsed since we started to implement a series of fundamental safety initiatives to thoroughly review and improve the problem areas relevant to ensuring safety and prevention on a companywide safety basis. Various measures that have been developed through many deliberations are incorporated into daily activities and form daily tasks in ongoing activities that entail PDCA cycles. While continuing to prioritize the fundamental safety initiatives to further raise levels of safety, we will continue to advance initiatives in the years ahead. In November and December 2016, we submitted final reports on the Safety Reconstruction Project that we had been conducting at the Iwakuni-Ohtake Works to representatives from the related supervisory government agencies and the members of the Accident Investigation Committee. Having confirmed the results of activities from the project, from fiscal 2017 we have been engaged in new levels of safety activities, in which we have incorporated efforts that had been continued under the fundamental safety initiatives.

Overview of Efforts Aimed at Advancing Fundamental Safety Initiatives

From the beginning of 2013, we built up the fundamental safety initiatives shown in overview in the chart below and conducted them on a Group-wide basis. At the steering committee ^{*1} in fiscal 2017, we discussed the recognition of and response to issues arising from the fire at the Mobara Branch Factory that occurred in July 2017 as well as confirmed the future development of safety culture diagnostics that we are addressing on an ongoing basis.

Points from the Fundamental Safety Initiatives Overview

- Reporting directly to the president, the steering committee deliberates Group-wide issues and sets the direction for activities
- Increasing opportunities for visits to Works by Head Office departments spearheaded by management participation in safety through active dialog
- Guidance from third parties, including external experts, reflected in the operations of Works
- Safety discussions by Works general managers and cross-sectional safety activity inspections by safety advisors ^{*2}
- Enhanced communication through forums such as foreman meetings spearheaded by section managers

^{*1} Steering committee:

In order to make prompt progress with the fundamental safety initiatives, the members shown in the diagram meet to discuss Group-wide issues and set the direction of activities.

^{*2} Safety advisors:

Veteran employees who are involved in improving the overall level of Works safety by entering daily activities and exchanging views.

Overview of Efforts Aimed at Advancing Fundamental Safety Initiatives



Progress with Fundamental Safety Initiatives

Addressing three important challenges and involving the deployment of 11 measures, the fundamental safety initiatives are used to advance concrete efforts throughout the company. Many of the initiatives have been pushed forward to the point where they are now positioned as everyday tasks. In fiscal 2017, we concentrated on activities designed to thoroughly advance the basic matters and activities (the parts enclosed in the red-bordered box below) to overcome weaknesses in the workplace, as seen from the safety culture diagnosis results. In fiscal 2018, while continuing and persistently addressing those activities, we will put plans into effect to strengthen safety management based on the system reviewed following the July 2017 fire at the Mobara Branch Factory.

Fundamental Safety Initiatives Progress Report

Three important challenges, 11 measures		Implementation schedule (fiscal year)					
		13 (2H)	14	15	16	17	18
(1) Allow line managers to focus on and properly manage worksites							
①	Reduce the workload of line managers		On an ongoing basis				
②	Train line managers			On an ongoing basis			
(2) Improve technical skills and ensure skills are passed down (clarify rights & responsibilities)							
③	Train engineering staff with situational awareness			On an ongoing basis			
④	Build safety technology systems			On an ongoing basis		Strengthen	
⑤	Review technical assessment systems and structures		On an ongoing basis			Strengthen	
(3) Ensure safety is the top priority, cultivate professionalism, and give workers a sense of accomplishment							
	Reorganize/boost functions of Safety &			On an			

⑥	Environment Division			ongoing basis			
⑦	Reinforce safety as a top priority(strict adherence to basics, diagnosis)						
⑧	Cultivate and bolster professionalism (Completely update manuals and draft supplementary materials)					On an ongoing basis	
⑨	Improve teamwork and communications within organizations				On an ongoing basis		
⑩	Establish attractive senior positions (Human Resources Committee, etc.)		On an ongoing basis				
⑪	Measures to give workers a sense of accomplishment in safety performance and operations		On an ongoing basis				

Safety and Prevention

▶ Management System

▶ Initiatives to Prevent Major Accidents

▶ Fundamental Safety Initiatives

▼ Major Accidents and Work-related Occupational Injuries

▶ Safety and Prevention Training

▶ Safety and Prevention Drills

Major Accidents and Work-related Occupational Injuries

The Mitsui Chemicals Group positions as KPIs and monitors major accidents, the number of abnormal conditions/accidents as well as the frequency rate of work-related occupational injuries.

Major Accidents and Abnormal Conditions/Accidents

Although the Mitsui Chemicals Group did not suffer a major accident^{*1} in fiscal 2017, the number of abnormal conditions/accidents^{*2} was six, compared with a target of five. Abnormal conditions/accidents are those conditions and accidents that, under our company standards, we judged might lead to a major accident. With regard to these abnormal conditions/accidents, we completed investigations into the causes and the horizontal deployment of preventive measures to all manufacturing sites.

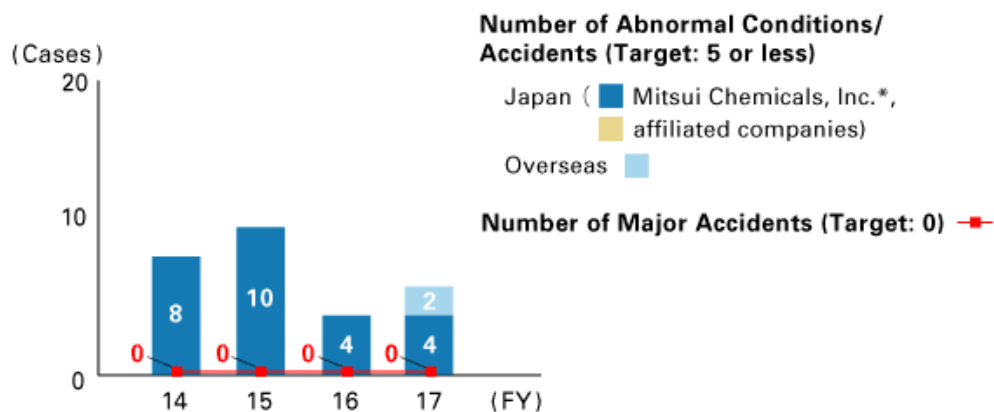
*1 Major Accidents:

Accident with a severity level of 18 points or more, as specified by the Japan Petrochemical Industry Association (JPCA) under Center for Chemical Process Safety (CCPS) evaluation procedures.

*2 Abnormal conditions/accidents:

Although under JPCA accident criteria having a severity level of less than 18 points, conditions/accidents that the Company judges should be monitored under Company standards taking into account the relevant laws and regulations.

Number of Major Accidents and Abnormal Conditions/Accidents



Note: Including subsidiaries and affiliates within factory premises where the parent company works manager bears the responsibility for Responsible Care implementation.

* Scope of data compilation for domestic and overseas affiliates: Affiliated companies eligible for Responsible Care support

Work-related Occupational Injuries

Compared with the Japanese overall industry average and the Japanese chemical industry average, the Company maintains a high level in terms of Days Away from Work Cases (DAFWCs) and, in aiming to achieve the world's highest standards for safety, targets a frequency rate of 0.15 or below with regard to Work-related Significant Occupational Injuries (WSOI)*.

The WSOI frequency rate for the Mitsui Chemicals Group for fiscal 2017 was 0.24, and thus we were unable to achieve the targeted numerical value of the highest global standard for safety of less than 0.15.

Breaking down that value, the WSOI frequency rate for parent company works and other sites worsened to 0.42. Having thoroughly checked the content of the breakdown, we will expand the scope of the data compilation in fiscal 2018.

In contrast, there was a significant improvement in the WSOI frequency rate for domestic and overseas affiliates. In having worked "to eradicate occupational injuries by setting a goal for more thorough adherence to fundamentals at affiliates,"

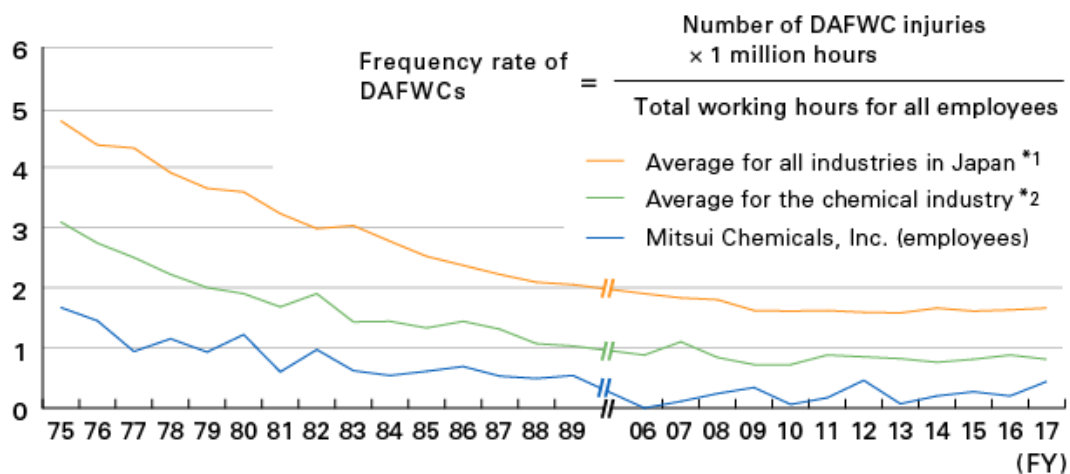
which fell under matters to be implemented in fiscal 2017, it appears that our efforts were effective.

By type of injury, to address the frequent occurrences of occupational injuries caused by falling, we will continue to promote preventive measures based on proactively expanding the Ministry of Health, Labour and Welfare's "Stop! Fall Injury Prevention Project."

* Work-related Significant Occupational Injuries (WSOI) :

Occupational accidents and injuries that are directly related to operations and result in days away from work cases or fatality or, of those resulting in no lost work or only minor injury, occupational accidents in which the cause was serious and there was a risk of death or days away from work.

Comparison of Mitsui Chemicals DAFWCs with All-industry and Chemical Industry DAFWCs



* Frequency rate indicates the frequency of occupational accidents based on the number of individuals killed or injured by occupational accidents per 1 million hours of total working time.

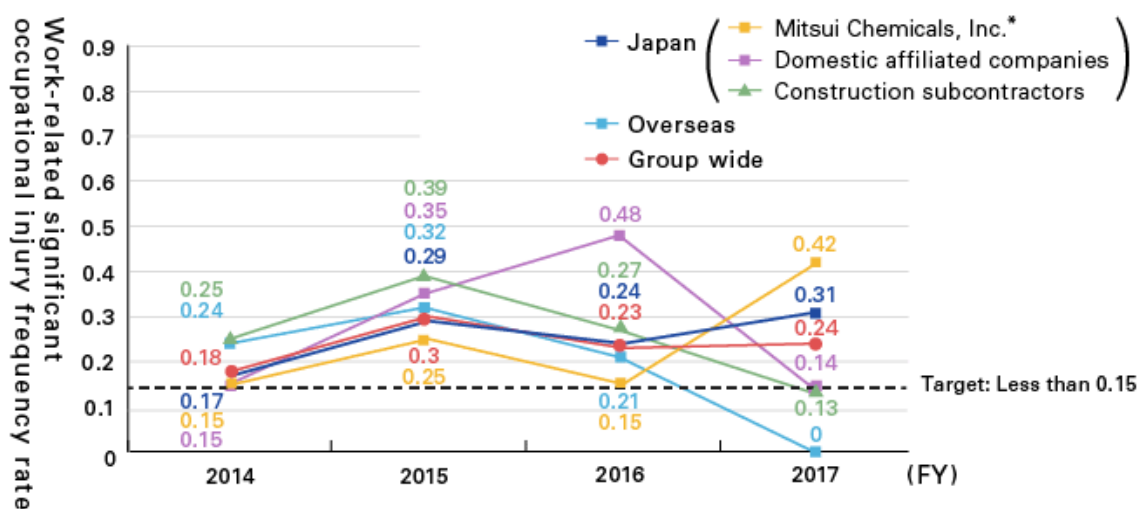
Shows the average DAFWC rates for all industries in Japan and for the Japanese chemical industry. Mitsui Chemicals aggregate data for DAFWC rates up to the second half of fiscal 2012 and work-related significant occupational injuries from the second half of fiscal 2012 onward.

Sources:

*1 Ministry of Health, Labour and Welfare White Paper Fiscal 2017 Survey on Industrial Accidents.

*2 Japan Industrial Safety & Health Association fiscal 2017 safety index.

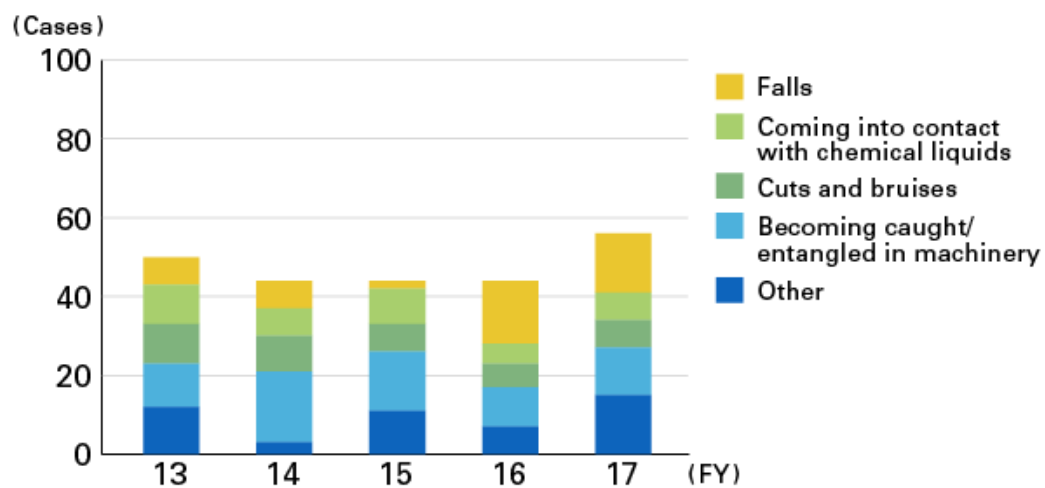
Work-related Significant Occupational Injury Frequency Rate



* Includes contractors operating on site.

Note: Scope of data compilation for domestic and overseas affiliates: Consolidated subsidiaries and affiliated companies eligible for Responsible Care support.

Number of Occupational Injuries Resulting in Zero or More Lost Work Days by Type



* Includes Mitsui Chemicals operations- and construction-related subcontractors

* Scope of data compilation for domestic and overseas affiliates: Consolidated subsidiaries and affiliated companies eligible for Responsible Care support.

Safety and Prevention

▶ Management System

▶ Initiatives to Prevent Major Accidents

▶ Fundamental Safety Initiatives

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▼ Safety and Prevention Training

▶ Safety and Prevention Drills

Safety and Prevention Training

The Mitsui Chemicals Group is implementing various initiatives, including training, toward nurturing human resources with a high awareness of dangerous situations and the ingraining of a safety culture throughout the Group.

Safety Day

To prevent the recurrence of accidents like the April 22, 2012, explosion and fire at the resorcinol production facility at our Iwakuni-Ohtake Works, Mitsui Chemicals has designated April 22 as Safety Day. In fiscal 2018, Safety Day events were held at each production site in Japan and at the Head Office. Continuing on from the previous year, and with the aim of giving the event a greater presence and more of a sense of tension, we simultaneously relayed a live broadcast of the President's moral discourse on safety to a total of six facilities, and all employees reaffirmed their commitment to making safety their top priority in everything they do. Experts from inside and outside Mitsui Chemicals also gave lectures about safety and other related topics at each site.

In fiscal 2018, presentations were given on Safety Day at each production site

Production base	Attending Directors, Head Office General Managers	Simultaneous live broadcast	Speakers		Presentations
Ichihara Works	—	*	Kazuharu Nara	Japan Manned Space Systems Corporation	Five Tips for Increasing Safety by "Nontechnical Skills"
Ichihara Works Mobara Branch Factory (includes the Plant Operation Technology Training Center and Mobara Research & Development Center)	Managing Executive Officer Hiroshi Tsunashima	Undertaken	Takeshi Kusugami	R&D Center, East Japan Railway Company	Let's Try to Think about the "Basic Actions of Administrators and Managers" in Safety Management!
Nagoya Works	—	*	Yasuhiro Sugano	Security Technologies G, Safety & Tourism Engineering Dept., Mitsui Chemicals, Inc.	(Safety Technical Education)
Osaka Works	—	*	Masamitsu Tamura	Professor Emeritus, The University of Tokyo	Toward Safer Chemical Plants – The Fundamentals of Safety and Fostering of Safe Environments
Iwakuni-Ohtake Works	Senior Managing Executive Officer Hideki Matsuo	Undertaken	Masayoshi Nakamura	Specially Appointed Professor, Tokyo	Learning from Major Accidents – Safety

	General Manager Naruyuki Iwanaga			Institute of Technology	Management from Now
Omuta Works	—	Undertaken	Higashi Ito	The Group for Safety Engineering (formerly at Denka Company Limited)	Role-sharing in Voluntary Safety Activities
Sodegaura Center	—	*	Akira Tose	Specially Appointed Associate Professor, Niigata University	Improvement of Laboratory Safety Culture
Hokkaido Mitsui Chemicals	—	Undertaken	Works General Manager Seiji Sasaki	Hokkaido Mitsui Chemicals, Inc.	The History of Accidents at Hokkaido Factories
Shimonoseki Mitsui Chemicals	—	Undertaken	Kozo Murata	Fire and Security Section, General Affairs Department, Yamaguchi Prefecture	High-Pressure Gas Security Administration in Yamaguchi Prefecture
Mitsui Chemicals & SKC Polyurethanes Tokuyama Factory	—	Undertaken	(Broadcast from Iwakuni- Ohtake Works)	(Broadcast from Iwakuni-Ohtake Works)	(Iwakuni- Ohtake Works)
Mitsui Chemicals Head Office	President Tsutomu Tannowa Executive Vice President Masaharu Kubo, and other directors working at Head Office	Undertaken	—	—	(Head Office Event: Looking Back at the Accident)

Notes: The video of President Tannowa's moral discourse on safety at the Head Office safety pledge ceremony was transmitted at a later date.

* As April 22, 2018 was a Sunday, the events were held on April 20.



President Tannowa during his moral discourse on safety at the Head Office safety pledge ceremony

Hazard Prediction (Kiken Yochi, or "KY") as well as Pointing and Calling

At the Mitsui Chemicals Group, we undertake initiatives at parent company works and at domestic and overseas affiliates to entrench and energize hazard prediction (Kiken Yochi, or "KY") and pointing and calling.

At parent company Works, planning, implementing, evaluating and improving each Works leads to a raised level of operations. During the course of these initiatives, as it is important to develop human resources who are able to recognize dangerous things as being dangerous and take safe action to prevent danger, KY education is implemented on an ongoing basis at each Works.

KY trainers are chosen at each Works to perform as drivers of these initiatives, and Companywide meetings held once per fiscal term. At these meetings, KY trainers report on the status of KY initiatives at their Works, and present communications from the Head Office. Sharing information enables KY trainers to reference the information with regard to KY activities at their own Works.

With regard to KY and pointing and calling training for domestic and overseas affiliates, we have provided training support

on an ongoing basis at the Safety & Environment Technology Division. That the significance and necessity of KY and pointing and calling training are understood at all affiliates, assists in their use in actual work situations and is thus helping to lead to their entrenchment.

The training incorporates exercises, presentations and team discussions that are appropriate to actual work situations, looking back on their daily tasks, and raising awareness so that safer actions can be taken. Key men are of particular necessity to entrench KY and pointing and calling, and the Company is encouraging their development through training

KY training sessions

	Training Time per Person/Session hrs/person	Number of Attendees
		FY2017
Mitsui Chemicals, Inc.	3.5	608
Domestic Subsidiaries & Affiliates	3	411
Overseas Subsidiaries & Affiliates	4	122
Total	—	1,141

Near-miss Activities

At each Mitsui Chemicals production site, information on workers' narrowly avoided major accidents or disasters, or "near-misses," that occur as a result of operations, is identified, and the details are shared within the organization. These sharing activities are ongoing. In line with the occupational safety and health management system for each production site, the organization determines the cause of these near misses, as well as preventive measures. Those concerned are provided with the awareness gained, and plans are put into effect that cover both concrete matters, as well as more intangible issues, in the course of operations.

In carrying out these preventive measures, Mitsui Chemicals continues to secure necessary resources. Examples of specific representative measures are as follows.

Ichihara Works

We are extracting high-risk items from the assumed near-miss* cases submitted by worksite employees and implementing activities to examine measures to deal with them. In addition to holding a monthly review meeting of experts selected from within the worksite to consider countermeasures depending on the degree of danger, the participating members of the study meetings serve a leading role in implementing countermeasures and in making them known within the worksite. We also checked the status of maintaining and managing the near-miss countermeasures implemented so far. Through these review meetings, we are trying to ascertain the potential risks from behavioral accidents at our worksite at an early stage and thus prevent them.

* Assumed near-miss:

A case in which each person pictured work procedures or behavior patterns and felt that there was a danger that they would lead to a near-miss. As opposed to a near-miss that was actually experienced.

Small-group Activities

Each Works at Mitsui Chemicals conducts small-group activities that undertake activities in group units of small numbers of people to deal with issues or matters causing concern, such as, in view of the characteristics of a Works, enhancing production workplace capabilities, refining mindsets and human resources development, workplace revitalization and business improvements.

We share the results of the small-group activities throughout a Works by means of presentations, and the honoring of best practices leads to heightened motivation. We are deploying the activities horizontally, such as by making reference to them in workplace activities, and promoting the revitalization of workplaces and Works as a whole as well as a raised level of operations. Typical examples of specific activities are as follows.

Omuta Works

On February 16, 2018, we held presentations of small-group activities at the Omuta Works at which 10 small groups showcased their autonomous initiatives. These presentations remain firmly entrenched as high-quality activities for adopting as themes matters that are causing concern in the workplace and presenting solutions to them. At the presentation we imparted to each workplace best practice cases shared from other workplaces that will lead to activities from next fiscal year onward.



Presentations of small-group activities, Omuta Works

Iwakuni-Ohtake Works

On March 20, 2018, the Iwakuni-Ohtake Works held an event at which 11 teams, selected from a total of 122 teams, gave presentations of small-group activities. With the goals of "human development" and "organizational development," this marked the fourth year of the small-group activities that had been resumed from 2014. Taking up themes that included the reductions in work duties to which consideration is being given at the Iwakuni-Ohtake Works and at other Works, the overall level of activities is rising. It is believed that amassing these results will lead to work style reform and the enhancement of our Works' competitiveness.



Presentations of small-group activities, Iwakuni-Ohtake Works

Nagoya Works

On March 20, 2018, the Nagoya Works held its NEXT activities presentation. For the presentations, 11 teams selected from all 45 teams at the Works reported on activities that focused on improving work productivity. The level of activity is increasing year by year, and next fiscal year we will develop bottom-up activities at all Works that will unite group members around their team leaders.



Presentations of small-group activities, Nagoya Works

Best Plants Awards

The purpose of the Best Plant Award is to revitalize Works by honoring the excellent production sections for their activities related to safety, environment, quality and production technologies. Having started this system in fiscal 2004, since fiscal 2013 Mitsui Chemicals has focused outside the field of safety achievements and the like but also on safety processes and recognized through these awards the successes and hardships of production sections.

In fiscal 2017, 18 applications were submitted from domestic and overseas production sites, one of which was selected for the President's Awards and seven for Production & Technology Center Executive's Awards. The Company's global expansion is advancing due not only to the Mitsui Chemicals parent company but also to award-winning domestic and overseas affiliates.

It should be noted that along with the aforementioned awards, we simultaneously awarded the General Manager of Works' Award and General Managers of Headquarters Award.

Best Plants Awards 2017

President's Award for Best Plant
Petrochemical Materials Section, Manufacturing Dept.-1, Ichihara Works
Production & Technology Center Executive's Award
Utility/Environment Section, Manufacturing Dept., Nagoya Works
Electronic Materials Section, Manufacturing Dept.-2, Osaka Works
Healthcare Section, Fine Chemicals Production Dept., Omuta Works
Saitama Office, Mitsui Chemicals Industrial Products, Ltd.
Shimizu Factory, Japan Composite Co., Ltd.
GRAND SIAM COMPOSITES CO., LTD. (Thailand)
MITSUI PHENOLS SINGAPORE PTE. LTD. (Singapore)



View of President's Award ceremony (Petrochemical Materials Section, Manufacturing Dept.-1, Ichihara Works)

In addition, we toured the outstanding workplaces recognized by the President's Award for Best Plant as well as held an exchange meeting as a means to exchange information. Starting in fiscal 2015, this year marks the third time we have held this event with the aim of enabling employees to gain awareness that is difficult to obtain in their own workplaces and Works, provide opportunities for line managers to share their concerns and encourage each other, and improve the safety culture throughout the Mitsui Chemicals Group.

Held over three days in February 2018, this year's exchange meeting was attended by six line managers and staff. We shared activities and exchanged opinions at THAI PET RESIN CO., LTD., winner of the President's Award for Best Plant for fiscal 2016, and toured the plants of affiliates GRAND SIAM COMPOSITES CO., LTD. and MITSUI HYGIENE MATERIALS

(THAILAND) CO., LTD. that are located in the vicinity.



Exchange meeting (THAI PET RESIN CO., LTD.)

Mitsui Chemicals' Plant Operation Technology Training Center

The Company opened the doors of its Mitsui Chemicals Plant Operation Technology Training Center (located at the Mobara Branch Factory) in October 2006 as a facility for training plant operation personnel. In May 2007, the Company also established the same type of center in Nagoya. Mainly training operators involved with chemicals in Mobara and operators of processing systems in Mobara, the Company is working to enhance its production workplace capabilities. In addition to having expanded its curriculum and the number of employees eligible for training in the more than 10 years that have elapsed since the centers opened, the Company has been taking steps to improve its training programs. The Company also accepts students from overseas affiliates and conducts training in English and Chinese.

In 2010, the Company also set up a hands-on safety training facility at Mitsui Phenols Singapore Pte. Ltd., one of its affiliates in Singapore, where training mainly for employees in the Singapore area is conducted. In 2011, the Company licensed its entire training facility to the Siam Group of Thailand, with which the Company formed a joint venture, the plan being to conduct the training of mainly Thai employees.

In this way, the Company is developing "experience and feeling" training not only in Japan but also overseas and promoting across two groups -the training of employees to excel at all aspects of safety-centered operations and equipment handling while being able to solve problems on their own.

Mitsui Chemicals' Plant Operation Technology Training Center (Mobara and Nagoya) Training Sessions for Mitsui Chemicals Group Employees

Training Category			Training Time per Person/Session hrs/person	Number of Attendees	
				FY2016	FY2017
Mitsui Chemicals, Inc.	For Plant Operators	When joined Company	3~14	102	122
		Follow-up training (six months after joining Company)	28	121	142
		Promoted staff (3-4 years after joining Company)	28	75	80
		Workplace managers (8 years or more after joining Company)	14	53	57
	For Engineers	When joined Company	7~14	21	23
		3-5 years after joining Company	21	10	18
	For Researchers		7~14	109	78
	Others		2~7	113	609
For employees of domestic affiliates			2~25	324	212
For employees of overseas affiliates			14	50	54
Total			—	978	1395

Since fiscal 2015, the experience-based training previously conducted internally at Mobara has been open to individuals from companies outside of the Group. Consequently, we are accepting more than 300 external attendees every year. Leveraging past cases of various types of accidents and problems experienced within the Company, Mitsui Chemicals will continue to actively provide experience-based, safety-focused training curriculums to companies and individuals outside the Mitsui Chemicals Group as a means to contribute to the development of human resources for production worksites throughout the industrial world.

Track Record of Mitsui Chemicals' Plant Operation Technology Training Center External Training Sessions (Mobara)/Responses to Plant Tour Requests (Mobara and Nagoya)

	FY2016	FY2017
Number of Training Attendees	388	344
Number of Plant Visitors	643	695

→ Mitsui Chemicals' Plant Operation Technology Training Center



Mitsui Chemicals' Plant Operation Technology Training Centers (Mobara and Nagoya)

Safety and Prevention

▸ Management System

▸ Initiatives to Prevent Major Accidents

▸ Fundamental Safety Initiatives

▸ Major Accidents and Work-related Occupational Injuries

▸ Safety and Prevention Training

▼ Safety and Prevention Drills

Safety and Prevention Drills

At Mitsui Chemicals, we hold evacuation drills and emergency shutdown drills in the event of a major earthquake or tsunami. We also hold various disaster drills that include emergency activities such as firefighting, emergency call-outs and reporting as part of measures to respond to emergencies at Works. Going forward, we will conduct various drills in a systematic, ongoing manner in tandem with relevant government agencies and local communities.

Process Safety and Disaster Prevention Drills

At Mitsui Chemicals, we are continually improving our in-house disaster prevention capabilities. In addition to conducting disaster prevention drills, including emergency activities such as firefighting, emergency call-outs and reporting, we also carry out joint drills with municipal fire and police departments, validate emergency responses and take steps to improve any shortcomings. We formulate site-specific plans for each Works every year and conduct drills designed specifically for the operations carried out at each of our sites. We also organize full-scale comprehensive disaster prevention drills on a regular basis at each of our Works, including joint training with municipal fire departments and volunteer firefighting units, and training involving the local police. We work with municipal fire departments and nearby companies to organize joint disaster prevention drills as a form of reciprocal training between companies. We introduce some examples of the drills below.

Ichihara Works

Based on the scenario of the leakage and ignition of flammable liquid from equipment at night when the Works were closed, we jointly implemented a Works comprehensive disaster prevention drill in conjunction with the volunteer firefighting organization and municipal fire service as well as the joint firefighting units from neighboring companies. We confirmed that disaster prevention operations could be reliably carried out in cooperation with each disaster prevention organization even at night when the Works are closed.



Disaster prevention activity with a chemical disaster prevention vehicle (Ichihara Works)



Firefighting activity (Mobara Branch Factory)

Ichihara Works Mobara Branch Factory

Based on the scenario that an abnormal reaction between hazardous materials in a tank had caused a fire, we implemented a Works comprehensive disaster prevention drill in cooperation with the municipal fire service. In the training, we confirmed the initial response system at the time the disaster occurred and the roles of each group and each person.



Stacking of sandbags to prevent leakage of material (Nagoya Works)

Nagoya Works

Based on the scenario that a major earthquake, such as along the Tokai/Nankai Trough, has occurred, we implemented a Works comprehensive disaster prevention drill with the aim of preventing more widespread damage should an accident occur. In training, we also conducted a ShakeOut drill that helps to ensure personal safety when an earthquake strikes and confirmed that all employees were able to act promptly and properly.



Firefighting activity (Osaka Works)

Osaka Works

Timed to coincide with a comprehensive disaster prevention drill organized by the Sakai-Senboku Rinkai Special Disaster Prevention District Council, we jointly

implemented a Works comprehensive disaster prevention drill with administrative organs, such as Osaka Prefecture and the Sakai City Fire Department, and all the Council-affiliated companies. The drill was based on the scenario that flammable liquid had leaked from equipment and ignited. During the drill, in addition to disaster response training, we also conducted training in cooperation with the relevant administrative bodies and neighboring companies.

Iwakuni-Ohtake Works

Based on the weekday daytime scenario that the gas detection system installed at the plant the plant has been activated and that the high-pressure gas that has leaked from the mounting flange of a safety valve installed on a pipe has been ignited by static electricity, we jointly implemented a Works comprehensive disaster prevention drill with the municipal fire service. We are working to enhance our disaster prevention capabilities by repeating training in a number of areas, including emergency equipment shutdowns and the bringing of disaster situations under control.



Firefighting activity
(Iwakuni-Ohtake Works)



Giving instructions at on-site command post (Omuta Works)

Omuta Works

Based on the scenario of the leakage and ignition of flammable liquid from a new plant, we jointly implemented a Works comprehensive disaster prevention drill with the municipal fire service. During the drill, which was also observed by police officers and officials from the municipal disaster prevention office, we verified methods for relaying information for the evacuation and guidance of local residents as well as cooperation with the relevant administrative bodies, from activities such as providing information to responses to a series of disasters.

Earthquake and Tsunami Drills

At Mitsui Chemicals, we conduct various drills to ensure that all staff are better prepared in the event of a major earthquake or tsunami, which are assumed in every site's region. These include emergency shutdown drills and evacuation drills to evacuation areas. The following are a few select examples of the drills conducted at each production site.

Ichihara Works

Based on the scenario that an earthquake has struck and a massive tsunami warning has been issued for Tokyo Bay, we conducted rule-based emergency plant shutdown drills as well as evacuation drills. Approximately 2,600 Company employees and employees from subcontractors took part in the drill. We confirmed the location of and routes to evacuation areas as well as the procedures for confirming the safety of employees at the evacuation area, and verified the criteria with regard to evacuations. By repeatedly undertaking evacuation drills, we are working to reduce the time needed to safely complete an evacuation.



A drill to confirm the safety of personnel
at a tsunami evacuation area
(Ichihara Works)

Osaka Works

In conjunction with the Osaka 8.8 Million Drill organized by Osaka Prefecture, Osaka Works conducts evacuation drills covering the initial response at the time a tsunami warning associated with a Nankai Trough Earthquake is issued and evacuation to the tsunami evacuation area. In addition to conducting skills training on initial response for when an earthquake occurs and on evacuation methods, we are working to raise disaster prevention awareness, conduct the verification of training and improve earthquake and tsunami measures.



A drill to confirm the safety of personnel
at an earthquake evacuation area
(Osaka Works)

Omuta Works

Based on the Company's High-Pressure Gas Hazard Prevention Rules, we conducted evacuation drills using a scenario in which high-pressure gas had leaked when an earthquake had struck. At each workplace, we selected an emergency evacuation route and a designated evacuation area according to the situation at the time of the earthquake while conducting the training with a sense of realism.



Drill simulating an evacuation following
an earthquake (Omuta Works)

Iwakuni-Ohtake Works' Self-defense Disaster Prevention System Receives Fire and Disaster Management Agency Director's Award (Encouragement Award)

The Iwakuni-Ohtake Works' self-defense disaster prevention system received a Fire and Disaster Management Agency Director's award (Encouragement Award) at the Fiscal 2017 Skill Contest of Self-defense Disaster Protection Systems for Petrochemical Complexes, etc. organized by the Fire and Disaster Management Agency of the Ministry of Internal Affairs and Communications. This contest, which was first launched in fiscal 2014 with the aim of enhancing skills and morale, pits large-scale chemical plant elevated water cannon and foam concentrate transporter crews against each other in a number of operations, such as their safety management and the standard of their firefighting vehicles and equipment.

Judging the Iwakuni-Ohtake Works' self-defense disaster prevention crew on its fire control technique and discipline, this award marked the fourth year in a row since the contest started that the crew had received an award. Accumulating experience from daily training that will lead to improved disaster prevention techniques in the years to come, we will unite in striving for safer and more stable Works operations.



Self-defense disaster prevention crew



A general view of the skill contest

Environmental Protection

▼ Management System ▶ Climate Change ▶ Industrial Waste ▶ Substances Subject to the PRTR Act

▶ Air ▶ Water ▶ Biodiversity ▶ Environmental Accounting ▶ INPUT⇒OUTPUT

▶ Environmental Compliance

As an entity that develops, manufactures and markets chemicals, the Mitsui Chemicals Group acts to protect the environment in two ways: by reducing the environmental impact of our business activities and by appropriately managing chemical substances.

Specific initiatives include preventing climate change, reducing the volume of industrial waste sent to final disposal (landfill) by the 3Rs (Reduce, Reuse, Recycle), and reducing the environmental impact of substances subject to the PRTR Act and volatile organic compounds (VOCs). We also publish environmental accounting figures and run eco-efficiency assessments in relation to our environmental impact and economic activities, in an effort to ascertain the impact of our activities and pave the way for sustainable development.

Management System

Policy

Our Responsible Care Policy states that we make efforts to assess the risks of our products throughout their lifecycles in order to ensure the health and safety of all persons and to protect the environment by reducing their environmental impact. We have also established a basic Environment Protection policy, and continue to promote environmental protection in line with internal regulations for the management of the environment and safety.

System and Responsible Officers

Assigning the president as the Chief and the director in charge of the Production & Technology Center as the person directly responsible, the Production & Technology Center Planning & Coordination Division and the Safety & Environment Technology Division formulates, disseminates and promotes the environmental protection strategy. In addition, they also collaborate with business divisions, production sites and affiliated companies to promote environmental protection.

Monitoring Methods

The Planning & Coordination Division in the Production & Technology Center and the Safety & Environmental Technology Division regularly check to confirm progress in meeting priority goals for environmental protection at domestic sites. Data related to the protection of the environment, including for GHG emissions, are collected once a year, with the results of analysis shared throughout the Group.

We also conduct environmental impact audits on an annual basis at the manufacturing facilities of companies eligible for Responsible Care support and the parent company itself.

Responsible Care Audits

Goals and Results

Climate Change

KPI	Scope of Compilation	FY2017			FY2018	Medium to Long-term
		Goals	Results	Level Achieved	Goals	Goals
GHG emissions* ¹ reduction rate (Compared with FY2005)	Japan	—	24.5%	—	—	25.4% or more (FY2030)
Reduction of GHG emissions* ¹ (Compared with the previous fiscal year)	Japan	57,000t or more	78,000t	○	150,000t or more	—
Per-unit energy						

consumption average reduction rate over five years	Mitsui Chemicals, Inc.	1% or more	0.9%	×	1% or more*2	1% or more (FY2025)
Per-unit energy consumption average reduction rate, using FY2009 as a base	Mitsui Chemicals, Inc.	—	92.3%	—	Annual average of 1%*2 or more	—

*1 Emission and reduction volume at full capacity, which is different than what is shown in the graph on the "Climate Change" page.

*2 Goal is to achieve either target

Substances Subject to the PRTR Act

KPI	Scope of Compilation	FY2017			FY2018	Medium to Long-term
		Goals	Results	Level Achieved	Goals	Goals
Volume of reduction in Substances Subject to the PRTR Act (Compared with FY2015)	Mitsui Chemicals, Inc.	200t or more	328t	○	—	—
Emission of substances subject to the PRTR Act	Mitsui Chemicals, Inc.	—	766t	—	700t or less	Measures aimed at achieving 450t or less in FY2020

Industrial Waste

KPI	Scope of Compilation	FY2017			FY2018	Medium to Long-term
		Goals	Results	Level Achieved	Goals	Goals
Landfill disposal rate for industrial waste	Japan	1% or less	0.3%	○	1% or less	1% or less
Landfill disposal rate for industrial waste	Overseas	1% or less	0.3%	○	1% or less	1% or less

Air

KPI	Scope of Compilation	FY2017			FY2018	Medium to Long-term
		Goals	Results	Level Achieved	Goals	Goals
Volatile Organic Compound (VOC) emissions	Mitsui Chemicals, Inc.	3,000t or less	1,574t	○	3,000t or less	Consider plans for further reductions

General measures to preserve the environment notwithstanding the above

KPI	Scope of Compilation	FY2017			FY2018	Medium to Long-term
		Goals	Results	Level Achieved	Goals	Goals
Number of environment-related accidents	Mitsui Chemicals Group	0	0	○	0	0
Number of violations to environmental laws	Mitsui Chemicals	0	0	○	0	0

and regulations	Group					
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Review and Challenges

We are showing steady progress in the achievement of our annual targets, including for environment-related accidents and violations to environmental laws and regulations. We will continue to promote voluntary measures aimed at reducing the use environmentally hazardous materials, including substances subject to the PRTR Act, and will continue to act in accordance with revisions to environmental laws and regulations moving forward.

Our 2025 Long-term Business Plan environmental and social targets focus on "maximize products and services to achieve a low carbon, recycling-oriented, and cohesive society in harmony with the environment" with the GHG emissions reduction rate and five-year average energy consumption reduction rate as key performance indicators (KPIs). Our goal for the Group as a whole is to make more effective use of resources in order to reduce the emission of GHG and environmentally hazardous materials.

Environmental Protection

▶ Management System ▼ Climate Change ▶ Industrial Waste ▶ Substances Subject to the PRTR Act

▶ Air ▶ Water ▶ Biodiversity ▶ Environmental Accounting ▶ INPUT⇒OUTPUT

▶ Environmental Compliance

Climate Change

Wide-ranging social problems caused by global warming have come to the fore recently, including larger-scale natural disasters such as typhoons, floods, and droughts, increasing negative effects on the agricultural and fishing industries from changes in ecosystems, greater health hazards mainly in the form of heat stroke during heat waves. The World Economic Forum (Davos Meeting) identified environmental risks such as "abnormal weather," "natural disasters," and "failure of climate-change mitigation and adaptation," while the Paris Agreement and U.N.'s sustainability development goals (SDGs) call upon countries and companies to take measures to combat climate change going forward. The Mitsui Chemicals Group intends to make a proactive contribution to addressing climate change both in terms of mitigation and adaption as a diversified chemicals company.

The Mitsui Chemicals Group's Climate Change Measures

Mitigation	Reduce GHG emissions in-house and across value chains Raw materials: Use non-edible biological raw materials Manufacturing: Use high-performance catalysts in manufacturing processes; introduce energy conservation technologies Processing: Provide energy conservation materials for customer processing stage Usage: Extend end product life spans; improve energy conservation during product use Disposal: Provide materials that are recyclable and produce minimal waste ⇒ Environmental Contribution Value, Blue Value™
Adaption	- Provide products that help treat malaria and other infectious diseases ⇒ Mitsui Chemicals Agro, Inc.  ⇒ QOL Improvement Contribution Value, Rose Value™ - Provide emergency supplies for disasters ⇒ Mitsui Chemicals Industrial Products, Ltd. 

▶ Climate change-related information(CDP) (Excel File : 1.2MB) 

▶ Climate Change-related Verification Statement(PDF : 124KB) 

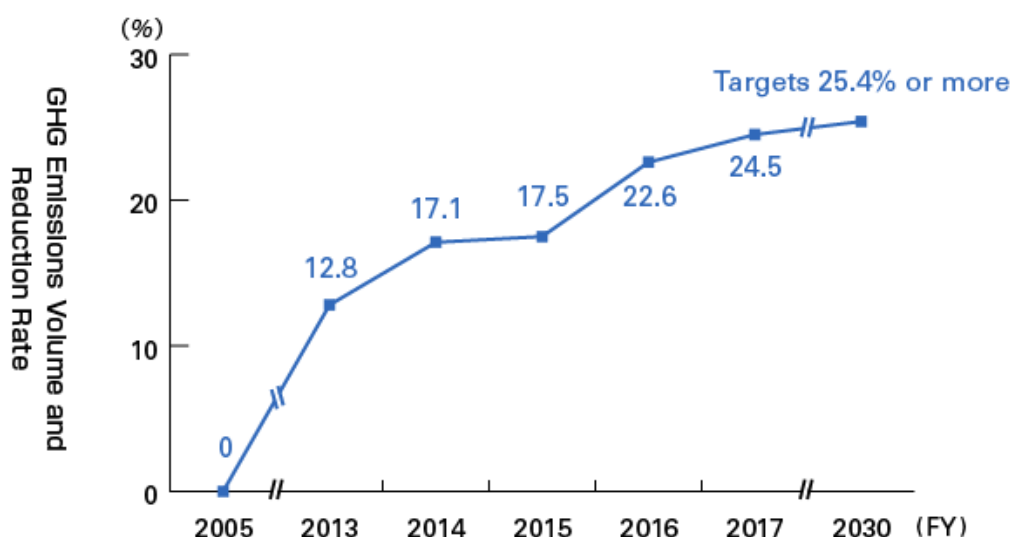
GHG Emissions and Energy Consumption

In fiscal 2016, the Mitsui Chemicals Group set itself the long-term target of reducing domestic greenhouse gas (GHG) emissions by 25.4% by fiscal 2030 (compared with fiscal 2005, operating at full capacity). To this end, we are working to realize a low-carbon society by actively promoting energy conservation, switching to alternative fuels, and creating innovative processes.

In fiscal 2017, the Company has set the goal of reducing NF₃ (nitrogen trifluoride)—which falls under the reporting scope of the Act on Promotion of Global Warming Countermeasures from fiscal 2015—by over 57,000 tons (compared with fiscal 2016; operating at full capacity) through energy savings and switching to alternative fuels undertaken independently. However, we achieved a reduction of 78,000 tons by thoroughly reducing factory energy use, including enhancing exhaust heat recovery and improving the efficiency of refining processes.

As a result, our GHG emissions reduction rate (operating at full capacity) reached 24.5% (23% in the case that NF₃ emissions are initially included) compared with fiscal 2005.

GHG Emissions Volume and Reduction Rate (compared with fiscal 2005, operating at full capacity) (Japan)

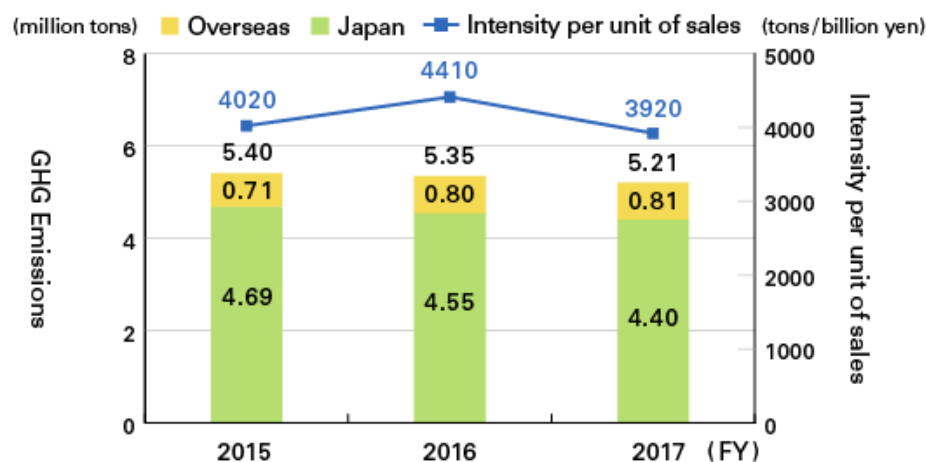


* Scope of affiliates: Domestic consolidated subsidiaries

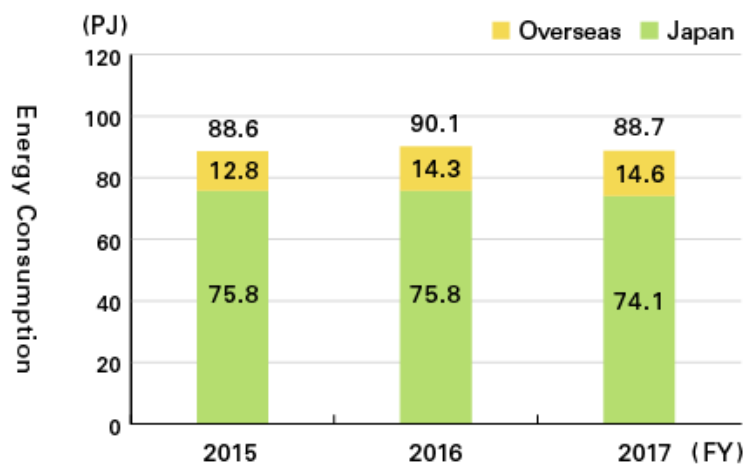
The Mitsui Chemicals Group reduced GHG emissions in fiscal 2017 by 140,000 tons compared with fiscal 2016. The Group targets a five-year per-unit energy consumption rate of over 1% under the 2025 Long-term Business Plan, reaching 0.9% in fiscal 2017. Looking ahead, while targeting a five-year average reduction rate of over 1%, in fiscal 2018 we aim to either reach a five-year average reduction rate of over 1% or the average per-unit reduction rate of over 1% per year using fiscal 2009 as the base year. This is because of the difficulties involved in evaluating long-term reduction efforts based on a five-year reduction rate.

In addition, we calculate GHG emissions regarding Scope 1 and 2 emissions generated from in-house operations and production activities as well as Scope 3 for indirect emissions in order to identify GHG emissions throughout the entire supply chain, extending from purchasing raw materials to customer use and disposal.

GHG Emissions



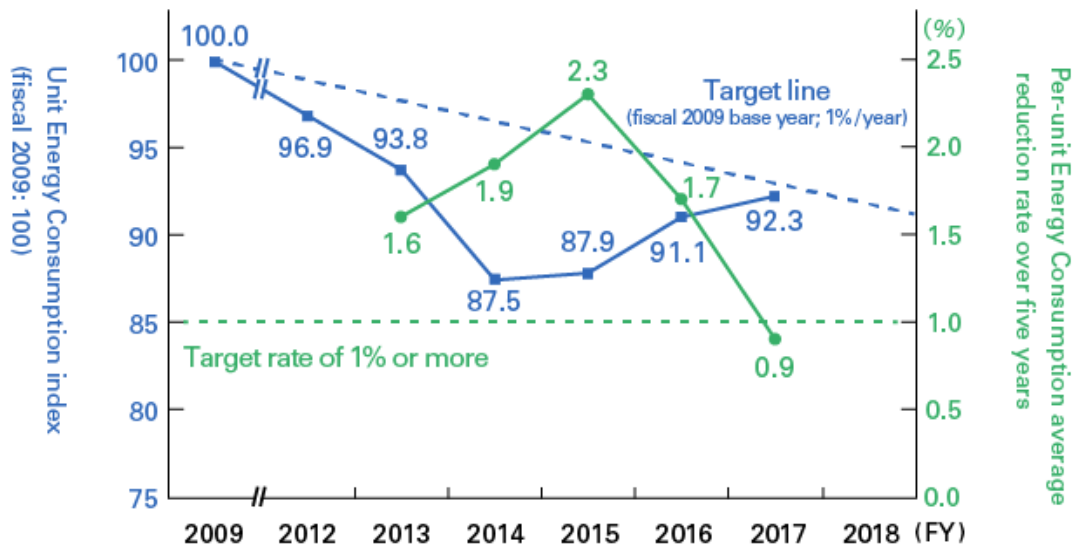
Energy Consumption



* Scope of Japan and overseas affiliates: Consolidated subsidiaries

- * GHG emissions calculated in accordance with Japan's Law Concerning the Promotion of Measures to Cope with Global Warming based on energy consumption figures for overseas consolidated subsidiaries.
- * The gases used to calculate GHG emissions are CO₂, CH₄, N₂O, HFC, PFC, SF₆ and NF₃.

Per-unit Energy Consumption (Mitsui Chemicals, Inc.)



* Per-unit energy consumption denominator is ethylene conversion production volume.

Scope 3 CO₂ Emissions (Mitsui Chemicals, Inc. Fiscal 2016)

Grouping	Category	Emissions (Thousands of tons CO ₂ eq / year)
1	Purchased goods and services	3,230
2	Capital goods	70
3	Fuel- and energy-related activities (not included in Scope 1, 2)	210
4	Transportation / distribution (upstream)	60
5	Waste generated from operations	30
6	Business travel	5
7	Employee commuting	7
8	Leased assets (upstream)	1
11	Sold product specifications	3,580
12	Sold product disposals	2,430
15	Investment	1,090

【Calculation Method】

Basic Guidelines for Calculating Greenhouse Gas Emissions Via Supply Chains (Ver. 2.3), Ministry of the Environment and Ministry of Economy, Trade and Industry

Based on the Basic Guidelines for Calculating Greenhouse Gas Emissions Via Supply Chains (Ver. 2.4) published by the Ministry of the Environment and Ministry of Economy, Trade and Industry, we used emission factors provided by IDEA and the Act on Promotion of Global Warming Countermeasures calculation/reporting/disclosure system, and emission units formulated by the Ministry of Environment.

Status of CO₂ Fixation Technologies

Mitsui Chemicals took part in the CO₂ fixation project launched by the Research Institute of Innovative Technology for the Earth (RITE) and has continued with the development of catalysts that will synthesize methanol from CO₂ and hydrogen. Having constructed a pilot plant inside its Osaka Works in 2009, Mitsui Chemicals commenced operations toward the commercial application of methanol synthesis technologies that utilize as feedstock the CO₂ contained in exhaust gases. As a result of a variety of verification tests, we were able to verify and confirm that methanol can be synthesized from CO₂ and hydrogen in 2010.

Since then, we have also been able to examine a variety of business models, including whether a manufacturing plant would be good as a source of CO₂, or good as a source of hydrogen, or whether locations with an abundance of natural energy would be better. The current status is that we are continuing our investigations to improve commercialization accuracy, but the securing of hydrogen supplies is presenting a major hurdle. We are looking into biomass-derived hydrogen to overcome this problem.

Mr. Tsutomu Tannowa
President & CEO
Mitsui Chemicals, Inc.

Objective

SGS Japan Inc. (hereinafter referred to as "SGS") was commissioned by Mitsui Chemicals Inc. (hereinafter referred to as "the Organization") to conduct independent verification based on criteria of verification (ISO14064-3:2006 and the SGS verification protocol) regarding the data prepared by the Organization on performance data of GHG emissions (hereinafter referred to as "the assertion"). The objective of this verification is to confirm that the assertion in the Organization's applicable scope has been correctly calculated and reported in the assertion in conformance with the criteria, and to express our views as a third party.

Scope

The scope of verification is limited to Scope 1 and 2 at the 6 domestic works and Scope 3 at the whole domestic sites (Head office, 3 branches, 7 works, and 1 R&D center) which have been defined by the Organization.

The period subject to report is from April 1, 2016 to March 31, 2017 for Scope 1 and 2 (CO₂ emissions from energy consumption), and from April 1, 2015 to March 31, 2016 for Scope 3 (Category1: Purchased Goods and Services, excluding services (intangible products)).

Procedure of Verification

The assertion was verified in accordance with criteria of verification, and the following processes were implemented at a limited level of assurance:

- Verification of the calculation system: interviews on the measurement, tabulation, calculation and reporting methods employed by the Organization as well as review of related documents and records
- Verification of the assertion: On-site verification, review of calculation systems and match of evidences at the Ichikawa works and the Osaka works, and analytical procedures and interviews carried out at all sites included in the scope of verification at the Head Office.

The criteria for this review is based on the following documents.

- Act on the Rational Use of Energy
- GHG Emissions Calculation and Reporting Manual Ver.4.2
- Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain, Ver. 2.2 and the Database of emissions unit values on the same Accounting Ver. 2.3
- Protocol specified by the Organization

Conclusion

Within the scope of the verification activities employing the methodologies mentioned above, nothing has come to our attention that caused us to believe that the Organization's assertion was not calculated and reported in conformance with the criteria.

SGS Japan Inc. affirms our independence from the organization, being free from bias and conflicts of interest with the organization.

For and on behalf of SGS Japan Inc
Senior Executive & Business Manager
Certification and Business Enhancement

Yuji Takeuchi

Signed:



Environmental Protection

▸ Management System ▸ Climate Change ▾ Industrial Waste ▸ Substances Subject to the PRTR Act

▸ Air ▸ Water ▸ Biodiversity ▸ Environmental Accounting ▸ INPUT⇒OUTPUT

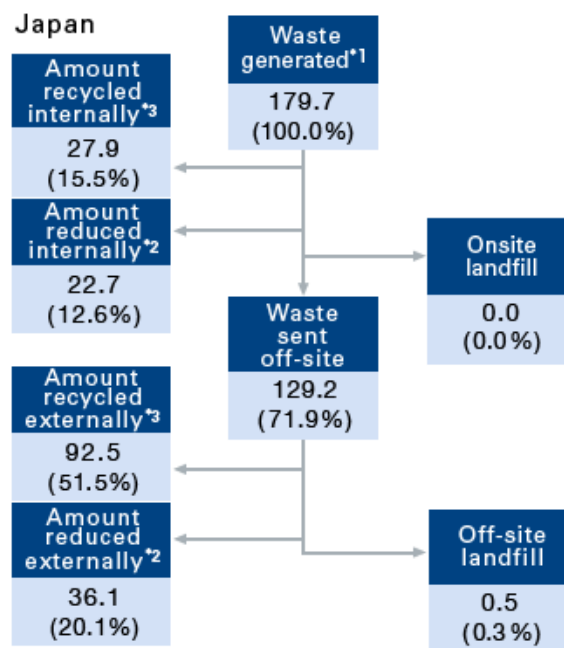
▸ Environmental Compliance

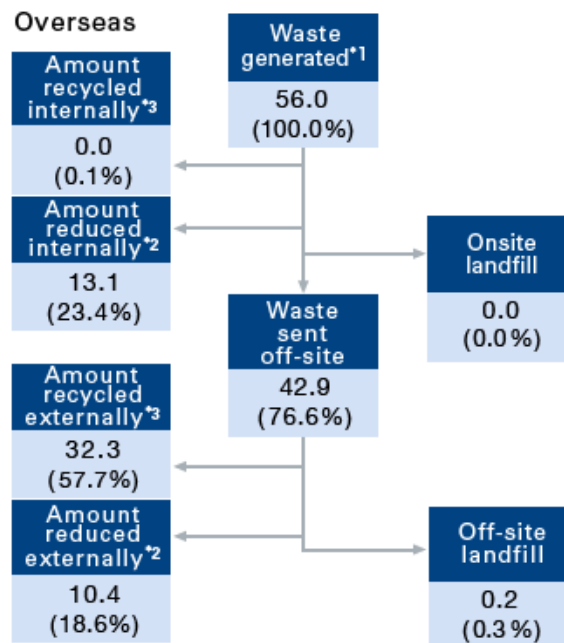
Industrial Waste

The Mitsui Chemicals Group aims to minimize industrial waste at domestic production sites and overseas affiliates, aiming to minimize the landfill disposal rate for industrial waste at 1% or less.

The Group was again successful at minimizing industrial waste at all domestic production sites including domestic affiliated companies in fiscal 2017 and has continued to minimize industrial waste for seven consecutive years since fiscal 2011. With a landfill disposal rate for industrial waste at our overseas affiliates of approximately 0.3%, we have now maintained a rate of 1% or less for nine straight years since fiscal 2009. In spite of the numerous challenges that we need to overcome to promote minimization at our overseas sites, including waste treatment regulations and industrial structures varying from one country to another, we are nonetheless committed to reducing and recycling waste at all of our companies in order to conserve resources. We will continue to work as a group to reduce final landfill waste.

Industrial waste treatment process (FY2017)

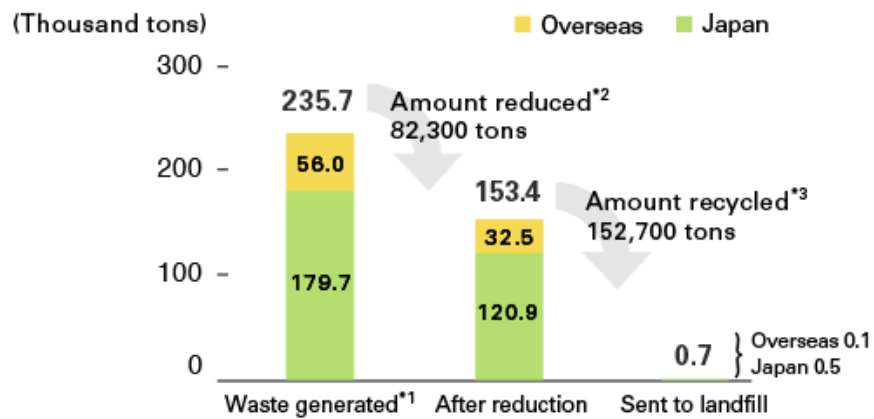




* Unit: Thousand tons

* Any minor discrepancies in percentages are due to rounding.

Industrial waste disposal categories (FY2017)

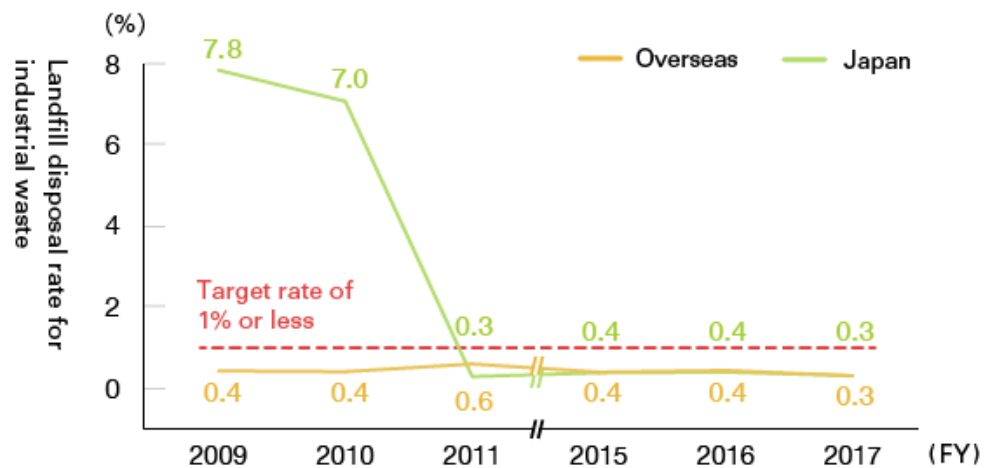


* 1 Waste generated:
Sludge (dry weight), waste plastics, soot and dust, etc.

* 2 Amount reduced:
Amount reduced as a result of waste plastic incineration and waste acid neutralization.

* 3 Amount recycled:
Includes waste plastic recycling and the reuse of waste oil as fuel.

Landfill disposal rate for industrial waste



* Scope of Mitsui Chemicals, Inc: Parent company production sites and the Sodegaura Center.

* Scope of domestic and overseas affiliates: Production sites operated by consolidated subsidiaries and affiliated companies eligible for Responsible Care support.

Environmental Protection

▸ Management System ▸ Climate Change ▸ Industrial Waste ▾ Substances Subject to the PRTR Act

▸ Air ▸ Water ▸ Biodiversity ▸ Environmental Accounting ▸ INPUT⇒OUTPUT

▸ Environmental Compliance

Substances Subject to the PRTR Act

In accordance with the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR* Act), Mitsui Chemicals submits a report to the Japanese government each year declaring the amounts of designated substances produced or used by the Company that were released into the environment or transferred elsewhere.

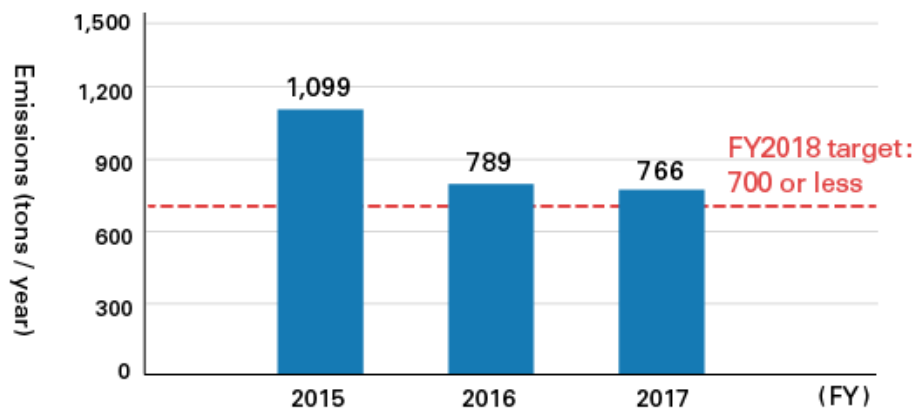
In fiscal 2017, the amount of emissions decreased approximately 23 tons compared with the level recorded in fiscal 2016. While favorable production trends contributed to an increase in the amount of chemicals used in fiscal 2017, the volume of emissions decreased thanks to emission reduction measures at each plant and the transfer of operations at the Kashima Works.

As calls for the management of chemical substance emissions to be improved and strengthened increase going forward, we will continue to manage emissions and to further strengthen our endeavors.

* PRTR: Pollutant Release and Transfer Register.

▸ [PRTR Data for Individual Sites \(PDF : 307KB\)](#) 

Substances subject to the PRTR Act emissions (Mitsui Chemicals, Inc.)



* Scope of Mitsui Chemicals, Inc: Parent company production sites and the Sodegaura Center.

PRTR Data for Individual Sites

Mitsui Chemicals Group ESG Report 2018

We have calculated the top ten PRTR substances emitted by Mitsui Chemicals at each of our Works (substances handled in annual volumes of at least one ton), and figures for dioxins.

Unit: Tons/year (Dioxins: mg-TEQ/year)

Ichihara Works

Substance	Ordinance designation number	Emitted				Transferred	
		Air	Water	Soil	Total	Sewage	Off-site
N-Hexane	392	132.31	0.00	0.00	132.31	0.00	23.95
Toluene	300	18.11	0.01	0.00	18.12	0.00	9.26
Xylene	80	5.90	0.01	0.00	5.91	0.00	1.44
Cumene	83	4.14	0.01	0.00	4.14	0.00	0.00
Ethylbenzene	53	3.91	0.00	0.00	3.91	0.00	1.12
Epichlorohydrin	65	2.53	0.00	0.00	2.53	0.00	0.00
Benzene	400	2.01	0.01	0.00	2.01	0.00	7.35
Zinc compounds(water-soluble)	1	0.00	1.25	0.00	1.25	0.00	0.00
Hydrogen fluoride and its water-soluble salt	374	0.00	1.04	0.00	1.04	0.00	0.00
Phenol	349	0.29	0.15	0.00	0.44	0.00	0.00

Mobara Branch Factory

Substance	Ordinance designation number	Emitted				Transferred	
		Air	Water	Soil	Total	Sewage	Off-site
Styrene	240	0.10	0.00	0.00	0.10	0.00	0.00
N-Butyl methacrylate	7	0.03	0.00	0.00	0.03	0.00	0.00
Methyl methacrylate	420	0.02	0.00	0.00	0.02	0.00	0.00
Acrylic acid	4	0.02	0.00	0.00	0.02	0.00	0.00
Methacrylic acid n-butyl	419	0.01	0.00	0.00	0.01	0.00	0.00
Xylene	80	0.00	0.00	0.00	0.00	0.00	0.00

Nagoya Works

Substance	Ordinance designation number	Emitted				Transferred	
		Air	Water	Soil	Total	Sewage	Off-site
1,2 - Epoxypropane	68	1.44	0.02	0.00	1.46	0.00	0.24
Styrene	240	0.29	0.00	0.00	0.29	0.00	16.40
Ethylene oxide	56	0.17	0.00	0.00	0.17	0.00	0.04
Toluene	300	0.14	0.00	0.00	0.14	0.00	0.04
Acrylonitrile	9	0.01	0.00	0.00	0.01	0.00	115.50

Osaka Works

Substance	Ordinance designation number	Emitted				Transferred	
		Air	Water	Soil	Total	Sewage	Off-site
Cumene	83	17.17	0.00	0.00	17.17	0.00	0.00
Benzene	400	5.42	0.12	0.00	5.54	0.00	0.00
Zinc compounds(water-soluble)	1	0.00	3.88	0.00	3.88	0.00	0.60
Toluene	300	3.33	0.01	0.00	3.35	0.00	0.38
Dicyclopentadiene	190	2.25	0.00	0.00	2.25	0.00	0.00
Acrylonitrile	9	1.50	0.00	0.00	1.50	0.00	2.73
Methyl methacrylate	420	1.28	0.00	0.00	1.28	0.00	0.33
1,4 - Dioxane	150	1.14	0.03	0.00	1.17	0.00	0.00
α-methylstyrene	436	1.15	0.00	0.00	1.15	0.00	0.00
Phenol	349	0.76	0.24	0.00	1.00	0.00	0.01
Dioxins	243	0.0000	0.0210	0.0000	0.0210	0.0000	0.0500

Iwakuni-Ohtake Works

Substance	Ordinance designation number	Emitted				Transferred	
		Air	Water	Soil	Total	Sewage	Off-site
N-Hexane	392	200.40	0.00	0.00	200.40	0.00	0.00
Xylene	80	25.51	0.00	0.00	25.51	0.00	0.00
Toluene	300	20.38	0.02	0.00	20.40	0.00	0.00
1,4- Dioxane	150	0.00	7.00	0.00	7.00	0.00	0.00
Bromomethane (also called Methyl bromide)	386	4.85	0.00	0.00	4.85	0.00	0.00
Benzene	400	3.00	0.00	0.00	3.00	0.00	0.00
Acetaldehyde	12	0.93	0.00	0.00	0.93	0.00	0.00
Cumene/Isopropyl benzene	83	0.39	0.00	0.00	0.39	0.00	0.00
Phenol	349	0.01	0.16	0.00	0.17	0.00	0.00
Cresol	86	0.10	0.00	0.00	0.10	0.00	0.00
Dioxins	243	0.0020	0.2480	0.0000	0.2500	0.0000	7.4560

Omuta Works

Substance	Ordinance designation number	Emitted				Transferred	
		Air	Water	Soil	Total	Sewage	Off-site
Toluene	300	221.29	0.21	0.00	221.51	0.00	352.28
Dichlorobenzene	181	25.97	0.31	0.00	26.28	0.00	207.00
Toluene (Yotsuyama area)	300	20.52	0.00	0.00	20.52	0.00	0.00
Epichlorohydrin	65	6.51	0.00	0.00	6.51	0.00	0.00
N,N -Dimethylformamide	232	0.14	5.81	0.00	5.95	0.00	0.00
Dicyclopentadiene	190	4.67	0.00	0.00	4.67	0.00	9.45
Formaldehyde	411	0.00	2.08	0.00	2.08	0.00	1.23
Phenol	349	1.74	0.00	0.00	1.74	0.00	0.71
Acetonitrile	13	0.00	0.55	0.00	0.55	0.00	0.08
Cresol	86	0.48	0.00	0.00	0.48	0.00	2.35
Dioxins	243	0.0000	2.4850	0.0000	2.4850	0.0000	0.0000

Sodegaura Center

Substance	Ordinance designation number	Emitted				Transferred	
		Air	Water	Soil	Total	Sewage	Off-site
Dichloromethane (also called methylene chloride)	186	0.45	0.00	0.00	0.45	0.00	1.03
Dichlorobenzene	181	0.14	0.00	0.00	0.14	0.00	1.47
Toluene	300	0.04	0.00	0.00	0.04	0.00	2.04
Tolylene diisocyanate	298	0.00	0.00	0.00	0.00	0.00	0.92
Methylenebis (4,1-phenylene) = diisocyanate	448	0.00	0.00	0.00	0.00	0.00	1.46

Environmental Protection

▸ Management System ▸ Climate Change ▸ Industrial Waste ▸ Substances Subject to the PRTR Act

▼ Air ▸ Water ▸ Biodiversity ▸ Environmental Accounting ▸ INPUT⇒OUTPUT

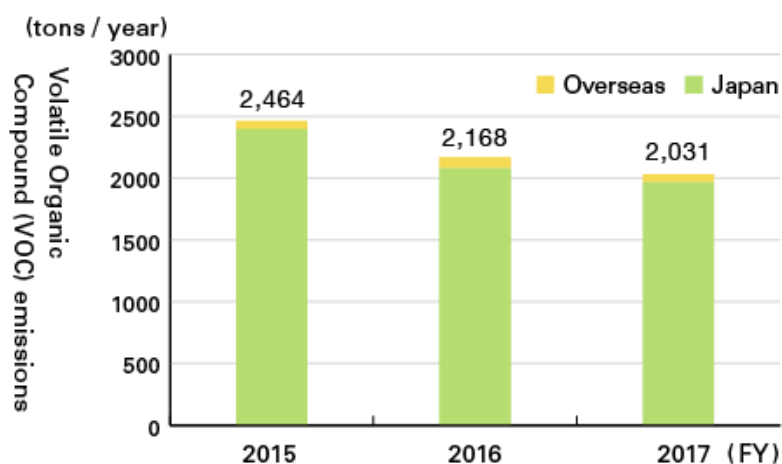
▸ Environmental Compliance

Air

Of the hazardous air pollutants specified under the Air Pollution Control Act, we are particularly focused on reducing emissions of priority substances that pose a significant health risk.

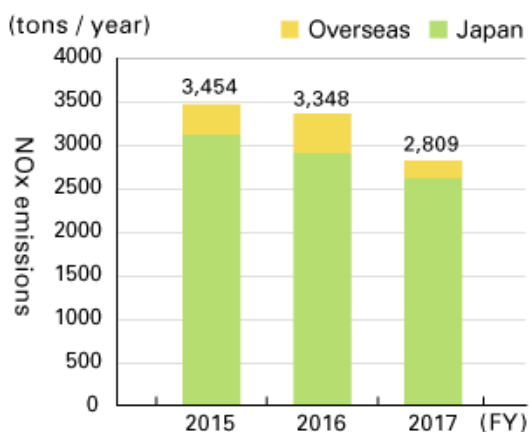
The Japanese government set a goal of reducing fixed-source volatile organic compound (VOC) emissions in fiscal 2010 by 30% compared to VOC emissions in fiscal 2000. VOC emissions at Mitsui Chemicals reached 8,523t in fiscal 2000, so our target is 5,966 tons / year. However, the Company established an even stricter target and achieved emissions of less than 3,000 tons / year in fiscal 2010. We have since continued to work toward maintaining emissions at this level.

Volatile Organic Compound (VOC) emissions

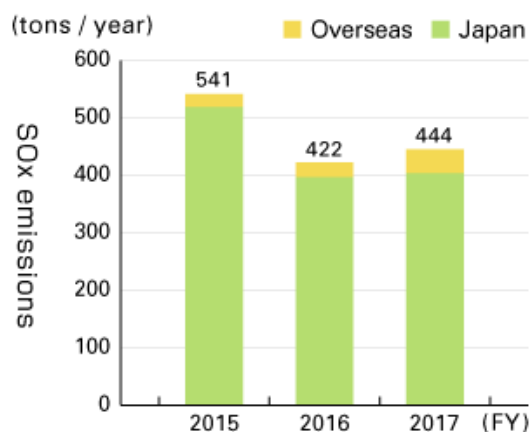


* Mitsui Chemicals, Inc. achieved its target of less than 3,000 tons / year in FY2017.

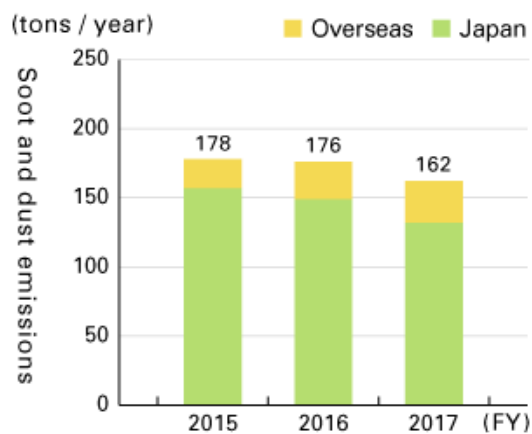
NOx emissions



SOx emissions



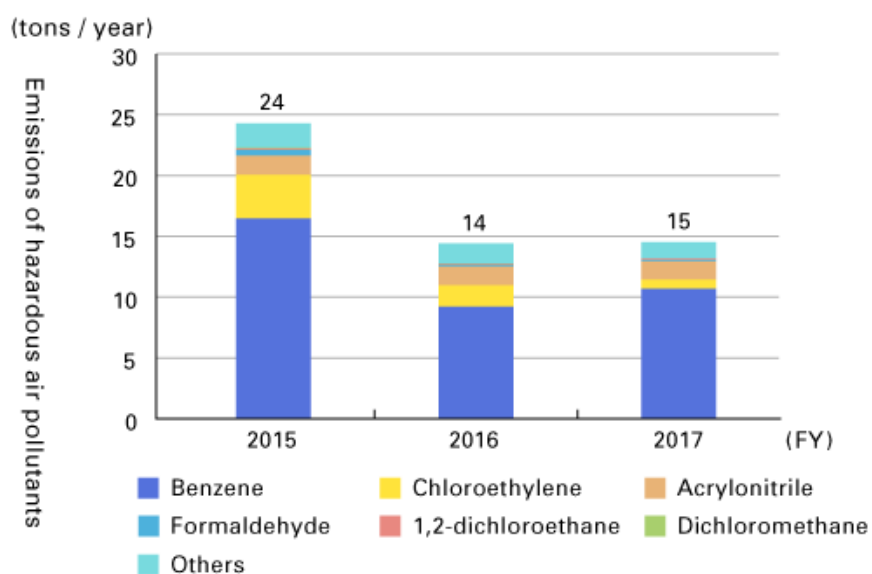
Soot and dust emissions



* Scope of Mitsui Chemicals, Inc: Parent company production sites and the Sodegaura Center.

* Scope of domestic and overseas affiliates: Production sites operated by consolidated subsidiaries and affiliated companies eligible for Responsible Care support.

Emissions of hazardous air pollutants (Mitsui Chemicals, Inc.)



* Precious emission figures: 771 tons / year (FY1995), 445 tons / year (FY2000), 110 tons / year (FY2005)

Environmental Protection

▶ Management System ▶ Climate Change ▶ Industrial Waste ▶ Substances Subject to the PRTR Act

▶ Air ▼ Water ▶ Biodiversity ▶ Environmental Accounting ▶ INPUT⇒OUTPUT

▶ Environmental Compliance

Water

Basic Philosophy on Water Resources

1. We recognize that water is a finite and precious resource, and regard water conservation as a key priority on a global scale.
2. We make every effort to use water efficiently as we recognize quality water resources are crucial to our operations.
3. We appropriately manage water on a case-by-case basis for each country and region in which we operate, in recognition of the fact that water resources distribution varies both geographically and temporally.

Water is an indispensable component of the Mitsui Chemicals Group's various chemical product manufacturing processes. For example, water is used in manufacturing processes that include heating, cooling, and washing as well as for equipment that removes harmful chemical substances produced during these processes and discharges effluent.

Formulating its basic philosophy on water resources, the Mitsui Chemicals Group works to manage efficient water usage and water preservation. In addition, the Group works to determine the water usage activities of suppliers through Sustainable Procurement SAQ that it asks them to fill out regarding the following items: "Control and reduction of waste water, sludge and air emissions" and "Sustainable and efficient utilization of resources (energy, water, raw materials, etc.)."

Supplier Sustainability Evaluation and Improvement Support

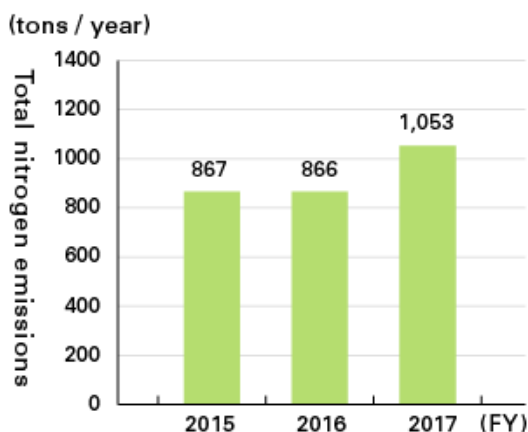
▶ [Water-related Information\(CDP\)](#) (PDF : 12.7MB) 

Reducing Emissions of Water Pollutants

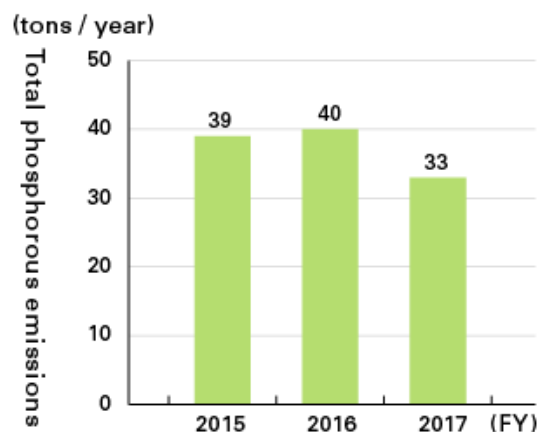
We monitor the emission volumes for water pollutants such as chemical oxygen demand (COD), nitrogen and phosphorus, to conserve water quality.

The emission volumes for each of these items are kept significantly lower than levels required by law or other legislation.

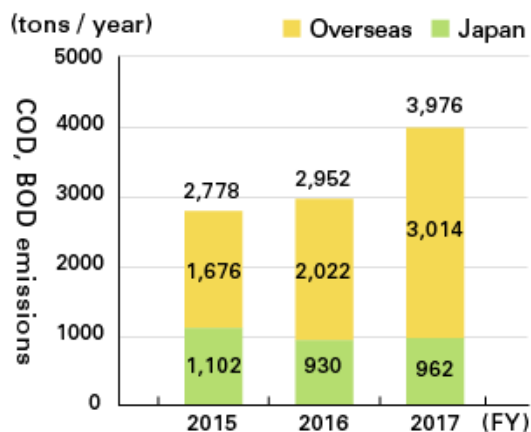
Total nitrogen emissions (Mitsui Chemicals, Inc.)



Total phosphorous emissions (Mitsui Chemicals, Inc.)



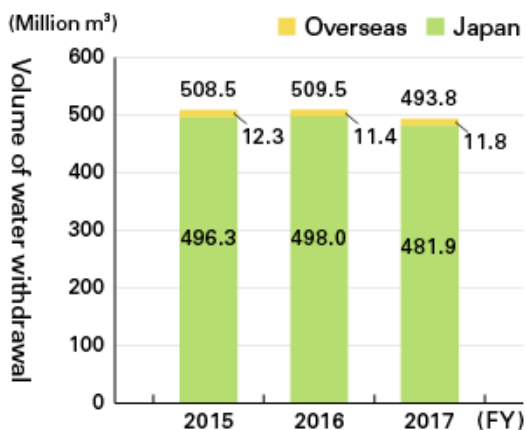
COD, BOD emissions



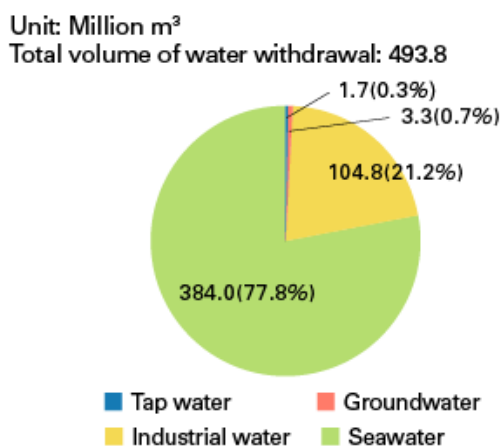
Efficient Use of Water

The Mitsui Chemicals Group monitors the volumes of water withdrawal, discharge, consumption, and recycling in an effort to use water efficiently. The Group proactively engages in water recycling particularly at production facilities that use large amounts of water.

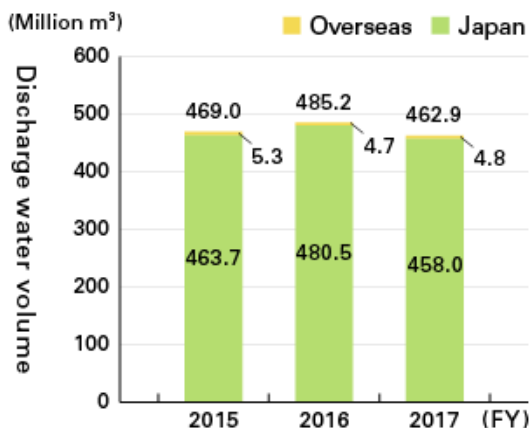
Volume of water withdrawal (tap water, groundwater, industrial water, and seawater)



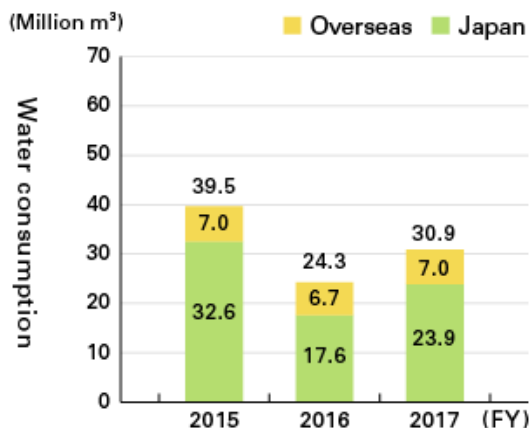
Breakdown of volume of water withdrawal (FY2017)



Discharge water volume

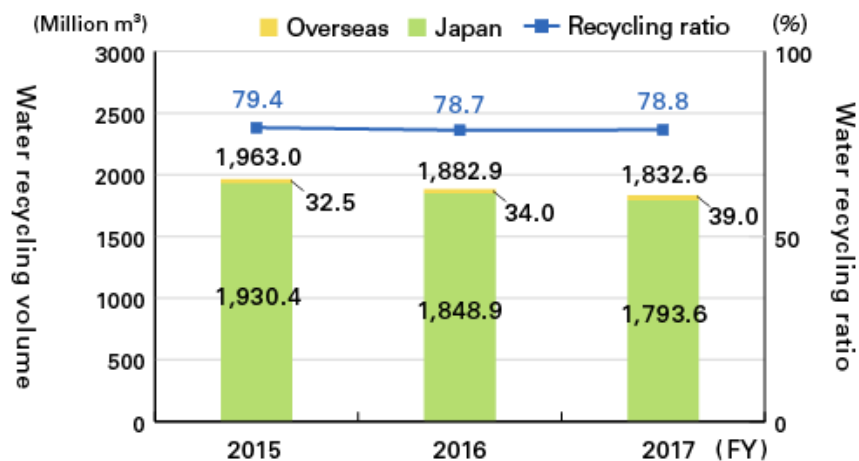


Water consumption*



* Water consumption:
Difference between water withdrawal and discharge water volume .

Water recycling volume and ratio



* Scope of Mitsui Chemicals, Inc.: Parent company production sites and the Sodegaura Center

* Scope of domestic and overseas affiliates: Production sites operated by consolidated subsidiaries and affiliated companies eligible for Responsible Care support

Water Risk Assessments

The Mitsui Chemicals Group conducts water risk assessments at each of its production facilities.

Water risks at each Group production facility from now through 2040 are assessed using World Business Council For Sustainable Development's (WBCSD) Global Water Tools and the World Resources Institute's (WRI) AQUEDUCT Water Risk Atlas. For production facilities deemed to be high risk based on these tools, detailed assessments are conducted involving local data, production facility unit water levels/usage volumes in order to verify low-risk areas. In addition, similar surveys are conducted at new plants when operations are commenced.

As part of assessing biodiversity and water risks, IBAT* is used to gather data and investigate these risks based on the following evaluation items: Protected areas, priority protected areas, endangered species, and endangered freshwater species surrounding production facilities.

* IBAT:

Integrated Biodiversity Assessment Tool. Developed jointly by BirdLife International, Conservation International, International Union for Conservation of Nature (IUCN), United Nations Environment Programme (UNEP), and UN Environment World Conservation Monitoring Centre, IBAT facilitates access to basic data and the latest information on natural preservation.

Environmental Protection

► Management System ► Climate Change ► Industrial Waste ► Substances Subject to the PRTR Act

► Air ► Water ▼ Biodiversity ► Environmental Accounting ► INPUT⇒OUTPUT

► Environmental Compliance

Biodiversity

Basic Approach to Biodiversity Conservation

1. We conduct our business activities in gratitude for the blessings of nature and biodiversity and recognize that environmental preservation is a globally important issue.
2. We contribute broadly to society by encouraging biodiversity conservation through the supply of environmentally friendly materials, products, and services.
3. We will comply with international biodiversity agreements.
4. We strive to conserve biodiversity by cooperating with relevant parties in Japan and abroad and within and outside the company and taking into account its effect in the supply chain.
5. To conserve biodiversity, we will promote employee social contribution activities that have our stakeholders trust.

The Mitsui Chemicals Group aims to minimize the negative impact on the global environment and ecosystems from the products it manufactures and sells throughout their lifecycles.

The manufacture of chemical products has the potential for impacting biodiversity in the air, water, and soil through GHG emissions when using energy (electricity and thermal), the consumption of water resources in heating, cooling, and cleaning processes, and water-polluting effluent. In addition, the release and decomposition of harmful chemical substances at the manufacture, use, and disposal stages of chemical product lifecycles can reduce the number of species living in those environments.

The Mitsui Chemicals Group believes that consistently managing chemical products, reducing GHG emissions, managing water resources (effluent quality, water intake/discharge volumes), and controlling substances released into the air helps conserve biodiversity. In addition, we think increasing products and services with high environmental contribution standards reduces environmental burdens at each stage of product lifecycles and, in turn, helps conserve biodiversity.

Initiatives Aimed at the Basic Approach to Biodiversity Conservation (1)

Believing that reducing environmental burdens throughout the Mitsui Chemicals Group's production and business activities helps preserve biodiversity, we undertake initiatives that include managing chemical substances, reducing GHG emissions, and managing water resources. In fiscal 2017, we conducted surveys of ecosystems surrounding parent company plants as well as production facilities of affiliated companies eligible for Responsible Care support. Using IBAT,* these surveys confirmed the absence of nature protected areas (i.e. world heritage sites, IUCN Category I, II, III, Ramsar Convention on Wetlands) within a 3km radius around these production facilities.

* IBAT:

Integrated Biodiversity Assessment Tool. Developed jointly by BirdLife International, Conservation International, International Union for Conservation of Nature (IUCN), United Nations Environment Programme (UNEP), and UN Environment World Conservation Monitoring Centre, IBAT facilitates access to basic data and the latest information on natural preservation.

→ Climate Change

→ Industrial Waste

→ Substances Subject to the PRTR Act

→ Air

→ Water

→ Product Stewardship

Initiatives Aimed at the Basic Approach to Biodiversity Conservation (2)

The Mitsui Chemicals Group is developing products and services that help reduce environmental burdens. Formulating “Blue Value™” as a means for displaying environmental contribution value, products that help reduce CO₂, protect resources, and harmonize with nature are designated as Blue Value™ products. Setting Blue Value™ product net sales ratios as a KPI in the 2025 Long-term Business Plan, we aim to expand products that help conserve biodiversity.

→ Blue Value™ / Rose Value™

→ Environmental Contribution Value, Blue Value™

Initiatives Aimed at the Basic Approach to the Biodiversity Conservation (3)

The Mitsui Chemicals Group complies with the regulations of individual countries in accordance with the Convention on Biological Diversity.

Initiatives Aimed at the Basic Approach to Biodiversity Conservation (4)

Regarding the procurement of raw materials, we make every effort to select raw materials and suppliers that have minor environmental burdens in accordance with our purchasing policy. During the distribution process, we work to reduce environmental burdens mainly by undertaking modal shifts and shared logistics. We provide product safety information in an effort to help customers handle products appropriately and minimize environmental impacts.

On January 22, 2010, the Group signed up to the Japan Business Federation's (Keidanren) Declaration of Biodiversity as a Promotion Partner. This means that the Group supports the seven principles set out in the declaration and that we commit to taking the initiative in our business activities and acting in accordance with the declaration and accompanying action policy.

→ Sustainable procurement

→ Logistics Initiatives to Reduce Environmental Impact in Logistics

→ Product Stewardship Build a structure that properly conveys information that in turn complies with diversifying regulatory requirements

→ Declaration of Biodiversity by Keidanren 

Initiatives Aimed at the Basic Approach to Biodiversity Conservation (5)

The Mitsui Chemicals Group undertakes environmental creation initiatives to conserve biodiversity at its business facilities.

Honshu Chemical Industry Co., Ltd.

Participating in Wakayama Prefecture's Company forest scheme

As part of its environmental activities, our affiliate Honshu Chemical Industry Co., Ltd. signed a Forest Conservation and Management Agreement with Wakayama Prefecture and Hidakagawa Town on September 7, 2010, with the aim of participating in Wakayama Prefecture's Company Forest conservation scheme.

As part of the Company Forest scheme, Wakayama Prefecture, forestry cooperatives, and companies work in partnership to effectively harness the prefecture's rich natural environment and get local people involved in environmental preservation.

In November 2010, Honshu Chemical Industry held a tree-planting event. As part of this event, employees and members of their families planted approximately 1,500 trees on a 1.32-hectare area of forestland in Hidakagawa Town (Hidaka-gun, Wakayama Prefecture). The forest was also given the official title "Hidakagawa Honshu Chemical Industry Forest."

On July 29, 2017, 33 people from the company participated in the cutting of weeds at the Hidakagawa Honshu Chemical Industry Forest under the guidance of the Kichu Forestry Cooperative, which has been entrusted with the forest's local management.



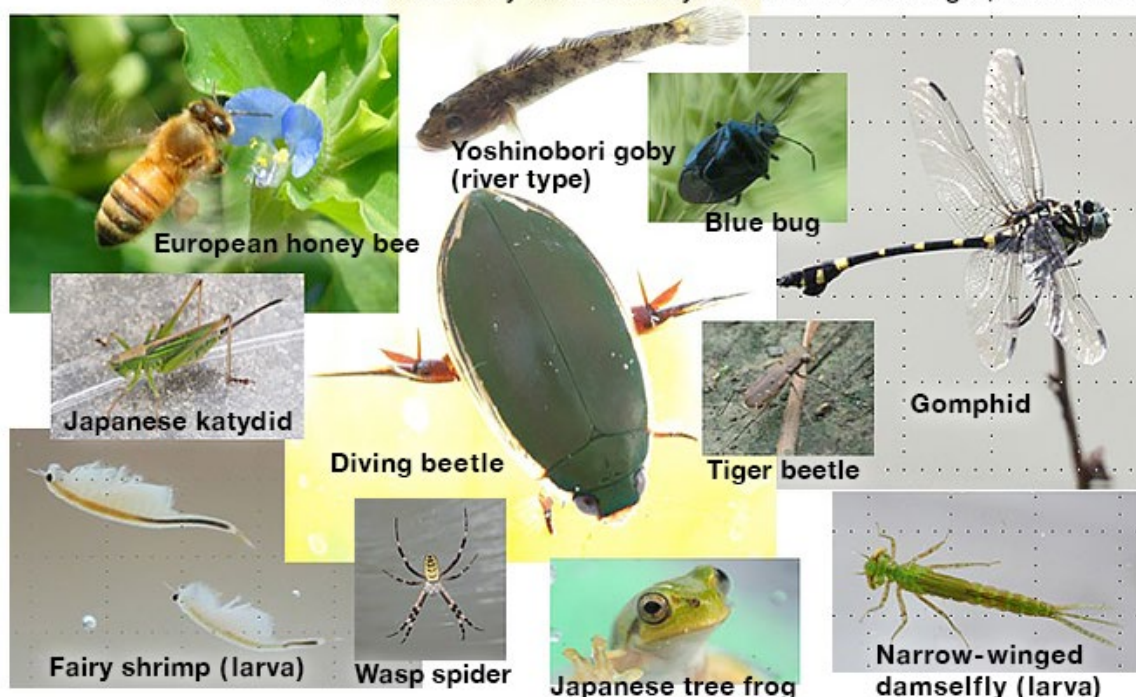
The employees who participated in the weeding activities

Wildlife Survey on Rice Fields

The Mitsui Chemicals Group affiliate company, Mitsui Chemicals Agro, Inc. (MCAG), has been conducting a “Wildlife Survey on Rice Fields” using MCAG products since 2012.

Involved in the manufacture and sales of agrochemicals and fertilizers, MCAG conducts the “Wildlife Survey on Rice Fields” annually with the full support of customers, confirming that a wide variety of wildlife inhabit rice fields. MCAG surveys the effects of agrochemical use on wildlife in rice paddies, which leads to the improvement and development of products. Further, through the release of experts' written opinions that summarize the results of these wildlife surveys, we certify that rice was grown in rice paddies inhabited by a wide variety of



Examples of the wildlife observed on the survey**In-house survey conducted by Mitsui Chemicals Agro, Inc. in 2014****Preservation Activities at Omuta Works**

At the Omuta Works (Fukuoka Prefecture), Mitsui Chemicals has a protected forest that spans approximately 5.4 hectares and engages in ongoing activities to preserve this area. In 2009, we cooperated on a survey of the natural environment in the forest around our property (the southern side of Mt. Takatori) at the request of Omuta City, which considers the preservation of the natural environment an important issue. The survey conducted by Omuta City Natural Environment Survey Association examined rare plants and species of living organisms in areas managed by Omuta Works, and presented its findings in the Omuta City Natural Environment Survey Results Report.



View of Shinomuta Station from Mt. Takatori

Rare wildlife found in survey (example)

Plants	Serissa japonica, tree of a thousand stars
	Selaginella moellendorffii
Amphibians	Japanese brown frog
Insects	Cydnidae, Parastrachia japonensis

Mangrove afforestation by a Thai affiliate

In December 2017, the Company's affiliate THAI MITSUI SPECIALTY CHEMICALS CO., LTD. (TMSC) planted mangrove trees in Chonburi province, where TMSC's production facilities are located. Cooperating with the Mangrove Conservation Learning Center, TMSC undertook mangrove afforestation activities for the second time, with roughly 80 TMSC employees planting around 1,500 mangrove trees.



Employees planting mangrove trees

Donations to Environmental Conservation Organizations

Mitsui Chemicals employees have been annually donating to the Japan Environmental Action Network (JEAN)—an NGO that engages in ocean and river environmental preservation activities—through the One-Coin Club since fiscal 2015.

→ One-Coin Club

Environmental Protection

► Management System ► Climate Change ► Industrial Waste ► Substances Subject to the PRTR Act

► Air ► Water ► Biodiversity ▼ Environmental Accounting ► INPUT⇒OUTPUT

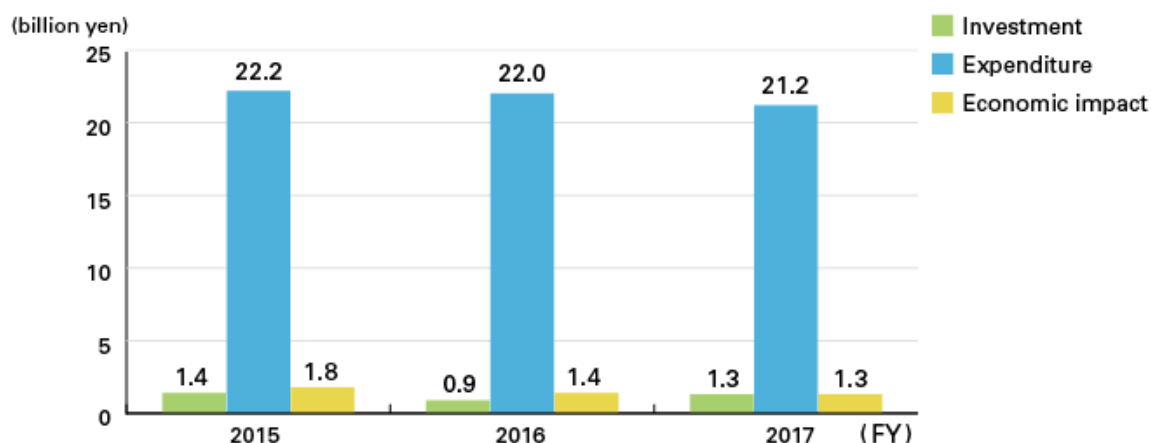
► Environmental Compliance

Environmental Accounting

Mitsui Chemicals invests as much as is necessary in responsible care, including environmental initiatives and occupational health and safety. We also compile and publish our environmental accounts in accordance with the Environmental Accounting Guidelines set out by the Japanese Ministry of the Environment in 2005.

In fiscal 2017, we invested approximately ¥1.3 billion on protecting the environment. Expenses totaled around ¥21.20 billion, while the economic impact of our environmental activities this year, including conserved resources and saved energy, was equivalent to approximately ¥1.3 billion. Specific examples of our efforts include the updating of aging wastewater treatment facilities, construction to comply with the Sewerage Act, and installation of an air pollution eliminating system. Moving forward, will continue to actively focus on environmental protection activities.

Environmental Accounts (Mitsui Chemicals, Inc.)



Environmental Accounts

Breakdown of Investment and Expenditure (FY2017 Mitsui Chemicals, Inc.)

Unit: Million yen

Category		Main initiatives	Investment	Expenditure
1	Business area costs (Cost of reducing the environmental impact of production and service activities within our business area)		1,289	13,437
	1-1 Pollution prevention cost	Measures to prevent VOC air pollution, odors, reduce wastewater, etc.	412	10,935
	1-2 Global environmental conservation cost	Energy saving equipment	876	117
	1-3 Resource circulation cost	Recycling waste plastics, etc.	2	2,385
2	Upstream / downstream costs (Cost of reducing the environmental impact of production and service activities in upstream or downstream areas)		0	0
3	Administration cost (Cost of environmental management activities)	Maintaining environmental management systems, training employees, etc.	0	569
4	R&D costs (Cost of environmental research and development activities)	Developing products and processes to protect the environment, reduce environmental impact, etc.	0	6,300

5	Social activity costs (Cost of environmental social activities)	Increasing greenery, funding measures to combat pollution, etc.	0	193
6	Environmental remediation cost (Cost of remediating environmental damage)	Remediating pollution, etc.	0	725
Total			1,289	21,224

Environmental Accounts

Breakdown of Economic Impact (FY2017 Mitsui Chemicals, Inc.)

Unit: Million yen

Category		Main benefits	Economic impact
1	Income from recycling	Recycling waste into resources	364
2	Income from saving energy	Saving energy	477
3	Income from saving resources	Improving our raw material intensity index	462
Total			1,303

* Scope of Mitsui Chemicals, Inc: Parent company production sites and the Sodegaura Center

Environmental Protection

► Management System ► Climate Change ► Industrial Waste ► Substances Subject to the PRTR Act

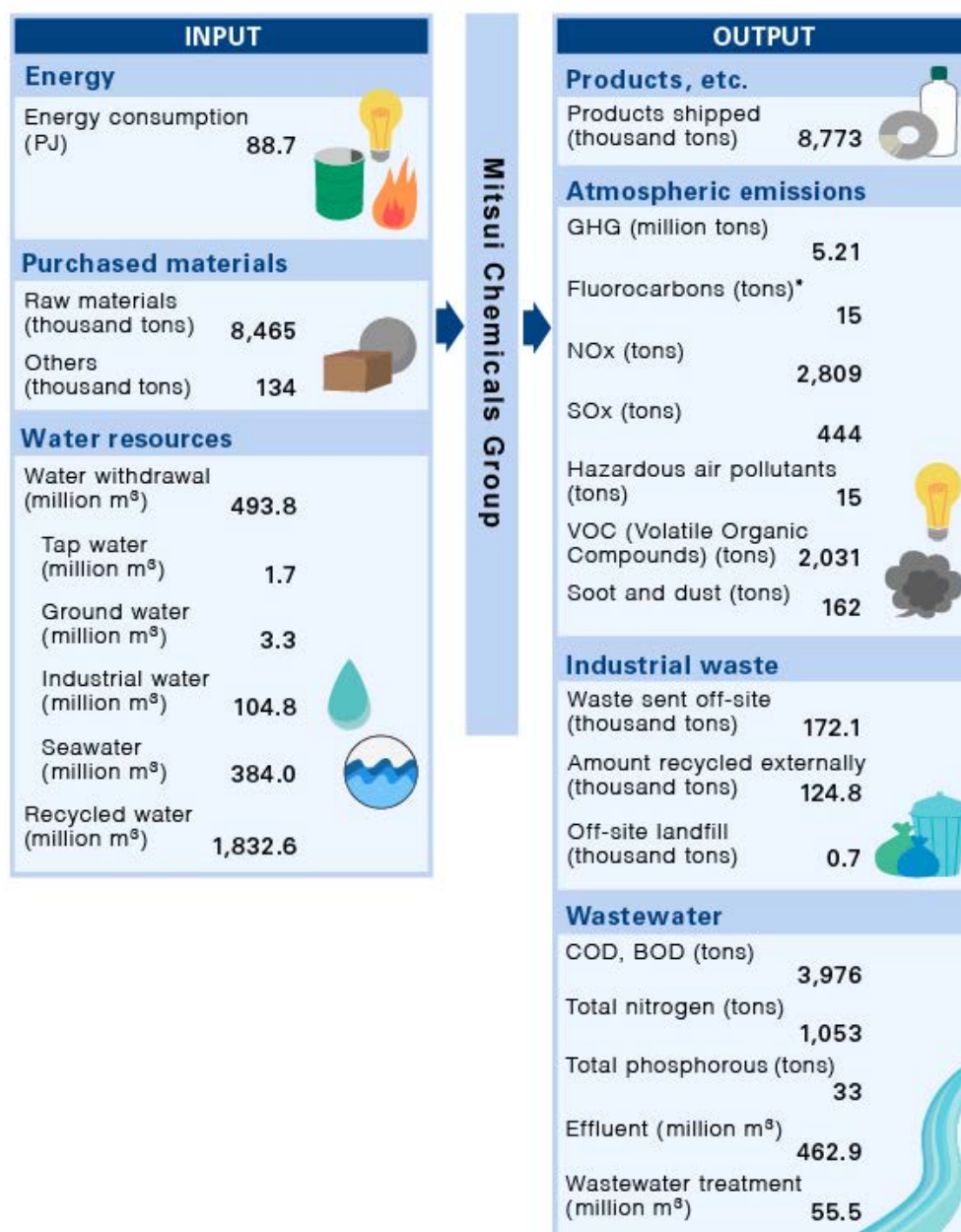
► Air ► Water ► Biodiversity ► Environmental Accounting ▼ INPUT⇒OUTPUT

► Environmental Compliance

INPUT⇒OUTPUT

We publish input-output reports explaining the volume of resources that we have consumed and the environmental impact of our business activities throughout the Mitsui Chemicals Group. We are actively working to save resources and reduce environmental impact throughout our business activities in the interests of supporting the sustainable development of society.

INPUT⇒OUTPUT Data (FY2017)



* Total hazardous air pollutants, wastewater treatment volume, nitrogen, and phosphorus for Mitsui Chemicals, Inc.

* Scope of Mitsui Chemicals, Inc: Parent company production sites and the Sodegaura Center. GHG and energy

consumption includes offices.

- * Scope of domestic and overseas affiliates: Production sites operated by consolidated subsidiaries and affiliated companies eligible for Responsible Care support. However, the scope of GHG and energy consumption covers the production facilities of consolidated subsidiaries and for Japan also includes offices.

Please refer here for details regarding Mitsui Chemicals, Inc., domestic and overseas affiliates, and each of the Mitsui Chemicals production sites.

[▶INPUT⇒OUTPUT Data \(FY2017\) \(PDF : 276KB\)](#) 

INPUT⇒OUTPUT Data (FY2017)

Mitsui Chemicals (Non-consolidated)

Energy consumption (PJ)	70.1	Mitsui Chemicals (Non-consolidated)	Products shipped (thousand tons)	5,189
Raw materials (thousand tons)	5,122		GHG (million tons)	3.96
Purchased materials (thousand tons)	25		Fluorocarbons (tons)	4
Water withdrawal (million m ³)	460.4		NOx (tons)	2,311
Tap water (million m ³)	0.8		SOx (tons)	273
Ground water (million m ³)	0.6		Hazardous air pollutants (tons)	15
Industrial water (million m ³)	83.5		VOC (Volatile Organic Compounds) (tons)	1,574
Seawater (million m ³)	375.5		Soot and dust (tons)	114
Recycled water (million m ³)	1,692.4		Waste sent off-site (thousand tons)	94.9
			Amount recycled externally (thousand tons)	61.4
			Off-site landfill (thousand tons)	0.5
			COD (tons)	889
			Total nitrogen (tons)	1,053
			Total phosphorous (tons)	33
			Water discharge (million m ³)	436.6
			Wastewater treatment (million m ³)	55.5

Domestic subsidiaries and affiliates

Energy consumption (PJ)	4.1	Domestic subsidiaries and affiliates	Products shipped (thousand tons)	575
Raw materials (thousand tons)	534		GHG (million tons)	0.43
Purchased materials (thousand tons)	20		Fluorocarbons (tons)	0
Water withdrawal (million m ³)	21.6		NOx (tons)	295
Tap water (million m ³)	0.3		SOx (tons)	131
Ground water (million m ³)	2.5		VOC (Volatile Organic Compounds) (tons)	395
Industrial water (million m ³)	10.3		Soot and dust (tons)	18
Seawater (million m ³)	8.4		Waste sent off-site (thousand tons)	34.3
Recycled water (million m ³)	101.2		Amount recycled externally (thousand tons)	31.1
			Off-site landfill (thousand tons)	0.1
			COD, BOD (tons)	73
			Water discharge (million m ³)	21.4

Overseas affiliates and subsidiaries

Energy consumption (PJ)	14.6	Overseas affiliates and subsidiaries	Products shipped (thousand tons)	3,009
Raw materials (thousand tons)	2,809		GHG (million tons)	0.81
Purchased materials (thousand tons)	89		Fluorocarbons (tons)	11
Water withdrawal (million m ³)	11.8		NOx (tons)	203
Tap water (million m ³)	0.6		SOx (tons)	41
Ground water (million m ³)	0.2		VOC (Volatile Organic Compounds) (tons)	62
Industrial water (million m ³)	11.0		Soot and dust (tons)	30
Seawater (million m ³)	0.0		Waste sent off-site (thousand tons)	42.9
Recycled water (million m ³)	39.0		Amount recycled externally (thousand tons)	32.3
			Off-site landfill (thousand tons)	0.1
			COD, BOD (tons)	3,014
			Water discharge (million m ³)	4.8

Ichihara Works

We commenced operations at our Ichihara Works in 1967. It is one of the leading comprehensive petrochemical Works in the country, manufacturing various resins, chemical products and other derivatives around a central ethylene plant. Production activities continue to go from strength to strength, as our core Works for petrochemical and basic chemical products.

https://www.mitsuichem.com/jp/corporate/group/domestic_02.htm

Energy consumption (thousand GJ)	24,851	Ichihara Works	Products shipped (thousand tons)	1,808
Raw materials (thousand tons)	1,083		GHG (thousand tons)	1,217
Purchased materials (thousand tons)	9.3		Fluorocarbons (tons)	1.6
Water withdrawal (thousand m ³)	314,343		NOx (tons)	889.7
Tap water (thousand m ³)	0		SOx (tons)	148.4
Ground water (million m ³)	127		Hazardous air pollutants (tons)	2.0
Industrial water (thousand m ³)	21,739		VOC (Volatile Organic Compounds) (tons)	320.3
Seawater (thousand m ³)	292,476		Soot and dust (tons)	36.2
Recycled water (thousand m ³)	377,839		Waste sent off-site (thousand tons)	14.1
			Amount recycled externally (thousand tons)	14.1
			Off-site landfill (thousand tons)	0.00
			COD (tons)	65.7
			Total nitrogen (tons)	24.1
			Total phosphorous (tons)	1.7
			Water discharge (thousand tons)	298,708
			Wastewater treatment (thousand tons)	6,132

Mobara Branch Factory

We commenced operations at our Mobara Branch Factory in 1957, with the aim of expanding the chemical industry using natural gas as a raw material. These days, it specializes in manufacturing highly functional products. We established our Plant Operation Technology Training Center on-site in 2006, as an educational facility and a focal point for transferring skills throughout the company.

https://www.mitsuichem.com/jp/corporate/group/domestic_08.htm

Energy consumption (thousand GJ)	689	Mobara Branch Factory	Products shipped (thousand tons)	49
Raw materials (thousand tons)	49		GHG(thousand tons)	35
Purchased materials (thousand tons)	1.3		Fluorocarbons(tons)	0.0
Water withdrawal (thousand m³)	909		NOx(tons)	12.8
Tap water (thousand m³)	4		SOx(tons)	0.0
Ground water (million m³)	444		Hazardous air pollutants (tons)	0.0
Industrial water (thousand m³)	0		VOC (Volatile Organic Compounds) (tons)	18.7
Seawater (thousand m³)	461		Soot and dust (tons)	0.3
Recycled water (thousand m³)	30,500		Waste sent off-site (thousand tons)	1.9
			Amount recycled externally (thousand tons)	1.5
			Off-site landfill (thousand tons)	0.00
			COD(tons)	10.5
			Total nitrogen (tons)	3.4
			Total phosphorous (tons)	0.7
			Water discharge (thousand tons)	677
		Wastewater treatment (thousand tons)	405	

Nagoya Works

We were the first in Japan to use our own unique technology to manufacture polyvinyl chloride resins at our Nagoya Works in 1951, using unique technology that had never previously been used in Japan. These days, the works has transformed into a production hub specializing in electronic and IT materials and products. Its main products include processing tape for manufacturing integrated circuits(IC) and sealant sheets for solar cells.

https://www.mitsuichem.com/jp/corporate/group/domestic_03.htm

Energy consumption (thousand GJ)	683	Nagoya Works	Products shipped (thousand tons)	44
Raw materials (thousand tons)	48		GHG(thousand tons)	34
Purchased materials (thousand tons)	3.6		Fluorocarbons(tons)	0.1
Water withdrawal (thousand m ³)	2,409		NOx(tons)	3.3
Tap water (thousand m ³)	7		SOx(tons)	0.0
Ground water (million m ³)	0		Hazardous air pollutants (tons)	0.2
Industrial water (thousand m ³)	2,402		VOC (Volatile Organic Compounds) (tons)	1.9
Seawater (thousand m ³)	0		Soot and dust (tons)	0.1
Recycled water (thousand m ³)	18,446		Waste sent off-site (thousand tons)	6.1
			Amount recycled externally (thousand tons)	2.9
			Off-site landfill (thousand tons)	0.02
			COD(tons)	2.5
			Total nitrogen (tons)	1.6
			Total phosphorous (tons)	0.4
			Water discharge (thousand tons)	2,389
		Wastewater treatment (thousand tons)	495	

Osaka Works

Located in the Sakai Senboku Coastal Industrial Zone, one of the leading industrial areas in Japan, our Osaka Works has a large dock capable of accommodating 100,000-ton tankers. Production activities make the most of the Works' ideal location, in terms of operations and distribution, with nearly half of all products and raw materials transported by ship.

https://www.mitsuichem.com/jp/corporate/group/domestic_04.htm

Energy consumption (thousand GJ)	30,631	Osaka Works	Products shipped (thousand tons)	2,311
Raw materials (thousand tons)	2,548		GHG(thousand tons)	1,725
Purchased materials (thousand tons)	2.1		Fluorocarbons(tons)	1.2
Water withdrawal (thousand m ³)	76,909		NOx(tons)	683.5
Tap water (thousand m ³)	74		SOx(tons)	31.9
Ground water (million m ³)	0		Hazardous air pollutants (tons)	8.0
Industrial water (thousand m ³)	22,311		VOC (Volatile Organic Compounds) (tons)	66.2
Seawater (thousand m ³)	54,524		Soot and dust (tons)	17.8
Recycled water (thousand m ³)	781,551		Waste sent off-site (thousand tons)	11.2
			Amount recycled externally (thousand tons)	9.2
		Off-site landfill (thousand tons)	0.09	
		COD(tons)	291.7	
		Total nitrogen (tons)	446.7	
		Total phosphorous (tons)	6.2	
		Water discharge (thousand tons)	64,632	
		Wastewater treatment (thousand tons)	11,392	

Iwakuni-Ohtake Works

We commenced operations at our Iwakuni-Ohtake Works in April 1958, as Japan's first comprehensive petrochemical works. It manufactures PTA, the raw material in polyester fibers, and PET resin, which is used to make plastic bottles, and is one of the largest scale facilities of its kind in the country.

https://www.mitsuichem.com/jp/corporate/group/domestic_05.htm

Energy consumption (thousand GJ)	6,529	Iwakuni-Ohtake Works	Products shipped (thousand tons)	426
Raw materials (thousand tons)	398		GHG(thousand tons)	462
Purchased materials (thousand tons)	0.7		Fluorocarbons(tons)	0.8
Water withdrawal (thousand m ³)	58,699		NOx(tons)	180.7
Tap water (thousand m ³)	124		SOx(tons)	83.3
Ground water (million m ³)	0		Hazardous air pollutants (tons)	3.9
Industrial water (thousand m ³)	30,043		VOC(Volatile Organic Compounds) (tons)	772.6
Seawater (thousand m ³)	28,532		Soot and dust (tons)	23.7
Recycled water (thousand m ³)	251,335		Waste sent off-site (thousand tons)	6.5
			Amount recycled externally (thousand tons)	6.0
			Off-site landfill (thousand tons)	0.01
			COD(tons)	226.6
			Total nitrogen (tons)	28.7
			Total phosphorous (tons)	10.4
			Water discharge (thousand tons)	58,230
		Wastewater treatment (thousand tons)	17,518	

Omuta Works

We commenced operations at our Omuta Works in 1912 and continued to operate as a coal complex through to the early 1960s, using byproducts from Mitsui Mining's coke ovens. These days, the Works specializes in organic synthesis technology and serves as our main fine chemical facility, primarily manufacturing functional chemicals.

https://www.mitsuichem.com/jp/corporate/group/domestic_06.htm

Energy consumption (thousand GJ)	6,389	Omuta Works	Products shipped (thousand tons)	551
Raw materials (thousand tons)	277		GHG(thousand tons)	465
Purchased materials (thousand tons)	7.7		Fluorocarbons(tons)	0.5
Water withdrawal (thousand m ³)	7,000		NOx(tons)	541.0
Tap water (thousand m ³)	486		SOx(tons)	9.0
Ground water (million m ³)	0		Hazardous air pollutants (tons)	0.4
Industrial water (thousand m ³)	6,514		VOC(Volatile Organic Compounds) (tons)	394.0
Seawater (thousand m ³)	0		Soot and dust (tons)	36.0
Recycled water (thousand m ³)	232,637		Waste sent off-site (thousand tons)	54.2
			Amount recycled externally (thousand tons)	27.3
			Off-site landfill (thousand tons)	0.30
			COD(tons)	292.0
			Total nitrogen (tons)	548.0
			Total phosphorous (tons)	13.4
			Water discharge (thousand tons)	11,875
			Wastewater treatment (thousand tons)	19,450

Sodegaura Center (R&D Center)

Including affiliates, our R&D center brings together around 1,000 researchers, all of whom continue to create new technologies and materials in an effort to make society a more comfortable place.

https://www.mitsuichem.com/jp/corporate/group/domestic_07.htm

Energy consumption (thousand GJ)	241	Sodegaura Center	Products shipped (thousand tons)	0
Raw materials (thousand tons)	0		GHG(thousand tons)	12
Purchased materials (thousand tons)	0.0		Fluorocarbons(tons)	0.0
Water withdrawal (thousand m ³)	95		NOx(tons)	0.0
Tap water (thousand m ³)	66		SOx(tons)	0.0
Ground water (million m ³)	29		Hazardous air pollutants (tons)	0.0
Industrial water (thousand m ³)	0		VOC(Volatile Organic Compounds) (tons)	0.0
Seawater (thousand m ³)	0		Soot and dust (tons)	0.0
Recycled water (thousand m ³)	53		Waste sent off-site (thousand tons)	0.9
			Amount recycled externally (thousand tons)	0.4
			Off-site landfill (thousand tons)	0.00
			COD(tons)	0.3
			Total nitrogen (tons)	0.3
			Total phosphorous (tons)	0.0
			Water discharge (thousand tons)	76
			Wastewater treatment (thousand tons)	76

Environmental Protection

▶ Management System ▶ Climate Change ▶ Industrial Waste ▶ Substances Subject to the PRTR Act

▶ Air ▶ Water ▶ Biodiversity ▶ Environmental Accounting ▶ INPUT⇒OUTPUT

▼ Environmental Compliance

Environmental Compliance

The Mitsui Chemicals Group believes that compliance with the environmental laws and regulations of the nations and regions in which it operates and addressing the opinions and complaints of local residents are an important part of environmental compliance.

Through training our employees about environmental laws and regulations and conducting audits at each of our operating sites, we aim for zero violations of environmental laws and regulations. Moreover, management at each of our locations conducts regular meetings with members of local communities so as to exchange opinions and broaden understanding in regard to the operation of the facility. Each business site fields complaints and comments from neighboring residents. Moreover, Mitsui Chemicals maintains a risk hot line that allows members of the local community to express their opinions.

Thanks in part to these efforts, there were no environmental complaints and no violations of environmental laws or regulations in fiscal 2017. Looking ahead, we will continue our efforts in environmental compliance in order to earn and maintain the trust of society in general.

→ Responsible Care Audits

→ Local Communication at Each Business Site

→ Risk Hotline

Product Stewardship

▼ Management System

▶ Strengthening the Management System

▶ Product Stewardship Initiatives

With the adoption in 2002 of the WSSD^{*1} goals aiming “to minimize the negative impact of chemicals on people and the environment by the year 2020,” countries around the world have been taking steps to reinforce related laws and regulations. This includes the enactment of REACH^{*2} in Europe, Japan’s Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc., and revisions to the TSCA^{*3} of the U.S. Under these circumstances, the need for companies to address and comply with more stringent laws and regulations, voluntarily undertake safety assessment and risk management, and convey information throughout the supply chain is becoming increasingly important in order to achieve WSSD goals.

^{*1} WSSD:

The World Summit on Sustainable Development (WSSD) held in Johannesburg, South Africa. During the Summit, the WSSD goal of achieving, by 2020, the use and production of chemicals in ways that lead to the minimization of significant adverse effects on human health and the environment, using transparent science-based risk assessment procedures and science-based risk management procedures was adopted.

^{*2} REACH:

Regulations relating to the registration, evaluation, authorization, and restriction of chemical substances.

^{*3} TSCA:

The Toxic Substances Control Act.

Management System

Policy

In preparation for the WSSD 2020 goals, the Mitsui Chemicals Group maintains a Responsible Care Policy that focuses on assessing the risks on people and the environment of its products throughout their entire lifecycles as well as ensuring the health and safety of all persons and reducing the environmental impact of those products. Guided by its Responsible Care Policy, the Group has also put in place internal rules regarding environmental safety and quality management. These regulations help the Group grasp the latest trends in and traverse the increasingly stringent laws and regulations of each country and provide a roadmap for conducting surveys of products containing chemical substances, conveying information to stakeholders including customers, ensuring the health of consumers, customers, and employees, and reducing its environmental impact.

In addition to the above, the Group is also endeavoring to complete an evaluation of risks for all of its products by 2020, along with working to convey this information to the customer and engaging in conversation with the customer, in order to contribute to the protection of human health and the environment.

→ Responsible Care Policy

System and Responsible Officers

The General Manager of the RC & Quality Assurance Division formulates the Product Stewardship Strategy. The results of Product Stewardship are reported and reviewed by the Responsible Care Committee. The findings of the Committee are then reflected in plans for the next fiscal year after taking into consideration changes in the environment, including the concerns and requirements of society as well as the latest trends in government policy and laws and regulations as they relate to chemical substances.

Prior to market launch at the product development, market development, and raw materials procurement stages, the General Managers of the R&D laboratory, business divisions, and Works collect information concerning products containing chemical substances, conduct risk assessments of products, address laws and regulations relating to chemicals, and prepare product SDS* and labels. At the raw materials sourcing stage, the General Manager of the Purchasing Division acquires information relating to the chemical substances contained in the raw materials, the safety thereof, and applicable laws and regulations from the supplier. In this way, the general managers of business divisions and general managers of each Works oversee chemical safety across the full gamut from the sourcing of raw materials to shipment at their respective locations of responsibility. Throughout this process, judgements and assessments requiring expertise and scientific knowledge are requested to and made by the RC & Quality Assurance Division.

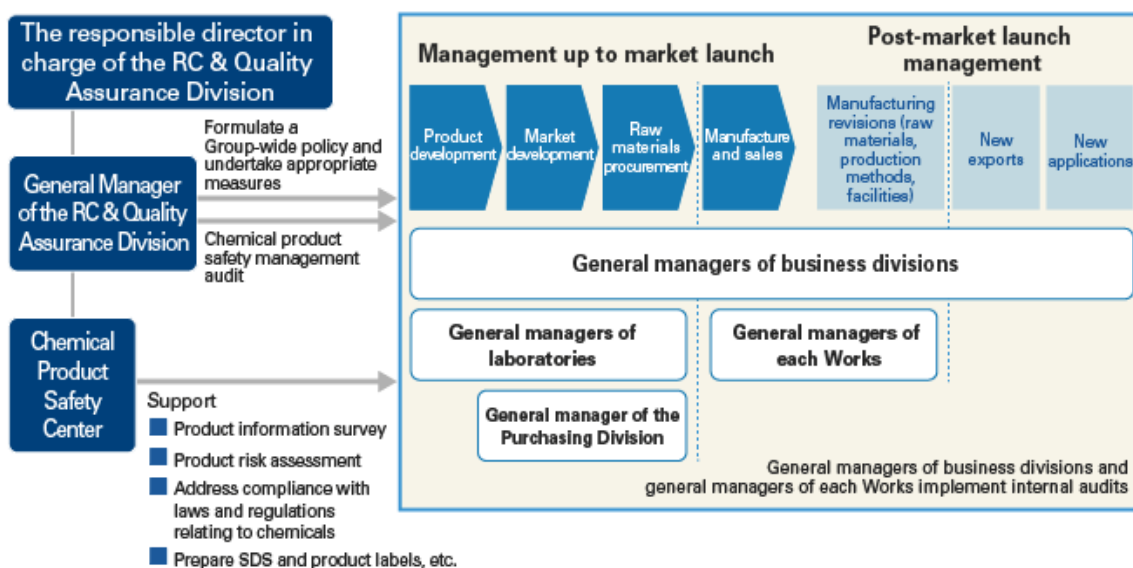
After market launch, the business divisions cooperate with each of the Works to manage the contained chemical substances regarding manufacturing and sales. In addition to preparing the product SDS and product labels, they also convey information to the customer and address compliance with laws and regulations. When raw materials, production formulations, and facilities are updated, when exporting to a new country, and when selling for a new application, they take necessary Change Control action (reconfirmation of management of chemical substances contained in the product, re-surveying product information, reassessment of product risks, and reconfirmation of regulatory compliance and standard compliance, etc.). During both the pre-market launch and post-market launch stages, any newly acquired product information is recorded in the chemical product safety information system to ensure that management, including addressing compliance with laws and regulations and the gate check during shipping, is more thorough.

These systems are subject to internal audits at the business divisions and Works, and are checked and reviewed during the

chemical product safety management audit implemented by the General Manager of the RC & Quality Management Division. The results of these audits are then reflected in the Product Stewardship Strategy the following fiscal year.

* SDS: Safety Data Sheet.

Product Stewardship Accountability Structure



Monitoring Methods

The General Manager of the RC & Quality Assurance Division undertakes a detailed confirmation of progress by major theme of the Product Stewardship Strategy at monthly reporting meetings.

The RC & Quality Assurance Division takes both exhaustive and comprehensive steps to ensure that it fully grasps the annual submission requirements prescribed under Japan's Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. as well as the new application and submission requirements associated with efforts to reinforce the European REACH and other regulations. Thereafter, the Division analyzes the Group-wide impact of each requirement and puts in place a Group-wide plan to ensure that requirements are met. In order to advise the rest of the organization and to provide support for handling these requirements, meetings are held to provide officers in charge of Responsible Care with the appropriate information. Among a host of endeavors, the Division makes full use of the gate check function of the chemical product safety information system (SAP-EHS). This helps in preventing the termination of export activities when the necessary registration requirements of each country have not been completed, and avoiding the manufacture of products in excess of approved limits.

A risk assessment that takes into consideration the impact on human health and the environment is undertaken for new products up to their market release and in accordance with any change in management after each product launch. In the event that the necessary low level of risk cannot be confirmed, a product safety meeting is held chaired either by the responsible director in charge of the RC & Quality Assurance Division or the General Manager of the RC & Quality Assurance Division. The goal of the meeting is to decide whether or not a product will be released and if so under what terms and conditions.

Goals and Results

KPI	Scope of Compilation	FY2017			FY2018	Medium to Long-term
		Goals	Results	Level Achieved	Goals	Goals
Product risk assessment implementation rate	Mitsui Chemicals, Inc.	Complete assessment of high-priority products	36%	○	Complete assessment of low-priority products	At least 99% (FY2020 ¹)
Provision ratio of the latest safety information for all products ²	Mitsui Chemicals, Inc.	100%	100%	○	100%	100% (FY2025)
Number of legal and regulatory violations	Mitsui Chemicals, Inc.	0	0	○	0	—

*1 The target year is set to 2020 in line with WSSD 2020 goals.

*2 Most recent SDS submission rate.

Review and Challenges

The Mitsui Chemicals Group has established targets for around 2020 as the medium-term Product Stewardship goals.

Targets for Mitsui Chemicals Group Product Stewardship for around 2020

Target 1: The Mitsui Chemicals Group will continue to ensure that it complies with all statutory and regulatory requirements in an exhaustive and comprehensive manner. Measures will be put in place to prevent any violation with respect to the Group's manufacturing and shipping activities.

Target 2 Mitsui Chemicals' safety evaluations will garner the confidence of society; as an integral element in the value chain, the Company will work toward sustainable development and provide increasingly safe products.

Review and challenges for achieving target 1:

Challenge (1) Reinforce governance in a bid to fully comply with all newly enacted and amended laws

FY 2017 results

- We responded in a planned manner to newly implemented and revised laws relating to Group products. In particular, we responded to revisions to TSCA of the U.S. in cooperation with affiliates in the U.S.
- In order to respond appropriately to the high pace of regulation reinforcement outside of Japan, we established a network that accurately collects information on local laws and regulations through legal and regulatory experts at affiliates in Europe, the U.S., and China.

FY 2018 plan

Along with expanding this information collection network to Southeast Asia, we will work to build a system that addresses regulations throughout the entire Group.

Until now, food packaging materials were regulated under self-imposed positive list (PL) industry standards, but Japan is set to introduce a national PL system coinciding with the revisions to the Food Sanitation Act of Japan. In preparation for the start of this system, we are handling this situation in a planned manner in cooperation with industry associations.

Challenge (2) Thorough chemicals management after product release to market

FY 2017 results

- We revised the internal Group rules regarding the Change Control of products in order to reinforce the mechanism by which we ensure management of products and chemical substances contained in products in a continuous manner even after market launch.

FY 2018 plan

We will engage in thorough management by instilling the revised rules for Change Control.

Challenge (3) Build a structure that properly conveys information that in turn complies with diversifying regulatory requirements

FY 2017 results

- We undertook the building of a structure designed to deploy the chemical product safety information system (SAP-EHS) to affiliates in order to share product information and safety information with affiliates.

FY 2018 plan

We will further expand the functions of SAP-EHS to comply with chemSHERPA and other schemes used to convey information about chemical substances contained in products and will work to deploy this to affiliates.

Review and challenges for achieving target 2:

Challenge (1) Undertake risk assessments as well as risk management via the supply chain for all products

FY 2017 results

- We completed the assessments of high-priority products from among the Group products that underwent preliminary assessment and were specifically deemed to require priority assessment.

FY 2018 plan

We will continue to assess low-priority products. Moreover, we will begin providing assessment results of high-priority products to customers.

Challenge (2) Business/product development that incorporates sound chemicals management perspectives

FY 2017 results

- We began an initiative to confirm risks regarding substances contained in products at an earlier stage of development in order to enable sustainable product development that is safer and more secure.

FY 2018 plan

We aim to instill this initiative through e-learning, educational seminars, and other educational activities.

Challenge (3) Put in place a safety evaluation platform that engenders the confidence of society and acquire cutting-edge technologies

FY 2017 results

- External experts investigated Group animal testing facilities and confirmed that these facilities and their operations were appropriate.
- In an effort to contribute to establishing the technologies for an alternative method to animal testing, we participated in activities to improve the precision of predicting irritation in the OECD QSAR toolbox and participated in the activities of the OECD guideline project for an alternative method for sensitivity testing. We presented the results for each at the Japanese Society for Alternatives to Animal Experiments.

FY 2018 plan

In fiscal 2018, we will work to further increase the accuracy of the OECD QSAR toolbox and improve *in vitro* irritation testing to better advance animal testing alternatives.

Product Stewardship

► Management System

▼ Strengthening the Management System

► Product Stewardship Initiatives

Strengthening the Management System

Reinforce Governance in a Bid to Fully Comply with All Newly Enacted and Amended Laws

Toward the achievement of the World Summit on Sustainable Development (WSSD) targets, each country is promoting the enactment of new or revised laws. Having greatly changed the whole concept of the chemical management system, the European Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) system has been adapted by each country while continuing to be introduced into many countries. Meanwhile, regarding the issue of taking measures against existing chemicals, even those countries that are at the forefront of chemicals management are proceeding to make changes to their laws.

In accordance with the Act on the Registration and Evaluation, etc. of Chemical Substances (K-REACH) that came into effect in Korea in 2015, the Mitsui Chemicals Group reported its manufactured and imported tonnage, and is responding in a planned manner towards the June 2018 registration deadline for chemicals that are subject to registration. In addition, K-REACH abolishes the system used until now that registers only some chemical products, and will be revised to register all chemical products manufactured and imported in volumes of one ton or more per year, in the same way as European REACH. This system will be enforced from January 2019. We will take advantage of our European REACH and other experience in responding in a planned manner to this revision.

In the United States, the Toxic Substances Control Act (TSCA) was revised in June 2016. Coinciding with the "reorganization" of the list of existing chemical substances, we made notification of the substances manufactured and imported over the past 10 years.

Through active participation in industry initiatives, such as those of the Japan Chemical Industry Association (JCIA), and through close exchanges of information with local consultants, the Mitsui Chemicals Group quickly obtains the regulatory information from each country. At the same time, the Group works to ensure thorough compliance. Moreover, in 2017 we established an organization to accurately collect local legal and regulatory information through our affiliates. As part of this move, we held a legal and regulatory expert committee to exchange information that was jointly attended by experts in law and regulation from our European, American, and Chinese affiliates (MITSUI CHEMICALS EUROPE GmbH, MITSUI CHEMICALS AMERICA, INC., SDC Technologies, Inc., MITSUI CHEMICALS (CHINA) CO., LTD., TAIWAN MITSUI CHEMICALS, INC.). In fiscal 2018, we plan to expand this system to Southeast Asia.

Led by the Global Chemical Regulation Compliance Team, in which business divisions and all corporate divisions participate, Mitsui Chemicals investigated and rapidly implemented Group-wide response measures in divisions across the company. Going forward, we will continue to respond in a planned manner to newly enacted and revised laws and regulations, including REACH of Europe, K-REACH of Korea, and TSCA of U.S., manage the progress of this response, and ensure full compliance.

Thorough Chemicals Management after Product Release to Market

The promulgation of national laws, including European REACH, marks the beginning of the registration of products and chemical substances, but the management of risks, such as the imposing of restrictions and the granting of approvals by regulatory authorities after registration, does not end after a product is released to the market. Regulatory requirements after launch to the market are also becoming more sophisticated and complicated, and it is essential to promptly and precisely implement appropriate responses.

We respond to changes in, for example, risk assessments and risk management from a range of perspectives that include a variety of changes after release to the market, such as changes in laws and regulations; the addition of regulated substances; the ascertaining of new hazard information; changes of product application; changes in raw materials/manufacturing methods; and toxicity based on internal regulations. It is thought, however, that the responses to be made will become progressively more complex in the years to come due to the regulations covering chemicals becoming even more stringent, as a result of revisions to the law and the formulation of new laws, and due to progress made in the evaluation of substances, including under European REACH. To better respond to such a variety of changes of this kind, we will work to reinforce the chemicals management system and ensure management when changes are made.

Build a Structure That Properly Conveys Information That in Turn Complies with Diversifying Regulatory Requirements

Information on all the products, raw materials and chemical substances handled by Mitsui Chemicals is controlled in an integrated manner by a chemical product safety information system (SAP-EHS). Through coordination between this system and mission-critical processes, we have reinforced both the expeditious provision of information to customers and compliance relating to chemical laws and regulations, such as the confirmation of legal compliance with domestic and foreign regulations, the management of production/import quantities, and the automatic creation of safety information, such as multilingual SDS, product labels, MSDSplus¹, etc. Going forward, we will also comply with chemSHERPA², a new scheme for conveying information about chemical substances contained in products.

To enable us to share product-related regulatory and safety information, we introduced this system to some affiliates in Europe, the United States and China and have been carrying out system upgrades. In addition, the automation of SDS creation was completed in China, following on from Europe, the United States, South Korea and Taiwan. System compatibility with major export destination countries was also completed.

In addition to advancing the development of this system to affiliates in Japan and overseas in the years to come, we will strive to communicate information that will enable us to respond to diversifying regulations and customer demands.

Specifically, in the case of the overseas version of SDS, we will assign expert staff to carry out locally the confirmation of the detailed applicable laws of each country and strengthen SDS creation and supply systems as the Mitsui Chemicals Group.

*1 MSDSplus:

A basic information sheet used to communicate information about chemical substances contained in products, as recommended by the Joint Article Management Promotion-consortium (JAMP).

*2 chemSHERPA:

Chemical information Sharing and Exchange under Reporting Partnership in supply chain. A scheme for conveying information about chemical substances contained in products. The Ministry of Economy, Trade and Industry is developing and promoting this scheme in aims of having the scheme utilized globally.

Product Stewardship

► Management System

► Strengthening the Management System

▼ Product Stewardship Initiatives

Product Stewardship Initiatives

Undertake Risk Assessments as Well as Risk Management Via the Supply Chain for All Products

On the basis of Product Stewardship, the Mitsui Chemicals Group takes a risk-based approach to the safety management of chemicals that extends to product life cycles.

New products undergo the prescribed risk assessments step by step, broken down into each of the five product development stages.

In accordance with Company rules, we conduct risk assessments from the viewpoints of product development (raw materials, physiochemical properties) and manufacturing (explosion risk, human health, environmental impact) and assign those assessments to the R&D Laboratory, business divisions, the Responsible Care (RC) & Quality Assurance Division, and the Safety & Environment Technology Department, respectively. In addition to the products themselves, we perform risk assessments that extend through the entire product life cycle, covering the raw materials, catalysts, and additives used in the manufacturing process, the byproducts that arise from the manufacturing process, and the chemical substances' effects on operator safety and on the products.

In order to achieve the WSSD goals, the chemicals industry has been working as a whole globally to reinforce chemical management. The Mitsui Chemicals Group is also working to conduct risk assessments of all products by 2020 for those existing products that have already reached the market. At the same time, we are working to determine risk levels from the points of view of the exposure level and hazard and are systematically conducting risk assessments starting with high-priority products in order to reliably implement risk management based on these risk assessments. In fiscal 2016, worker risk assessment was carried out using the Control Banding Method^{*1}, and from the total number of around 2,500 Company products we narrowed down the number of high-priority products to approximately 1,000. In fiscal 2017, the risk levels of the high-priority products from among these 1,000 products were calculated using tools such as ECETOC TRA^{*2}, which is used for European REACH risk assessments. In fiscal 2018, along with expanding the assessment targets to low-priority products, risk assessment results will be provided to the customer and proposals made for risk reducing measures.

*1 Control Banding Method:

A chemical substance management method created by the International Labour Organization (ILO) with the aim of protecting workers from chemical substances.

*2 ECETOC TRA:

A targeted risk assessment (TRA) tool developed by the European Centre for Ecotoxicology and Toxicology of Chemicals (ECETOC).

Chemicals Management throughout Product Life Cycles



Mitsui Chemicals Product Development Guidelines

Stage	Role	Responsible Care Responses
I	Tentative product concept setting	Gathering of safety-related information, conducting of surveys
II	Tentative product concept market opportunity assessment	Provide customers with safety information when supplying prototypes
III	Preliminary market development by limited number of customers	Notify those involved within the Company of safety information Provide safety information to limited number of potential customers
IV	Full-scale market development	↓ Conduct risk assessment by application Conduct operator/environmental risk assessment ↓ Hold product safety conference* ¹ → Change* ² /cease development ↓ Implementation of risk management measures* ³ Submission of application for approval
V	Commercialization, release to market	Implement Change Control Implement risk assessment of existing products

*1 Held when it cannot be confirmed that the risk is sufficiently low, etc., or in the event of conflicts arising with internal standards.

*2 Examples: Changes of materials, method of manufacture, specifications, etc.

*3 Examples: Restrictions on application/use conditions; in addition to SDS, information conveyed in technical documents.

Business/Product Development That Incorporates Sound Chemicals Management Perspectives

For human health and environmental protection as well as for sustainable development, the Sound Chemicals Management (SCM) of chemical substances and hazardous waste that takes into account product life cycles is being proposed and is also being deployed by the International Council of Chemical Associations (ICCA). The Mitsui Chemicals Group is also engaging in business and product development that incorporates SCM perspectives.

For example, in the Development Guidelines we set out the items to be checked at each of the five development stages, and at the tentative product concept setting stage we conduct surveys on the safety of product components of the product and legal information.

In recent years, social concerns with regard to the safety of chemical substances have been on the rise and reached the stage where even greater safety is being demanded. Under the European REACH regulations, risk assessments are conducted by the authorities, but due to the previously mentioned demands of society, there is a tendency for the judgments necessary to strengthen the regulations, such as the limitations of use imposed by the authorities, to be even more stringent on the basis of precautionary principles.

In response to this situation, we initiated activities from SCM perspectives, including disseminating information to research and business development departments and the raising of awareness. Specifically, we have defined the regulated substances and some of the substances of concern for our customers as substances to be managed, and from fiscal 2018 we will establish a mechanism to check whether the relevant substances are contained in products at the initial stages of development (product concept validation stage). In addition, we will initiate educational activities for research and development staff so that they can select substances ahead of their regulation.

Moreover, the Group is certifying products that have an environmental contribution value as Blue Value™ products. Although we have defined "harmonize with nature" as one of the assessment basis for the environmental impact assessment criteria used at that time of certification and reflect the degree of impact the product has on ecosystems and the environment, we must grasp the dynamics (for example, fate of substances and exposure to the human environment) of even more products and related substances in order to assess many of our products, including those under development and new products. Therefore, based on the latest reliable assessment models and data, we have begun the work of adding the necessary assessment factors (characterization factors) to the environmental impact assessment of chemical substances.

Through these efforts, the Mitsui Chemicals Group aims to provide products that will enable even more of a contribution to human health, environmental protection and sustainable development.

Put in Place a Safety Evaluation Platform That Engenders the Confidence of Society and Acquire Cutting-edge Technologies

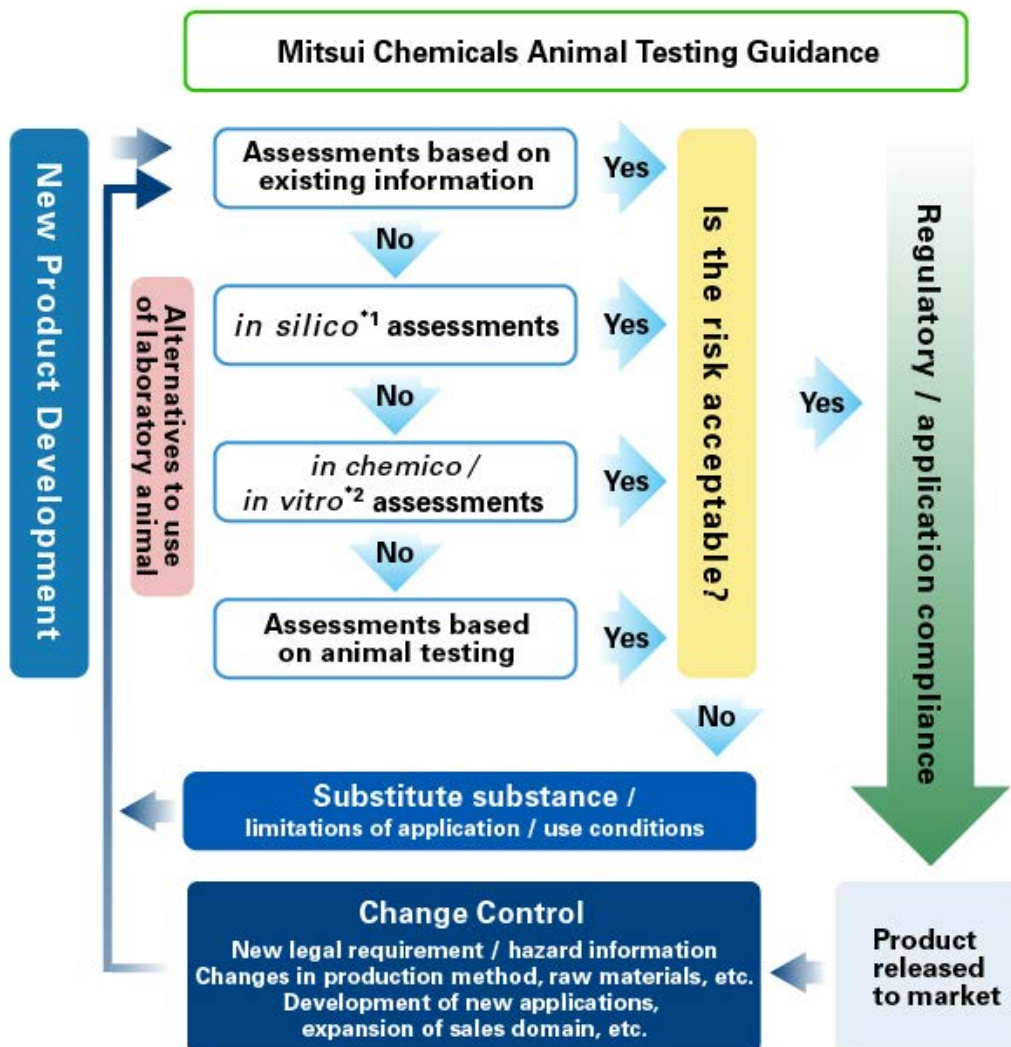
The development of chemical products and chemicals management requires the safety tests demanded by legal regulations. There are also cases in which animal test may be necessary, but we are formulating internal institutional rules for the Group's animal testing guidelines and animal testing facilities based on the 3R principles (of replacement, the utilization of alternative methods; reduction, reduction of the number of uses; and refinement, the alleviation of suffering) as required by legal regulations and the basic guidelines of the Ministry of Health, Labour and Welfare. Based on these rules,

the Institutional Animal Care and Use Committee was established and pre-screening of all animal testing and animal testing facilities are approved by the head of the testing institution. Testing and testing management, facility and equipment propriety, and education and training are checked through a self-inspection and evaluation every year. These activities are documented and reported to the head of the testing institution through the Institutional Animal Care and Use Committee. In fiscal 2017, self-inspections and evaluations, as well as facilities, were verified by an outside expert, thereby confirming that these are appropriately managed.

As a global risk assessment trend, the Integrated Approaches to Testing and Assessment (IATA), the Organisation for Economic Co-operation and Development (OECD) risk assessment method, are gaining in popularity. Under this method, *in silico* (techniques that predict harmfulness from a chemical substance's structure) and *in vitro* (an alternative test method that does not utilize animal testing) are integrated with existing data, and animal experiments only carried out when necessary. In addition, the IATA has been incorporated into the OECD testing guidelines for irritants, corrosives and sensitivity, and has been introduced into each country's regulations. In order to respond to these new legal requirements and to further enhance reliability, we are actively working to acquire advanced technologies. For example, in fiscal 2017, in an effort to contribute to establishing the technologies for an alternative method to animal testing, we took initiatives and produced results that improved the precision of irritation prediction in the OECD QSAR* toolbox (one of the *in silico* techniques) and participated in the OECD guideline project for an alternative method for sensitivity testing in cooperation with the Japanese Center for the Validation of Alternative Methods (JaCVAM). We presented the results of reach at the Japanese Society for Alternatives to Animal Experiments. We will continue to enhance efforts towards animal testing alternatives and contribute to their promotion.

* QSAR:
Quantitative Structure—Activity Relationships.

New Safety Assessment System



*1 *in silico* : Computational scientific method utilizing structural activity correlations and similar substance information.

*2 *in chemico/in vitro* : Laboratory-level evaluation method that utilizes scientific / biological reactions.

Participation in Industry Chemicals Management Initiatives

One international initiative taken to achieve the World Summit on Sustainable Development (WSSD) goals is UN Environment's SAICM^{*1}. Having concluded an agreement with UN Environment to promote the implementation of SAICM, the International Council of Chemical Associations (ICCA) provides support in a number of areas, including human resources and financing. The ICCA intends to contribute to sound chemicals management aimed at SAICM through

Responsible Care and the Global Product Strategy (GPS)*². Each country's chemical industry association is conducting activities aimed at achieving the WSSD target under the ICCA.

To achieve the WSSD goals, the Mitsui Chemicals Group endorses and proactively participates in the voluntary initiatives encouraged by the ICCA.

One activity for the ICCA has been Capacity Building. This is an activity that, especially in developing countries, supports the ability to develop sound chemicals management. Since fiscal 2015, Mitsui Chemicals employees have co-chaired the ICCA's Capacity Building Task Force and displayed leadership qualities in support activities designed to improve sound chemicals management and sustainability throughout the world.

In Japan, the JCIA is promoting GPS/JIPS*³ activities to achieve the WSSD goals, and the company is a key member in reinforcing those activities. In fiscal 2017, we actively participated in and contributed to JCIA activities, for example by having Mitsui Chemicals employees serve as lecturers at JCIA-sponsored seminars.

*1 SAICM (Strategic Approach to International Chemicals Management):

A strategic approach to international chemicals management. Established to promote advances in a number of areas to achieve the WSSD goals, such as risk reduction based on scientific risk assessment, preventive approaches, the collection and provision of information on hazardous chemical substances, improvements in each country's chemical substance management system, and the promotion of technical cooperation in developing countries.

*2 Global Product Strategy (GPS):

In order to minimize the risk from chemicals throughout the supply chain, each company conducts risk assessments on its chemical products. In addition to implementing appropriate risk-based management, they engage in voluntary efforts to disclose to society in general, including customers, information on product safety and risk. GPS is thus designed to strengthen product stewardship.

*3 GPS / JIPS (Global Product Strategy / Japan Initiative of Product Stewardship) :

Name given to GPS activities in Japan.

Quality of Products and Services

▼ Management System

► Quality Improvement Initiatives

The Mitsui Chemicals Group is providing products and services that foster satisfaction while responding to the trust of customers by continually improving the level of its quality management based on its Responsible Care Policy.

Management System

Policy

Under our Responsible Care Policy, we have identified details of our quality system and other key issues such as PDCA procedures as basic matters concerning quality management in our internal regulations. In carrying out the appropriate procedures, we are providing products and services that satisfy customers while earning their trust.

→ Responsible Care Policy

In conjunction with the global expansion of the Group's business, we have identified specific principles for global quality management in order to ensure a uniform awareness toward the basic level of quality. Steps are being taken to roll out these principles across the Group as a whole.

The Mitsui Chemicals Group's Global Quality Management Principles

The Mitsui Chemicals Group makes every effort to increase customer satisfaction via a two-pronged approach to quality management, based on quality control ("built-in quality activities"^{*1}) and quality assurance ("activities that win over customers' trust"^{*2}). In this regard, the Company has identified the following principles.

1. Provide customer-oriented products and services

- Clarify customers' requirements and ensure quality
- Design and provide products that also look beyond immediate customer needs
- Propose and provide new products and services that address customers' needs

2. Ensure objective and transparent quality assurance

- Give priority to compliance with laws and regulations over the pursuit of any profit
- Put in place a framework that enables a prompt response when an issue occurs
- Ensure the independence of the Quality Assurance Division

3. Put in place a framework that allows the stable supply of products

- Ensure quality control from the procurement of raw materials to the delivery of products to customers
- Adhere strictly to a policy of management of change and non-conforming product control

4. Create a more open corporate culture

- Adhere strictly to a policy of "report, contact, and consult;" promote the sharing of information between departments
- Undertake the exchange and horizontal deployment of quality assurance information and techniques across the Group

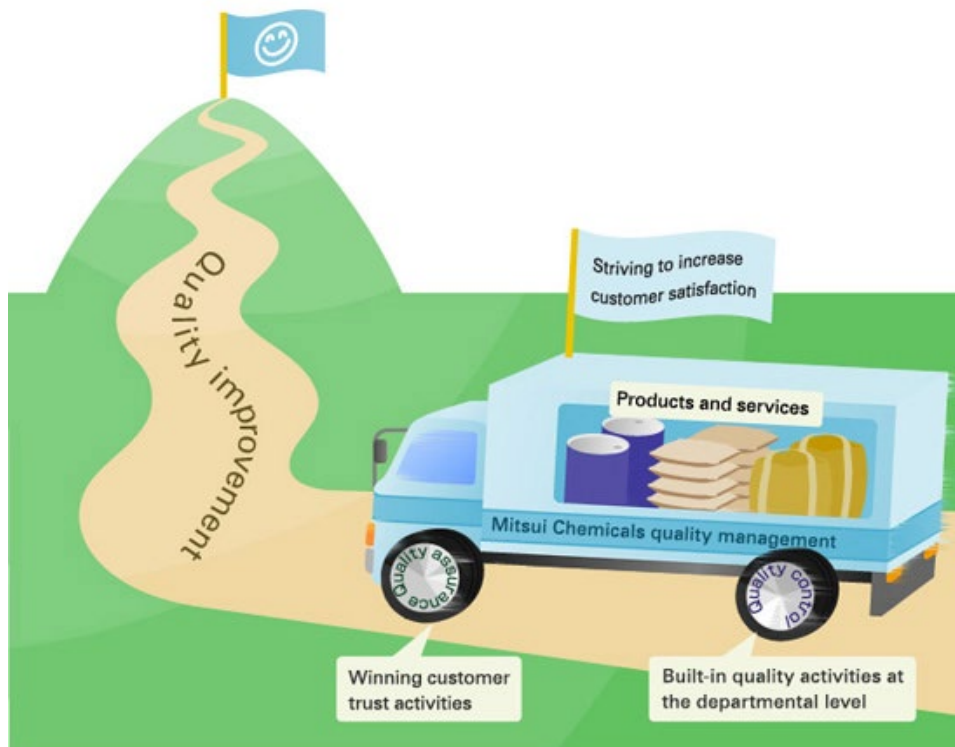
*1 Built-in quality activities:

Our built-in quality activities are aimed at minimizing discrepancies at every stage of the process, including purchasing, design, logistics, and sales as well as manufacturing, to enable every department to provide the same quality of product and service.

*2 Activities that win over customers' trust:

Our activities that win over customers' trust meanwhile are aimed at resolving issues from the customer's perspective, and are spearheaded by the Quality Assurance Department, independently of our sales and manufacturing sections.

Quality Management Philosophy



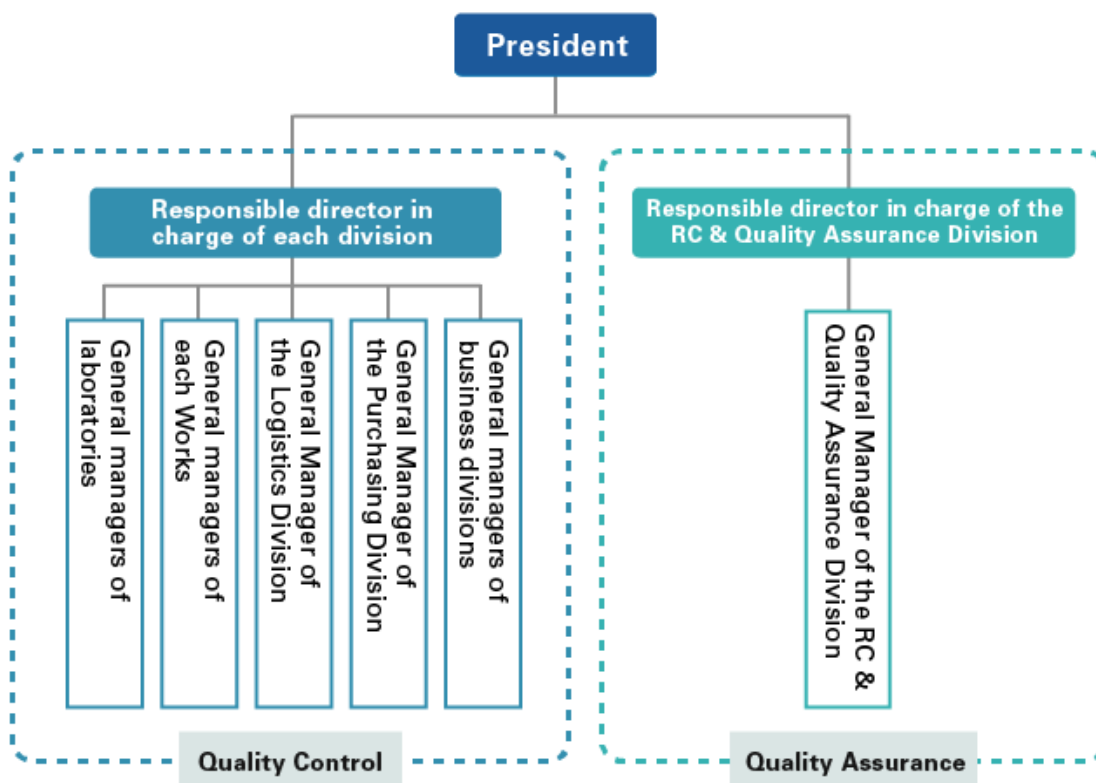
Reference: ISO9000 (Quality management systems - Fundamentals and vocabulary)
 Quality assurance: Part of quality management, focused on providing confidence that quality requirements will be fulfilled
 Quality control: Part of quality management, focused on fulfilling quality requirements

System and Responsible Officers

With the president assuming ultimate responsibility for quality management, the RC & Quality Assurance Division controls quality management for the entire Mitsui Chemicals Group in Japan and overseas. Under this structure, every effort is made to improve product and service quality in all divisions and further raise customer satisfaction.

Business divisions, the Logistics and Purchasing divisions, Works, and laboratories are responsible for quality control. The RC & Quality Assurance Division is responsible for quality assurance. As the heads of each division, general managers engage in quality management.

Quality Management System and Responsible Officers



Monitoring Methods

Quality Management

Steps are taken to identify quality audit program and priority audit items and to confirm the status of quality management implementation across the Group as a whole. A review of certain items including observations raised during fiscal year-end audits is undertaken. The results of this review are reflected in the audit program for the following fiscal year.

Responsible Care Audits

Quality of Products

In addition to systematically collating customer complaints, steps are taken to monitor the details, causes, and each customer's response with respect to each complaint. After analyzing the information gleaned on a monthly basis, the results are shared within the Group. After conducting a review of complaints over the year, quality targets are identified for the following fiscal year.

Goals and Results

KPI	Scope of Compilation	FY2017			FY2018	Medium to Long-term
		Goals	Results	Level Achieved	Goals	Goals
Incidence of customer non-conformance	Mitsui Chemicals Group	—	—	—	—	Less than 10ppm (FY2025)
Number of complaints for which the Company is responsible	Mitsui Chemicals, Inc.	Reduce by at least 10% (YoY)	Reduced by 15% (YoY)	○	Reduce by at least 10% (YoY)	A deemed level of zero complaints (FY2025)
Number of complaints where a risk has been identified in line with the Company's criteria included in the number of complaints for which the Company is responsible	Mitsui Chemicals, Inc.	Less than 20% of the total	17% of the total	○	Less than 20% of the total	A deemed level of zero complaints (FY2025)
Number of PL accidents	Mitsui Chemicals Group	0	0	○	0	0 (FY2025)
Number of major quality-related legal and regulatory violations	Mitsui Chemicals Group	0	0	○	0	0 (FY2025)

Review and Challenges

Owing mainly to efforts aimed at uncovering the underlying cause of each complaint and the implementation of measures designed to prevent any recurrence promoted horizontally across the Group, successful steps were taken to reduce the number of quality-related complaints on an ongoing basis and curtail any incidence by at least 10% in fiscal 2017 compared with the previous fiscal year.

In addition, every effort is being made to explain the Group's Global Quality Management Principles, put in place in 2015, on an ongoing basis and to nurture awareness toward quality and compliance within the Group through audits and training sessions.

Looking ahead, customer-oriented and advanced quality control will become essential due to the growing trend toward globalization and increased product performance. With this in mind, we will work to build a quality management system that can address this and win over the trust of customers.

Quality of Products and Services

► Management System

▼ Quality Improvement Initiatives

Quality Improvement Initiatives

Improving the Standard of Quality Management

Our efforts to improve quality management standards revolve primarily around quality auditing and training. The RC & Quality Assurance Division provides all departments within the Mitsui Chemicals Group, including the head office, works, laboratories, and domestic and overseas affiliates, with support in order to improve quality management through quality auditing that takes into consideration the perspectives of customers. In fiscal 2017, audits were conducted on (1) the clarity of responsibility delegation and operations across the supply chain, (2) the identification of latent quality risks and measures aimed at risk reduction, and (3) the integrity of product inspection data as priority areas. Please click the link below to view the results of quality audits in fiscal 2017.

Audits Conducted in Fiscal 2017

In terms of quality training, we have formulated a training program and are developing employees through e-learning as a platform for ensuring compliance awareness. Covering more than just the Group's operations in Japan, this training is also implemented for the benefit of overseas subsidiaries and affiliates. As far as compliance is concerned, we are using audits and other initiatives as direct training opportunities and the means to provide reminders. Moreover, we have been implementing frontline measures to prevent quality issues on the shop floor (QRG activities) since fiscal 2010, with the aim of identifying and eliminating risks that could lead to quality issues. These measures are being carried out at all of the Company's main works and factories while also being rolled out to subsidiaries and affiliates.

We are constantly working to encourage and raise the level of quality awareness on the frontline and give out awards to departments or individuals that have particularly helped to improve frontline quality standards, to coincide with our annual nationwide Quality Month campaign.

Responding to the Voices of Customers

Whenever we receive a complaint from one of our customers regarding our products or services, business and manufacturing divisions together with the Quality Assurance Department work in unison to identify the cause of the complaint and to take corrective action. In this manner, every effort is made to implement preventive measures across the organization as a whole.

As one such initiative, all members of the Quality Assurance Department take the time to go back to the root of any issues and reassess the cause of each complaint, reconsider appropriate countermeasures, and confirm progress. At the same time, energies are channeled toward extracting important case studies, particularly where there is a substantial risk to customers, and where the potential exists for similar cases to arise. These case studies are then shared across the entire Company.

Society's interest toward the impact of chemical substances on people's health and the environment continues to rise.

Against this backdrop, chemical substance regulations are becoming increasingly stringent with growing importance placed on the higher level of management of products containing chemical substances.

Under these circumstances, the Mitsui Chemicals Group has not only set up an information database in response to inquiries regarding products containing chemical substances from customers, but also established a designated department to undertake appropriate research. Through these means, we are working diligently to reply accurately to each inquiry in a timely manner.

Customer-specific Initiatives:

Initiatives Aimed at Ensuring Statutory, Regulatory, and Authentication Compliance

The Mitsui Chemicals Group takes steps to ensure compliance with all applicable statutory, regulatory, and authentication requirements on an individual product application basis and conducts internal risk assessments before bringing a particular product to market. From fiscal 2015, we established a designated group to address compliance issues in connection with laws and regulations related to pharmaceutical affairs including medical instruments and authentication. With this designated group taking the lead, every effort is made to confirm the safety and efficacy of products. Steps are also taken to strictly comply with all statutory and regulatory requirements. Moreover, we look to confirm the status of statutory, regulatory, and authentication compliance through periodic inspections after products have been launched.

Logistics

▼ Management System ▶ Transporting Products Safely

▶ Initiatives to Reduce Environmental Impact in Logistics

In order to maintain and increase efforts aimed at protecting the environment and ensuring safety and quality with respect to the logistics function, it is important to not only gain the cooperation of the Group's business site, but also across the supply chain. Here at the Mitsui Chemicals Group, we carry out a wide range of initiatives to ensure that our products are safe and transported in a manner that takes into consideration the environment.

Management System

Policy

The Mitsui Chemicals Group has established "Off-premise Logistics Environment, Safety, and Quality Management Bylaws" based on its Responsible Care Policy and Company-wide regulations for risk management. Moreover, the Group complies with all related legal and regulatory requirements and has put in place various initiatives including logistics accident countermeasures. Logistics subcontractors are also required to comply with the Group's bylaws.

System and Responsible Officers

With the responsible director in charge, the Logistics Division sets targets for the fiscal year based on results (number of accidents, complaints, etc.) up to the previous year. Various measures (audit of logistics subcontractors, training, on-site discussion, campaigns, etc.) are incorporated into the annual plan with definitive steps then taken to implement a PDCA cycle. The Logistics Division reports on logistics performance as well as the progress of annual plans while promoting the exchange of opinions through various means including regular meetings with the Responsible Care Committee and the responsible director in charge of the Logistics Division.

Monitoring Methods

Among a host of measures, steps are taken to conduct a Logistics Division Responsible Care audit of the Group's business sites and logistics subcontractors based on specific criteria and a checklist that is prepared in advance. In this manner, every effort is made to monitor the progress of annual logistics Responsible Care plans. The results of the aforementioned measures and audit are reported to all relevant logistics-related parties and proper action taken.

Goals and Results

KPI	Scope of Compilation	FY2017			FY2018	Medium to Long-term
		Goals	Results	Level Achieved	Goals	Goals
Number of work-related significant occupational injuries* ¹ in logistics	Mitsui Chemicals Group	0	2	×	0	0
Number of major accidents* ² in logistics	Mitsui Chemicals Group	0	0	○	0	0
Number of issues impacting customers* ³	Mitsui Chemicals Group	Less than 24	20	○	Less than 20	Less than 90% (average of the most recent three years)
Incidence of issues impacting customers* ³	Mitsui Chemicals Group	Less than 50ppm	42ppm	○	Less than 40ppm	Less than 30ppm (FY2020)
Number of complaints	Mitsui Chemicals Group	Less than 7	5	○	Less than 7	—

Number of legal and regulatory violations	Mitsui Chemicals Group	0	0	○	0	0

- *1 Work-related significant occupational injuries in logistics:
Work-related significant occupational injuries that occurred during logistics activities undertaken by the Mitsui Chemicals Group including across the supply chain.
- *2 Major accident in logistics:
Major accident that occurred during logistics activities undertaken by the Mitsui Chemicals Group including across the supply chain.
- *3 Issues impacting customers:
Quality issues (including complaints) and accidents that impacted customers.

Review and Challenges

The number of complaints and issues impacting customers is in a decline owing mainly to such efforts as training, measures aimed at increasing awareness, campaigns as well as monthly and weekly reports. Meanwhile, there were two work-related significant occupational injuries at subcontractors in fiscal 2017. As a preventive measure, steps have been taken to reconfirm areas of potential danger as well as operations at all Works and to implement safety measures for facilities. In addition, thoroughgoing efforts are being made to prevent any recurrence. This includes the update, promotion of increased awareness and training measures regarding dangerous location maps, a review of dangerous operations and procedures, and the strengthening of patrols.

Logistics

► Management System

▼ Transporting Products Safely

► Initiatives to Reduce Environmental Impact in Logistics

Transporting Products Safely

Dialog with Logistics Subcontractors

Here at the Mitsui Chemicals Group, we are committed to conducting safety activities in partnership with our logistics subcontractors.

The department responsible for logistics at each of our works organizes logistics meetings with the works' logistics subcontractors, usually once a month, in order to share information about accidents and other relevant matters, review details of *hiyari-hatto* (near-miss) ^{*1} incidents, carry out on-site patrols and training, and improve communication. We also make every effort to prevent accidents as part of our logistics operations by requiring contractors to undergo responsible care audits and engage in safety dialog with on-site operators, based on the principle of *Shichigen Shugi*, or "the seven actuals" ^{*2}. Energies are also directed toward preventing incidents relating to the logistics process. This includes the elimination of erroneous shipments and deliveries as well as product leakage.

Third-party logistics (3PL) ^{*3} companies take the lead in managing 3PL products. The aforementioned activities are also undertaken with the departments responsible for logistics at each works playing a supporting role.

*1 Near-miss:

Any narrowly avoided major accident or disaster.

*2 The seven actuals:

Solving problems by going to the actual location (*genba*), inspecting the actual situation (*genbutsu*) and ascertaining the actual facts (*genjitsu*) while placing the utmost importance on actual principles (*genri*), actual rules (*gensoku*), the actual basics (*genten*), and actual people (*ningen*).

*3 Third-party Logistics (3PL):

A form of logistics operation where a third party undertakes all or a portion of the logistics function on a contract basis.

Safety Measures Using SDS and Yellow Cards

As we deal with high-pressure gas and numerous hazardous or toxic chemicals that are required by law to be managed and handled in a certain manner, we take the utmost care to ensure that our products are transported safely. For the subcontractors to whom we consign logistics, we provide an SDS^{*1} for each product, regardless of whether it is dangerous or hazardous, to serve as information regarding the precautions needed when handling and storing our products. In the same way as the SDS, we also require drivers and other operators transporting our products to carry yellow cards^{*2} outlining measures that need to be taken and information that needs to be reported in the event of an accident.

*1 SDS: Safety Data Sheet

Documentation issued by one operator to another when transporting chemicals or other such substances, containing information such as the name of the substance, the name of the supplier, hazard/toxicity levels, safety measures and emergency procedures.

*2 Yellow card:

Promoted by the Japan Chemical Industry Association, an emergency contact card on which are written the actions to be taken those involved, including the truck driver, fire and police, in preparation for the unlikely event of an accident when transporting chemical substances or high-pressure gas.



Yellow card

Eliminating Transport-related and Occupational Accidents

We publish a monthly report on Responsible Care logistics safety quality and monthly / weekly RC reports, conduct creatively original risk prevention activities, such as reinforcing the basic rules for vehicle safety^{*} and peer group case studies of logistics accidents and difficulties, while working to reduce and eradicate accidents and occupational injuries.

At busy periods and at the end of the year/fiscal year, we distribute and put up

posters to prevent logistics difficulties and put into effect a nationwide campaign at worksites.

* Basic rules for vehicle safety:

1. Before reversing, get out of the truck and make sure it is safe.
2. Put the brake lock on and be sure to place a chock against a tire.
3. Before departure, always do a full walk-around, top to bottom inspection to check that everything is safe.



Monthly report on logistics safety quality

Minimizing Damage in the Event of an Accident

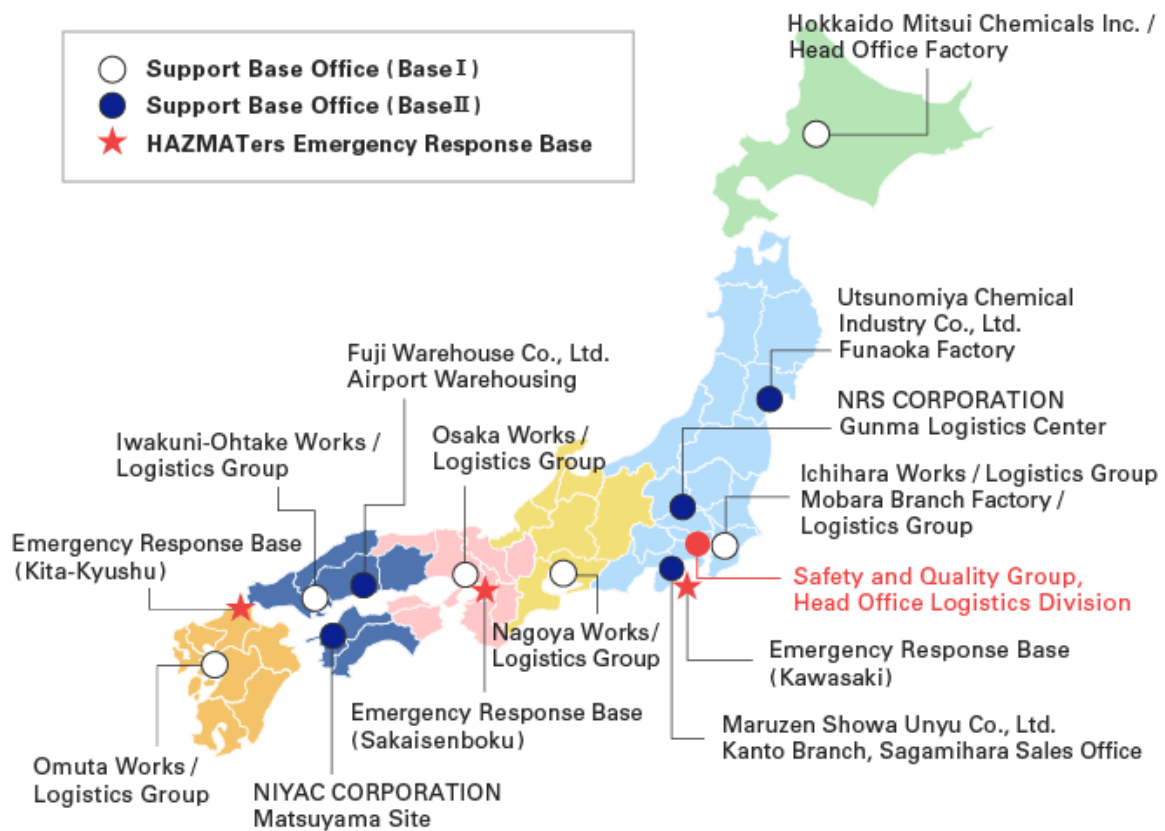
In an effort to minimize damage in the event of an accident during the transportation of our products, we have introduced a set of regulations outlining the Mitsui Chemicals Group Logistics Emergency Network (MENET^{*1}). The network is divided into six areas covering different parts of the country and can be mobilized 24 hours a day. We also conduct emergency contact and mobilization drills twice a year.

Maintaining Support Base Offices (Base Is) and Emergency Equipment Loading Points (Base IIs), we also adopted the Maritime Disaster Prevention Center's Hazardous Material Emergency Response Service (HAZMATers^{*2}) to respond in a timely manner to accidents as and when they occur and to prevent major damage while working to enhance the MENET system.

*1 MENET (Mitsui Chemicals-G Logistics Emergency Network):
Offsite logistics accident/emergency network and support system.

*2 HAZMATers (Hazardous Material Emergency Response Service) Maritime Disaster Prevention Center:
Hazardous Material Emergency Response Service (HAZMATers).

MENET Support Bases and HAZMATers Emergency Response Bases



Outside Assessments

Mitsui Chemicals' Logistics Division was presented with this year's Japan Chemical Industry Association ("JCIA") RC Outstanding Award in May 2018. The RC Outstanding Award is presented annually to business sites, works, divisions, groups, and individuals in recognition of their outstanding efforts and contributions. In this manner, JCIA is striving to further promote and expand Responsible Care.

Guided by a policy that places safety as its top priority, Mitsui Chemicals works diligently to ensure thoroughgoing

communication between administrative divisions and the frontline. To this end, the Company engages in variety of activities to ensure that the goal of absolute logistics safety is conveyed to each and every member working at the frontline. This includes communications activities and lending a keen ear to onsite personnel. As a result of these endeavors, successful steps have been taken to reduce logistics accidents and quality related complaints by 80% and 74%, respectively, over the period from 2008 to 2017. Furthermore, we set up the Mitsui Chemicals Group Logistics Emergency Network (MENET) in 1995 and continue to minimize damage caused by a variety of events including a logistics accident or incident during the transportation of our products.

This award reflects the Company's earnest efforts to enhance logistics safety and quality.

Logistics

► Management System

► Transporting Products Safely

▼ Initiatives to Reduce Environmental Impact in Logistics

Initiatives to Reduce Environmental Impact in Logistics

Mitsui Chemicals is working to build a logistics structure that has a low impact on the environment. Promoting a model shift in moving away from the use of trucks and increasing the volume of marine and rail transportation, we are working to reduce CO₂ emissions through such measures as improving our load efficiency by building of a shared logistics system for small-lot products made up of chemical manufacturers in the Keiyo area.

In fiscal 2017, the Company's per-unit energy consumption rate for the transportation of products^{*1} was 6.65 kiloliters per thousand tons. This was down 5.7% compared with fiscal 2016. This downturn in the Company's per-unit energy consumption rate largely reflected such factors as the decrease in the average transportation distance of products attributable to changes in sales.

In addition, Mitsui Chemicals has been designated as an Eco Rail Mark company by the Administration and Screening Committee of Japan's Ministry of Land, Infrastructure and Transport.



→ Initiatives to Reduce Environmental Impact in Logistics

In fiscal 2017, five companies including Mitsui Chemicals were collectively certified as a model shift promotion business by Japan's Ministry of Land, Infrastructure, Transport and Tourism. In this instance, certification recognized the model shift away from the use of trucks to rail when transporting products between the Company's operations in the Ichihara area (Chiba Prefecture) to its affiliate Du Pont-Mitsui Polychemicals Co., Ltd. in the Ohtake area (Hiroshima Prefecture). Moreover, steps were taken to introduce large-scale containers in earnest from August 2017 and to realize container round use^{*2}. In the future, plans are in place to reduce the amount of CO₂ emissions by 70% and truck drivers' hours by 86.8% compared with the levels recorded prior to the change in transportation route.

^{*1} Per-unit energy consumption rate for the transportation of products:

Amount of energy consumed (crude oil equivalent in kiloliters) / Volume of product shipments (thousands of tons).

^{*2} Container round use:

Container round use is a concept in which the devanned container is used without returning it to the shipping company. The container is diverted after securing a return load.

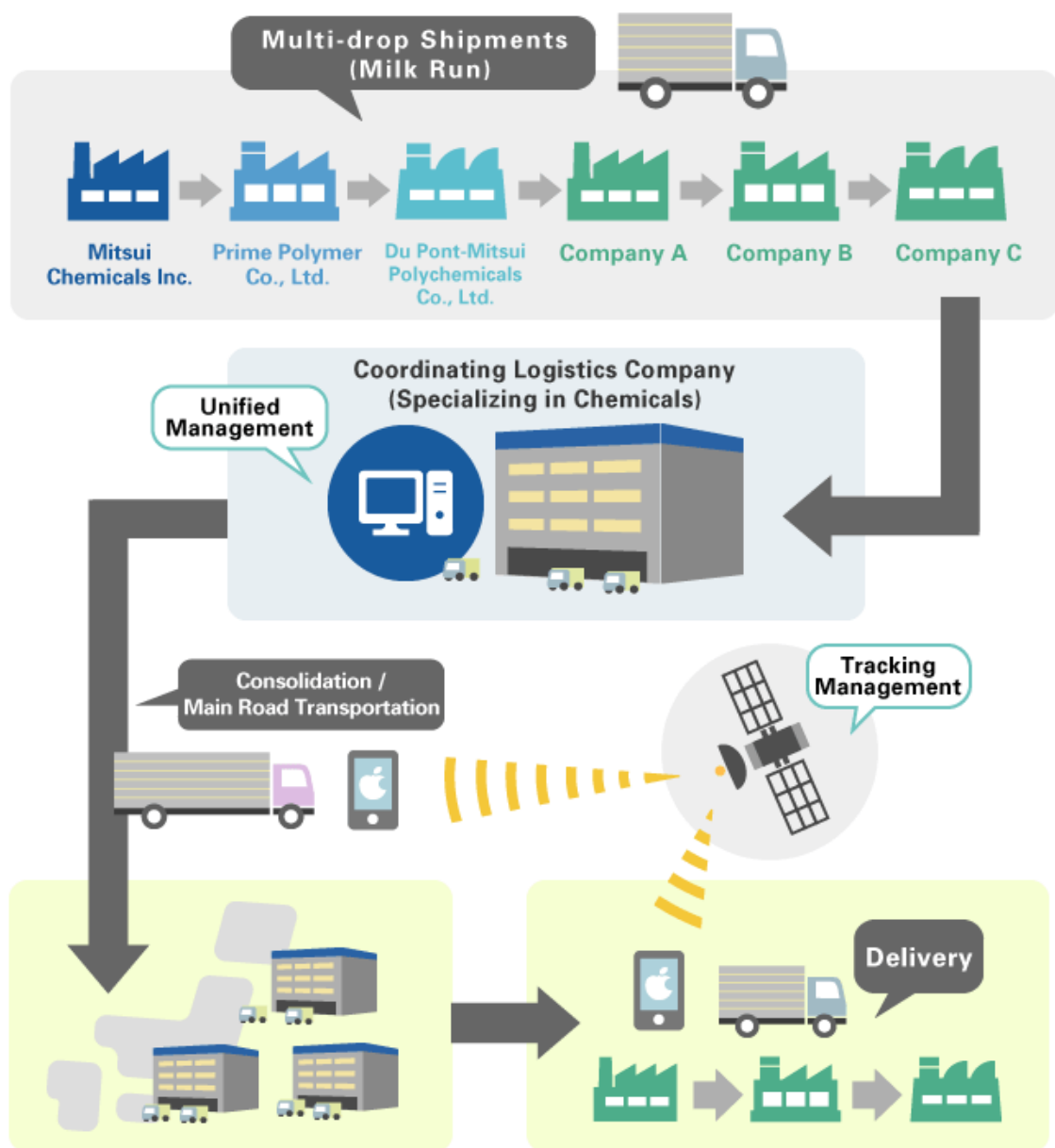
Shared Logistics System for Small-lot Products by Keiyo Area Chemical Manufacturers

Against the backdrop of an increasingly serious shortage of drivers and burgeoning mail order demand, operators began to shun the transportation of chemicals. Securing stable transportation capacity for small-lot products over long distances thus became an urgent issue common among chemical shippers. In the Keiyo area to the east of Tokyo, we collect shipments from the production sites of other manufacturers in the vicinity and share the logistics of delivering those products to customers via common transportation routes.

Traditionally, transportation was carried out by delivery companies that took chemicals mixed with loads of general merchandise on set routes via multiple transshipment points. Since we reduce the number of transshipment points by using companies specializing in chemicals, we can expect to reduce the number of quality issues, such as damage caused in transit.

We can also expect that the improvement in load efficiency will have the effect of reducing our CO₂ emissions.

Shared Logistics System



Occupational Health

▼ Management System

► Occupational Health Initiatives

The main purposes of occupational health are to prevent the health hazards caused by harmful factors in the workplace, while working to maintain and promote the health of employees. In addition to complying with the Occupational Health and Safety Act and related laws and regulations, the Company believes that encouraging employee health promotion leads to the happiness of employees and their families and that for employees to be energetically active in their local communities, including after retirement, is a corporate social responsibility and thus promotes occupational health. At the same time, the Company believes that healthy employees make for healthy organizations and contribute to an improvement in the Company's labor productivity, and we are thus working to improve both the well-being of our employees and the organizational culture.

Management System

Policy

Under our Responsible Care Policy, we actively promote the well-being of all our employees. In addition, under Company rules (occupational health regulations) that pertain to occupational health management, set forth in our basic items that also cover occupational health, we have developed the basic philosophy of "Employee well-being is directly linked to the Company's well-being." Based on this, we work to develop occupational health measures, including for health management.

System and Responsible Officers

With the responsible director in charge of the Human Resources Division, the industrial physician who heads the Health Management Department (supervising industrial physician) in the Company's head office holds regular Group-wide industrial physician conferences to consider issues and measures related to health management. Based on these conferences, we formulate occupational health plans during the fiscal year and proposals for annual plan key issues and measures (Group-wide occupational health key issues), which are decided through deliberations by the Responsible Care Committee. In addition, the Head Office, Sodegaura Center, and the healthcare sections of all five of our Works take the lead in drawing up and expanding occupational health annual plans for each business site. Full-time industrial physicians, nursing staff and health supervisors at healthcare sections promote efforts to improve employee health and measures designed to prevent employees from being exposed to harmful substances. We also assign part-time industrial physicians, nursing staff, and other healthcare professionals to our smaller Works and to major Works operated by our subsidiaries and affiliates, in an effort to help improve the health of all Group employees.

The relevant persons and labor union members at each Mitsui Chemicals site hold a health and safety committee meeting for each site, in which they participate and at which they report on and discuss issues related to occupational health, including the maintenance and promotion of health, workplace environments and long working hours.

Monitoring Methods

With regard to Mitsui Chemicals business sites, we report the status of annual occupational health plan progress at industrial physician conferences and, to ascertain the risk of lifestyle-related disease, aggregate as Companywide statistics the detection rate, number of days off due to illness, number of days of mental health disorders, and number of new cases of mental health disorders.

Furthermore, we conduct occupational health audits of Mitsui Chemicals business sites once every two years and at domestic and overseas affiliates once every three to four years while taking steps to achieve annual plans and make improvements in occupational health management-related problem areas.

Goals and Results

Health Improvements

KPI	Scope of Compilation	FY2017			FY2018	Medium to Long-term
		Goals	Results	Level Achieved	Goals	Goals
Frequency of absences from work due to health disorders	Mitsui Chemicals, Inc. registered employees	Less than 0.7	0.60	○	Less than 0.6	0.5 or less
Frequency of	Mitsui					

absences from work due to mental health disorders	Chemicals, Inc. registered employees	Less than 0.39	0.34	○	Less than 0.30	0.25 or less
Average rate of lifestyle-related disease diagnosis	Mitsui Chemicals, Inc. registered male employees	Less than 9.0%	9.6%	×	Less than 9.0	8.0 or less
Ratio of smokers	Mitsui Chemicals, Inc. registered employees	25.9% or less	25.7%	○	24.7% or less	20% or less

Preventing Exposure to Harmful Substances

KPI	Scope of Compilation	FY2017			FY2018	Medium to Long-term
		Goals	Results	Level Achieved	Goals	Goals
Working environment measurement result relating to harmful substances	Mitsui Chemicals, Inc.	Management Category I 100%	99.6%	×	Management Category I 100%	Management Category I 100%
Harmful substance risk assessment implementation rate: (New substances being handled and SDS-updated substances)	Mitsui Chemicals, Inc.	100%	100%	○	100%	—

Review and Challenges

Together with enhancing health as an important occupational health-related issue, there is a concern with an increase in the rate of lifestyle-related disease diagnosis. Looking at lifestyle-related disease risks, however, we see that there is an improvement in the blood pressure and blood sugar trends. In accordance with the increase in the obesity rate among young people, the overall number of obese people has been increasing, and I have positioned measures to combat obesity as an important issue. In particular, we are focusing on measures from young people. Mental health measures also represent an important health issue for employees and have an enormous impact on labor productivity. Utilizing stress level investigations is a way we will work to further raise the level of improvements in the workplace environment.

With regard to the promotion of policies to prevent the release of chemical substances, risk assessment measures concerning hazardous materials and the reinforcement of measures are being sought in line with revisions to the Occupational Health and Safety Act. In fiscal 2018, we will look into developing risk assessments relating to the hazards posed by chemical substances from being absorbed through the skin.

Occupational Health

► Management System

▼ Occupational Health Initiatives

Occupational Health Initiatives

Taking Good Care of Employees

We are committed to reducing occupational health risks and improving working conditions by, for example, utilizing the Occupational Safety and Health Management System (OHSAS 18001) scheme, the harmful chemical substance risk assessment (new risk assessment system) established in fiscal 2015, through onsite inspections conducted by industrial physicians and health supervisors as well as by means of internal audits.

Risk Assessment

Since fiscal 2016, we have been using the new risk assessment system to systematically conduct risk assessments covering harmful substances. In fiscal 2017, qualitative evaluations were completed as planned at all workplaces (a total of 700 substances and 6,429 operations), and we also completed approximately 460 quantitative evaluations. In fiscal 2018, based on the quantitative evaluations conducted in the previous fiscal year, we will study the working environments and operational improvements for high risk-level operations. In addition to promoting the reduction of risk, we will prioritize and implement quantitative evaluations that have not yet been conducted. Since harmful chemical substances that cause health problems by being absorbed through the skin have become a social issue, we also plan to construct and conduct trials of specific risk assessments for health problems newly caused by the absorption of chemical substances through the skin. In so doing, we will promote further enhancements to measures for preventing exposure to harmful substances by conducting risk assessments.

Onsite Inspections Conducted by Industrial Physicians Aimed at Reducing Occupational Health Risks at Overseas Subsidiaries and Affiliates

In an effort to reduce occupational health risks at overseas affiliates, onsite inspections are undertaken on a systematic basis and steps taken to provide instructions regarding areas of occupational health improvement at the time head office industrial physicians make their rounds at overseas bases. This initiative was conducted at six overseas bases in fiscal 2017. Energies were also directed toward educating and training local responsible officers. The Mitsui Chemicals Group will continue these activities in fiscal 2018.

Health Management

We promote good health management among employees via activities such as medical examinations and health guidance, carried out by industrial physicians, nurses and other healthcare professionals.

We are now in our 10th year since we introduced comprehensive medical check-ups, combining regular medical examinations with special medical check-ups and cancer screening, and the uptake rates remain steady. The uptake rate for medical check-ups was nearly 100% and the rates for cancer screening were as follows: nearly 100% for lung cancer, over 85% for colon cancer, over 60% for gastric cancer; over 70% for abdominal ultrasound, over 90% for prostate cancer, and over 50% for breast/uterine cervical cancer.

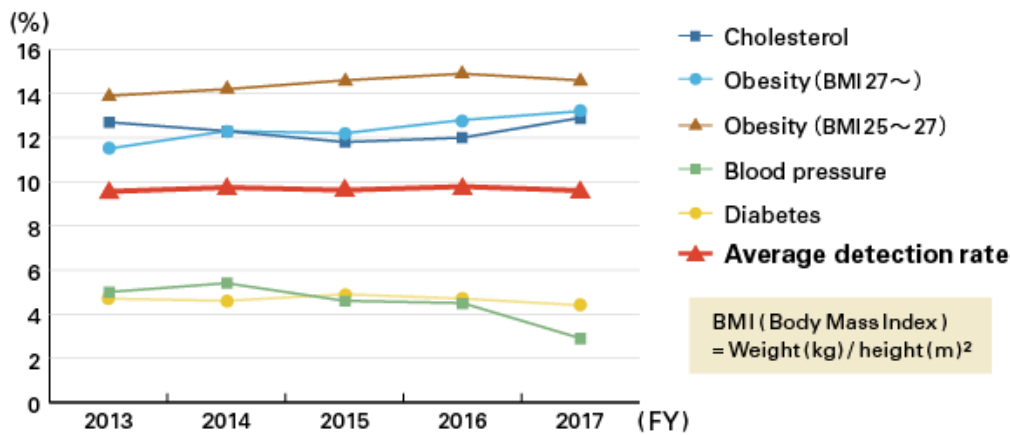
As a result of gastric cancer risk screenings conducted in fiscal 2015, many individuals underwent treatment to eradicate *Helicobacter pylori*. Moreover, the number of individuals undergoing gastric cancer screening using gastroscopic examinations increased primarily for individuals who received treatment to eradicate *Helicobacter pylori* as well as those categorized in groups B-D by medical specialists. The Health Management Department ascertains the results of the cancer screenings, properly explains the condition so the employee receives the necessary detailed examinations, provides the hospital information and referral letter and advises consultation and, with regard to the results of the detailed examinations, receives the report from the person who conducted the examinations. As a result, of the over 80% of cancers discovered by these screening (including subjective symptoms), more than 80% are discovered to be curable. The number of sick days taken off for malignant tumors (cancers) in fiscal 2017 fell from 1,068 days in the previous fiscal year to 669 days.

With regard to the observation rates of lifestyle-related diseases, those for blood pressure continue to decrease, from 9.1% in fiscal 2008 to 2.9%, while cholesterol and blood sugar levels have remained flat. These results are due to medical examination follow-up guidance, health guidance based on diabetes genetic test results for interested predisposed individuals, and health improvement activities.

In fiscal 2017, as an initiative for elderly workers who suffer from diminished physical abilities, each site devised measures to promote health education from the younger generation and entrench exercise habits. In fiscal 2018, we will aim for further improvement and work on reducing the obesity rate.

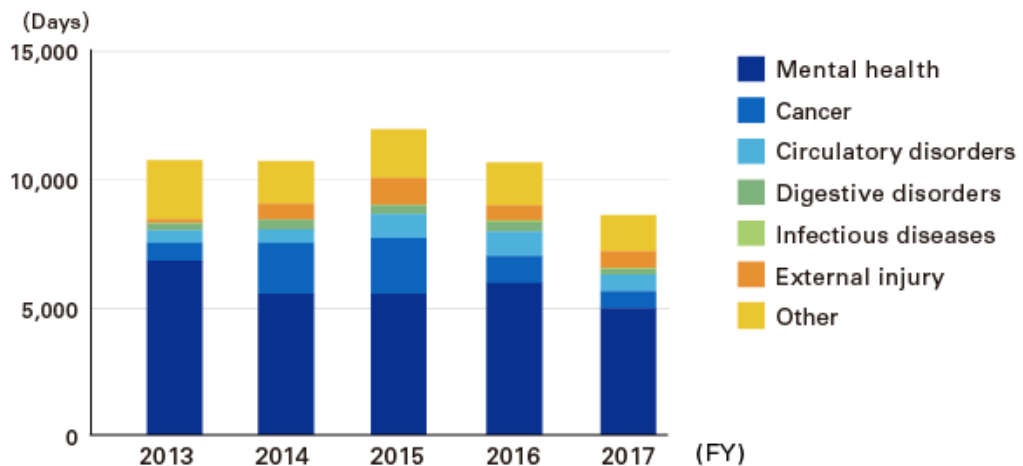
At our overseas bases, our industrial physicians go overseas every year to make the rounds, conducting health interviews with all employees working overseas, including their families if they so desire. We are offering ongoing support to our employees for both mental and physical symptoms. With regard to long-term projects, we will provide employees with health support more frequently, such as once every three months.

Lifestyle-related Disease Observation Rates (Mitsui Chemicals, Inc. registered male employees)



* Lifestyle-related disease observation rates are compiled separately by gender since criteria for men and women differ depending on the category. As the proportion of men is high the case of Mitsui Chemicals, observation rates for men are regarded as a KPI.

Breakdown of Days Off due to Illness (Mitsui Chemicals, Inc. registered employees)



Mental Health Initiatives

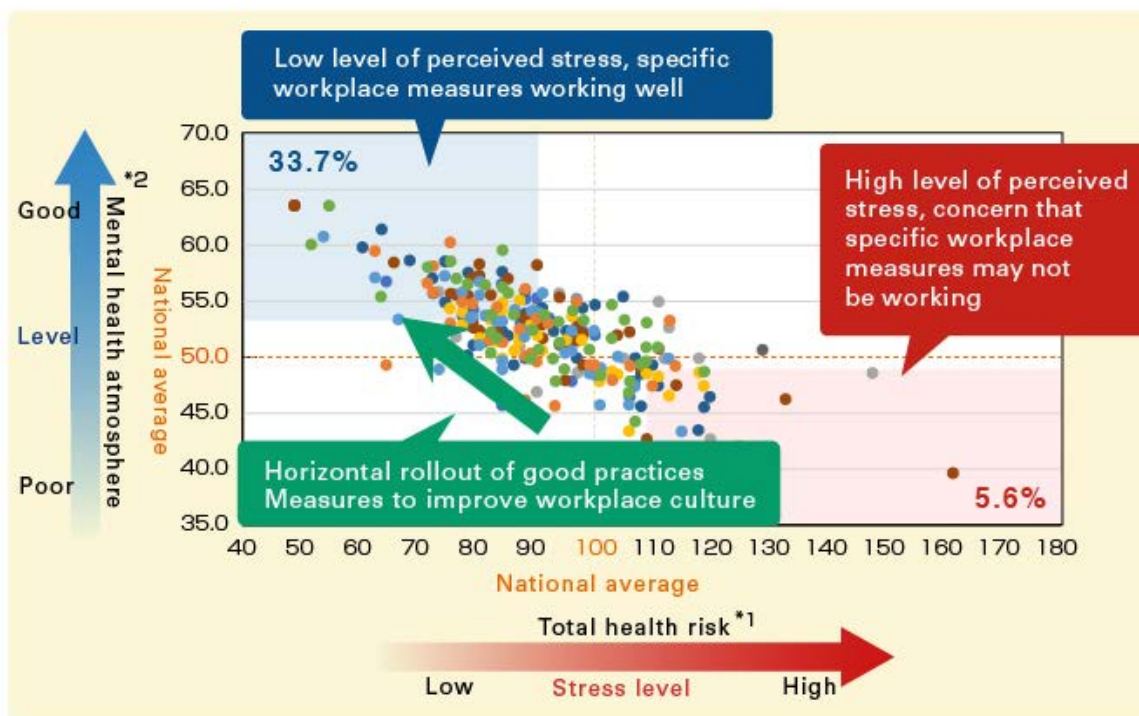
In fiscal 2017, we continued to implement mental health initiatives such as training (for new employees, management staff, line managers, self-care training programs, etc.), conduct interviews undertaken by industrial physicians, and provided counseling.

In addition to training, new employees undergo three types of e-learning-based communication courses for a fixed period after entering the Company. We also provide appropriate support regarding employee work-related lifestyles, which involves industrial physicians interviewing all new employees every six months, determining the status of communications in the areas of lifestyles, health, supervisors, colleagues, provided advice as needed, and hold discussions that include supervisors.

In addition to our simplified occupational stress survey, since 2011 we have conducted a workplace stress questionnaire (occupational stress and mental health) to provide hints for improving the workplace, with nearly all employees replying to. Beyond providing individuals with feedback, managers in each workplace are also given details of the results of their organization useful for improving workplace conditions. We have also formulated and implemented stress reduction plans (communication improvement plans) in workplaces deemed to be particularly susceptible to high stress levels by conducting interviews with managers and members of such workplaces. Moreover, we are working to identify good practices in workplaces with a positive mental health environment and improving work conditions over time, with interviews with and documents released by representatives of these workplaces made available via the intranet in order to apply them to other workplaces throughout the Company.

With more workplaces actively using these questionnaire results recently, this has led to independent workplace improvements. As a result, the percentage of workplaces with low noticeable stress levels and are considered to be functioning well in various categories rose from 22.1% in fiscal 2015 to 33.7% in fiscal 2017. Workplaces where there was judged to be a "high level of perceived stress, concern that specific workplace measures may not be working" decreased, from 8.7% to 5.6%. In fiscal 2018, we will work to improve workplace culture by examining the results of stress-level surveys at each workplace over a period of years.

Fiscal 2017 New Workplace Stress Survey Results (Mitsui Chemicals, Inc. and Contracted Affiliates)



* Each dot in the graph represents a workplace (department level at the Head Office, section level at offices).

^{*1} Total health risk:

A measurement on the subjective sensory scale of workload, sense of control, and empathy from superior and co-workers. (A relative measurement that uses 100 as the national average. A workplace score of 120 implies that the rate of health problems is 20% higher than the average.)

^{*2} Mental health atmosphere:

A scale-based measurement of the appropriateness of command and control, labor management, cooperation, and training opportunities. (A relative measurement that uses 50 as the national average. Higher figures imply a better workplace atmosphere.)

A Wide Range of Health Management Programs

Mitsui Chemicals runs a wide variety of health promotion programs and supports the health management of its employees, primarily through its healthcare section and health insurance association.

In fiscal 2017, our initiatives included the Healthy Mileage Campaign, fitness classes, eating habit/dietary classes, walking events, sports competitions, quitting smoking campaigns, employee cafeteria healthy menus, and health/balanced body measurement events.

The Healthy Mileage Campaign is a program that involves participation by individuals or teams, collecting points (health miles) for exercise and healthy lifestyles, and winning prizes for miles collected. With employees being able to enter achievements via the web and smartphones, the number of employees participating in this program was over 40% in Japan and more than 5% overseas. The Healthy Mileage Campaign initiative is also certified by a Tokyo-based sports promotion company.



Nutrition class



Fitness class



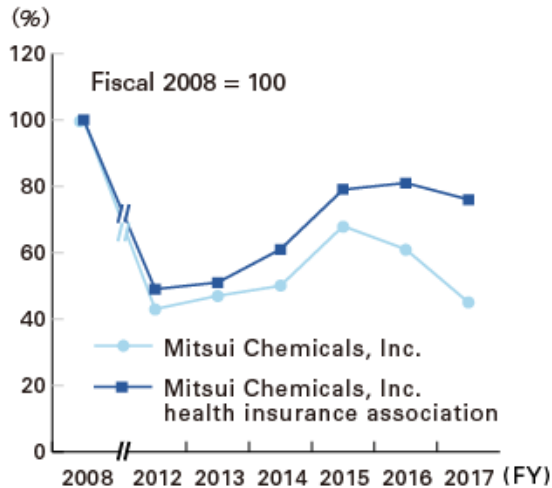
Reducing Medical Costs

In accordance with an increase in the numbers of older employees, such as rehired employees, diseases such as cancer are on the increase, and thus sickness/accident allowances were on an upward trend in fiscal 2015 and fiscal 2016. In fiscal 2017, however, there was an improvement due to a decrease in the numbers of people on long-term absences from work due to mental health disorders or cancer. The sickness/accident allowances for fiscal 2017 were 45% of those in 2008.

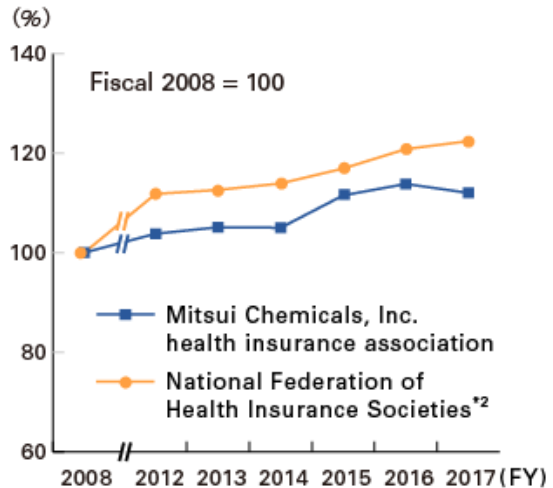
Taking the legally mandated medical benefits in fiscal 2008 as a baseline index of 100, the rate of increase for general health insurance association medical expenses in fiscal 2017 was 22.4%, but the rate of increase in the case of the Mitsui Chemicals Health Insurance Association was 12.0%, which is only about half the rate of increase.

These are considered to be comprehensive effects of health management, and we will continue to strengthen health promotion measures on an ongoing basis in the years to come.

Sick / Accident Allowances



Legally Mandated Benefits*¹ (per insured person)



*1 Legally Mandated Benefits:
Includes medical costs, sick / accident allowances, lump-sum birth allowances, maternity allowances, burial expenses.

*2 National Federation of Health Insurance Societies:
Data taken from an overview of health insurance society early budget collation results.

External Recognition regarding Occupational Health

Recognized for its promotion of health management, Mitsui Chemicals has been certified for two consecutive years as an Excellent Enterprise of Health and Productivity Management—White 500 jointly by the Ministry of Economy, Trade and Industry (METI) and Nippon Kenko Kaigi for its superior management practices that focus on promoting employee health.

In November 2017, Koichi Takahashi, the health supervisor in the Environment and Safety Department at the Nagoya Works received the Green Cross Award (Safety and Health) from the Japan Industrial Safety & Health Association. This award is presented to individuals in recognition of their distinguished track records in working to improve industrial safety and occupational health in Japan over many years.

Also, in June 2017, Ms. Mari Kusumoto, an occupational health nurse at the Sodegaura Center Health Management Office, was selected and awarded Best Theme for a Practical Research Presentation at the 26th Academic Conference of the Japanese Society of Health Education and Promotion. The presented content made points about the "planning and implementation of small group discussions on mental health" at the Sodegaura Center, and the point that the discussions had been tried out at all workplaces was highly evaluated. This award was also an evaluation of our daily efforts, which also lead to the creation of working environments that are more employee-friendly.

In January 2018, the Company's Nagoya Works received the Nagoya Mayor's Meritorious Deed Award for its activities to raise awareness of first-aid treatments. This award represents the feelings of gratitude to the citizens and organizations that contribute to the firefighting administration run by the City of Nagoya Fire Department. The Nagoya Works has been conducting regular practical training on first-aid treatment for some time, and it is thought that the evaluation took into account that all the employees receive training in first-aid treatment at least once every five years.

Engagement with Society



Here at the Mitsui Chemicals Group, we recognize the critical need to be as receptive as possible to what society wants and what is expected from us in order to secure sustainable growth in concert with society.

With this in mind, we are fully committed to engaging in a wide range of activities while taking to heart the importance of communication with our various stakeholders.

▶ Respect for Human Rights

▶ Human Rights Policy

▶ Initiatives Aimed at Raising Human Rights Awareness

▶ Sustainable Procurement

▶ Management System

▶ Supplier Sustainability Evaluation and Improvement Support

▶ Participating in Sustainable Procurement-related Initiatives

▶ Human Resources Management

▶ Management System

▶ Human Resources Development

▶ Evaluation/Compensation

▶ Employee-friendly Working Environment

▶ Diversity

▶ Social Activities

▶ Management System

▶ Laboratory Classes on the Wonders of Chemistry

▶ Nurturing Future Generations

▶ Environment Communication

▶ International Exchanges and Cooperation

▶ Support for Employees' Participation in Social Activities

▶ Disaster Relief

▶ Working in Harmony with Local Communities

Respect for Human Rights

▼ Human Rights Policy

► Initiatives Aimed at Raising Human Rights Awareness

Human Rights Policy

The Mitsui Chemicals Group Human Rights Policy

This Mitsui Chemicals Group Human Rights Policy (the "Policy") establishes specific guidelines concerning respect for human rights in the Mitsui Chemicals Group.

(Basic philosophy)

Respect for human rights is an essential element of developing business activities globally.

We at the Mitsui Chemicals Group signed the United Nations Global Compact in January 2008, endorse the aims of the UN Universal Declaration of Human Rights, the ILO (International Labour Organization) Declaration on Fundamental Principles and Rights at Work and the UN Guiding Principles on Business and Human Rights, and emphasize respect for human rights.

Pursuant to the Mitsui Chemicals Group Action Guidelines, we practice "Always Act in Good Faith," "For People and Society" and "Dream-Inspiring Innovation" as a corporate citizen. Furthermore, we are aware of our environmental and social responsibilities along the entire supply chain, encourage each other to respect the Policy, and aim to be a corporate group that enjoys the confidence of society for its fair corporate activities.

(Respect for human rights)

As an essential matter for developing business activities globally, we respect human rights and aim at becoming a corporate group that enjoys the confidence of society for its fair corporate activities based on the awareness of the common standard stated in Article 1 of the UN Universal Declaration of Human Rights "All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood."

(Prohibition of discrimination)

Under no circumstances shall we engage in discrimination whatsoever based on race, national origin, birthplace, social origin, caste, family lineage, religion, disability, age, gender, sexual orientation, gender identity, family background, marital status, membership of unions, political views, or any other differences.

(Respect for basic labor rights)

We respect workers' rights to organize and bargain collectively and other basic labor rights.

In addition, we shall foster labor-management trust and cooperative relations through frank dialogues and mutual understanding and solve labor-management issues voluntarily and peacefully.

(Prohibition of forced labor and child labor)

We never use forced labor and child labor in any of our business activities in any of the countries and regions in which we operate.

(Prohibition of harassment)

Under no circumstances shall we engage in sexual harassment, power harassment, maternity harassment or other harassment actions that hurt the dignity of individuals.

(Respect for privacy)

We respect privacy of individuals and endorse the aims of the OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data and handle personal information appropriately in accordance with the relevant laws of the respective countries.

(Prevention of human rights violation)

We shall endeavor to avoid causing any human rights violation and or indirectly creating adverse human rights impacts through our business activities.

In addition, through all the stakeholders involved in our business activities, we shall work to prevent or mitigate adverse human rights impacts.

(Initiatives based on the concept of human rights due diligence)

We are committed to acting based on the concept of human rights due diligence which requires the identification of

human rights violations and indirect impacts or risks that may lead to human rights violations, their prevention or mitigation, and accountability for how to respond to the violations.

(Response to human rights violations)

In the event of a human rights violation or indirect adverse human rights impact which is produced by our business activities, we shall promptly devise corrective measures or cooperate with a third party in taking measures.

End.

 Support Initiatives Signatory to the UN Global Compact

 The 10 principles of the UN Global Compact Cross-reference Table

 Mitsui Chemicals Group Action Guidelines

Respect for Human Rights

► Human Rights Policy

▼ Initiatives Aimed at Raising Human Rights Awareness

Initiatives Aimed at Raising Human Rights Awareness

Survey on Human Rights Challenges That Should be Taken into Consideration

In the countries in which the Mitsui Chemicals Group maintains a presence, there are a number of challenges pertaining to human rights, reflecting conditions of local politics, the economy and society. In addition, in line with changes to those conditions, the challenges themselves will at times also be impacted. At each of the Group's sites, consideration into such human rights challenges is something that cannot be overlooked. In order to gain a grasp of the human rights challenges that arise from each region around the globe that we should consider as a Group, we reference survey materials from NGOs and other organizations involved in human rights, such as information from United Nations institutions and the United States State Department's "Country Reports on Human Rights Practices" and "Trafficking in Persons Report," and conduct investigations of challenges with regard to regional human rights where the Group's business sites exist. Going forward, the Group will define priority regions, and identify challenges associated with human rights that business sites should take into account.

Consideration for Human Rights within Mitsui Chemicals

At each type of training session, we entrench awareness for human rights by studying the "Mitsui Chemicals Group Action Guidelines" and "The Mitsui Chemicals Group Human Rights Policy" and educate attendees on a number of issues, such as discrimination and harassment.

Mitsui Chemicals participates in the subcommittee concerning human rights of the Global Compact Network Japan. This subcommittee provides the forum to learn about and deliberate on a wide range of issues pertaining to human rights on a global scale in conjunction with human rights NGOs and participating companies. In addition to deepening its understanding toward human rights issues, the Mitsui Chemicals Group will draw its participation in the subcommittee to bolster its awareness activities.

→ Mitsui Chemicals Group Action Guidelines

→ Human Resources Management

→ Occupational Health

→ Safety and Prevention

→ Risk Hotline

Consideration for Human Rights in Investment Activities

The Mitsui Chemicals Group undertakes substantial investments as a part of its business development activities. When selecting an investment, a meeting is held to consider any related human rights issues. As a part of the Group's due diligence, steps are also taken to assess the impact of human rights concerns in the context of each country's statutory and regulatory requirements regarding the use of labor.

Taking Human Rights Issues into Consideration along the Supply Chain

While advocating the promotion of environmental activities and social responsibility along its entire supply chain, the Mitsui Chemicals Group is equally committed to respecting the human rights of all of its stakeholders who are in some way linked to the Group's business activities.

For example, we have clearly set out our expectations of suppliers in the Mitsui Chemicals Group Purchasing Policy. Under this policy, we place considerable importance on compliance with laws and regulations as well as social norms and respect for human rights and labor conditions. When we commence a new business arrangement, and also in the case of ongoing suppliers, we periodically and depending on the nature of the business conduct wide-ranging checks that include corporate governance, human rights, occupational safety, fair trade and environmental protection.

In addition, we have also extended our Risk Hotline (internal reporting system) so that it is now accessible to suppliers and are determined to keep on building stronger partnerships in the future. The Mitsui Chemicals Group works diligently to ensure equal opportunity and transparency while maintaining and promoting fair and equitable business practices.

→ Sustainable Procurement

Participation in Stakeholder Engagement Program

Through dialog with companies, NPOs/NGOs and knowledgeable experts, the Mitsui Chemicals Group deepens its understanding of the importance of corporate activities that show consideration for the contexts in which human rights

challenges occur, the relationship between business activities and human rights, important human rights themes as well as human rights, while working to utilize that understanding in its corporate activities.

In fiscal 2017, the Group participated in the Stakeholder Engagement Program organized by Caux Round Table Japan (CRT Japan).

The program holds discussions, conducted by companies, NGOs/NPOs and knowledgeable experts, geared toward the human rights due diligence called for under the United Nations *Guiding Principles on Business and Human Rights*.

At the 2017 program, we identified the important human rights challenges as pertain to each industry, referencing human rights guidance tools formulated through UN environmental plans and financial initiatives, while also taking into account the global supply chain, migrant workers, women's empowerment, LGBT issues, disabled persons and other challenges.

Through a variety of activities, the Group is aiming to "pursue thorough safety, high quality, and fairness across the entire supply chain" as one of its declared goals in the 2025 Long-term Business Plan.

 [Human Rights Due Diligence Workshop](#) 

▶ [2017 Human Rights Due Diligence Workshop](#) (PDF : 740KB) 

Sustainable Procurement

▼ Management System

▶ Supplier Sustainability Evaluation and Improvement Support

▶ Participating in Sustainable Procurement-related Initiatives

Management System

Policy

The Mitsui Chemicals Group engages in purchasing activities based on the Mitsui Chemicals Group Purchasing Policy formulated in April 2006. Details of this policy are being conveyed to suppliers.

The Mitsui Chemicals Group verifies the status of sustainable activities when starting transactions with new suppliers as well as periodically with our current suppliers depending on transaction details. This involves confirming a wide range of specifics that include environmental protection, occupational safety, quality assurance, corporate governance, fair transactions, human rights, and information security. In addition, we evaluate supplier companies based on the results of these surveys and offer guidance on making improvements as needed. In the case that there are compliance violations and other significant discrepancies at suppliers, we will take steps to address these issues in accordance with established standards.

The Mitsui Chemicals Group Purchasing Policy

As we rely on our suppliers to help us to enhance the Group's corporate value through our purchasing activities, we regard all of our suppliers as good partners. We always deal with our suppliers fairly and in good faith and make every effort to ensure the mutually sustainable development of our corporate activities. As such, all purchasing divisions within the Mitsui Chemicals Group engage in purchasing activities in accordance with the following Purchasing Policy.

1. Legal compliance

We will strictly comply with all laws and social norms as part of our purchasing activities.

2. Equal opportunities and transparency

We will be wide open with our suppliers, both domestic and overseas, and provide equal opportunities for fair trade in good faith.

3. Harmony with the environment

We will endeavor to purchase goods and materials that have less impact on the environment.

4. CSR-oriented selection

When selecting suppliers, we will give priority to and seek to build stronger partnerships with companies that satisfy the following requirements.

- Strict compliance with laws and social norms
- Respect for human rights and consideration for working environments
- Commitment to environmental preservation and safety assurance
- Sound management
- Commitment to maintaining and improving appropriate standards in areas such as quality, price and delivery dates

Transaction Procedures



* Requests to complete sustainable procurement SAQs (Self-assessment Questionnaires) are made once every four years.

System and Responsible Officers

With the officer in charge of the Purchasing Division as the responsible party, the Purchasing Division formulates and implements plans related to sustainable procurement for purchases made by the Purchasing Division, major business divisions, and domestic and overseas affiliates.

Monitoring Methods

The Purchasing Division confirms the status of suppliers by regularly conducting sustainable procurement SAQs as well as supplier audits in the context of its sustainable procurement environment. At monthly results review meetings, such surveys determine the progress of sustainable procurement action plans as well as achievements, which are then reflected in plans for the next fiscal year. In addition, we check the status of sustainable procurement activities during annual audits conducted by corporate auditors and the Purchasing Division.

Goals and Results

KPI	Scope of Compilation	FY2017			FY2018	Medium to Long-term
		Goals	Results	Level Achieved	Goals	Goals
Sustainable procurement ratio*	Mitsui Chemicals Group	—	—	—	—	70% (FY2025)
Sustainable procurement ratio*	Mitsui Chemicals, Inc.	—	39%	—	—	—

* Sustainable procurement ratio:
The sustainable procurement SAQ response rate from suppliers (Group-wide transaction value basis). Feedback and improvement assistance are provided to the suppliers based on the response results.

Review and Challenges

Mitsui Chemicals has promoted mutual understanding between it and suppliers as well as improvement assistance since establishing the Mitsui Chemicals Group Purchasing Policy in fiscal 2006 based on its sustainable procurement SAQ. One of the aims of the 2025 Long-term Business Plan is to undertake supplier sustainability assessments and improvement assistance (sustainable procurement ratio of 70% or more).

In fiscal 2017, we began surveying the status of the sustainability activities of our suppliers using the CSR/ Sustainable Procurement SAQ drafted by the UN Global Compact Network Japan supply chain subcommittee meetings. Based on the results of this survey, in fiscal 2018 we restructured the Mitsui Chemicals Group Purchasing Policy as the Mitsui Chemicals Group Sustainable Procurement Policy, which we plan to share with those both inside and outside of the Group. Mitsui Chemicals will pursue initiatives to promote a shared understanding of the importance of sustainable procurement and expand the scope of sustainable procurement throughout the Group centered on the Purchasing Division.

Sustainable Procurement

► Management System

▼ Supplier Sustainability Evaluation and Improvement Support

► Participating in Sustainable Procurement-related Initiatives

Supplier Sustainability Evaluation and Improvement Support

Sustainable Procurement Survey

The Group has adopted the CSR/ Sustainable Procurement Self-assessment Questionnaire (SAQ) drafted by the UN Global Compact Network Japan supply chain subcommittee meeting as the SAQ format used to request responses from suppliers.

This SAQ was drafted to conform with the UN Global Compact's 10 principles and international regulations such as ISO 26000 and GRI. Although the Group already requests that our suppliers meet the requirements of "4. CSR-oriented Selection" from the Purchasing Policy, it is the SAQ that specifically defines the details of these requirements.

Mitsui Chemicals requires that suppliers complete the SAQ, and provides feedback and improvement assistance to suppliers based on the response results. In addition, the SAQ completion rate (Group-wide transaction value basis) has been included as one of the KPI within the 2025 Long-term Business Plan as the sustainable procurement ratio.

► [CSR/ Sustainable Procurement SAQ \(PDF : 770KB\)](#) 

* Partial excerpt from the CSR/ Sustainable Procurement SAQ tool set of the helpful series aimed at realizing global sustainable development published by Global Compact Network Japan.

 [Global Compact Network Japan CSR/ Sustainable Procurement SAQ tool set](#) 

In fiscal 2017, Mitsui Chemicals selected applicable suppliers that were requested to complete the SAQ based on the purchasing track record of the Group's Purchasing Division over the three-year period starting in fiscal 2014. Tabulating purchasing amounts by first-tier suppliers, Mitsui Chemical selected suppliers with a 90% monetary coverage ratio listed in sequence of large monetary amounts. The results and type of improvement assistance provided are shown in the following table. The next survey is scheduled to be distributed in 2021.

Fiscal 2017 Sustainable Procurement Survey Results and Improvement Assistance

				Improvement Assistance (completed in fiscal 2017 and scheduled for completion in fiscal 2018)
Surveyed Suppliers			342 companies	—
	Responding Suppliers	Level 3 (companies receiving 70 – 100 points)	181 companies	Provide feedback
		Level 2 (companies receiving 40 – 69 points)	57 companies	Request resubmission of the completed SAQ with explanations
		Level 1 (companies receiving 0 – 39 points)	14 companies	Visit the company and hold discussions towards improvements; request resubmission of the completed SAQ with explanations
		Total	252 companies	—
Non-responding Suppliers			90 companies	Urge and collect responses

Fiscal 2017 Sustainable procurement ratio

Sustainable procurement ratio (Purchasing Division transaction value basis)	73%
Sustainable procurement ratio (Mitsui Chemicals, Inc. transaction value basis)	39%

Going forward, we will engage in sustainable procurement for purchases made by the business divisions and domestic and overseas affiliates. In fiscal 2017, we carried out the following.

- Exchanged information between the Purchasing Division and 20 other divisions, including the business development divisions, and shared the status of sustainable procurement.
- Had the Purchasing Division provide explanations of sustainable procurement at domestic affiliate liaison meetings. Exchanged information between five major domestic affiliates.

Sending Reminders to Our Suppliers

In fiscal 2016, Mitsui Chemicals sent reminder letters to around 2,600 Purchasing Division suppliers containing the following items.

- Examples of previous discrepancies
- Request items for each supplier
 - Compliance with laws and social norms from a sustainable standpoint
 - Avoid engaging in direct price negotiations with requesting divisions regarding transactions overseen by the Purchasing Division
 - Formulate BCPs (business continuity plans)
- The Mitsui Chemicals Group Purchasing Policy details and Risk Hotline reminder

Risk Hotline

Policy on Conflict Minerals

We are fully aware of the essential need to address so-called conflict minerals here at the Mitsui Chemicals Group. In fiscal 2015, the Purchasing Division conducted an investigation covering all raw materials except fuels and packaging materials transactions taken in fiscal 2014. As a result, we have confirmed that we do not purchase or use any conflict minerals associated with inhumane acts committed by armed groups on the ground in the Democratic Republic of Congo or any of its neighboring countries. That includes gold (Au), tantalum (Ta), tungsten (W) and tin (Sn). If it comes to light that we have used any conflict minerals in the future, we will immediately halt procurement of the relevant minerals.

In addition, the Purchasing Division and RC & Quality Assurance Division are working together to identify tin catalysts, etc., within those Group product compositions that are registered in the chemical product safety information system (SAP-EHS) and conducting conflict mineral surveys of our suppliers.

The sustainable procurement SAQ includes a category for confirming conflict mineral-related activities.

* In July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act was enacted in the U.S. The act came about as a result of reports regarding serious human rights violations and damage to the environment, stemming from inhumane acts committed by armed groups on the ground in the Democratic Republic of Congo and its neighboring countries. As this has become a serious international issue, there are growing concerns that trade in conflict minerals could be used to fund armed groups in those countries, either directly or indirectly.

Sustainable Procurement Training

In fiscal 2016, Mitsui Chemicals conducted sustainable procurement training targeting all of its Purchasing Division employees. Since this time, this training has been included as one of the required elements of procurement training for all newly appointed members.

Scope of reply:

* Terms with numbers in parentheses correspond to the numbered items in the sheet (3) Explanation of Terms

Company:	
Department:	
Business:	
Scope of reply:	Consolidated, Group in Japan (incl. main company), Main company alone, Individual Company, Business Division, Business site (incl. plant), Other

When answering:

Refer to the instructions, glossary, and guide. To answer a question, enter the number of your chosen "Response Level" from the right into the "Answer" field.

Yellow cells are required to be filled, while blue cells ("Comments") are optional.

Quick Links

I. Corporate governance	IV. Environment	VII. Information security
II. Human rights	V. Fair business practices	VIII. Supply chain
III. Labor	VI. Quality and safety	IX. Local Communities

Theme	Topic	Approach	Question	Answer	Response Level 1	Response Level 2	Response Level 3	Response Level 4	Response Level 5
I. (1) Corporate governance related to (2) CSR	1. Establishment of a CSR promotion system Companies are expected to endeavor to achieve a sustainable society while observing the law, abiding by social norms, meeting society's expectations, and taking care not to have a negative impact on society and the environment. Companies must put this idea into practice while familiarizing employees with it. Toward that end, they must establish a system for risk management of ESG (environmental, social, and governance) related to CSR and for implementing the PDCA (Plan, Do, Check, Act) cycle.	Policy	Do you have a policy and guidelines related to this topic?		No		Yes, we have one or both.		Yes, we have one (or both), and it is reviewed properly in a timely manner.
		System / Responsibility	Do you have a designated person or structure assuming responsibility or promotion of this topic?		No		Yes, we have.		Yes, we have designated one, and it is reviewed properly in a timely manner.
		Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	2. Establishment of (3) internal controls It is expected that management systems and schemes are in place within the company to ensure effectiveness and efficiency of operations as a company, reliability of financial reporting, compliance with laws and regulations related to business activities, and asset protection, with a view toward the establishment of an organizational structure for sound corporate management.	Policy	Do you have a policy and guidelines related to this topic?		No		Yes, we have one or both.		Yes, we have one (or both), and it is reviewed properly in a timely manner.
		System / Responsibility	Do you have a designated person or structure assuming responsibility or promotion of this topic?		No		Yes, we have.		Yes, we have designated one, and it is reviewed properly in a timely manner.
		Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	3. Establishment of a (4) business continuity planning (BCP) system It is expected that a system is in place for continuity or early recovery of important operations and business during/ after a disaster (e.g., natural disaster, major fire, terrorist attack).	Policy	Do you have a policy and guidelines related to this topic?		No		Yes, we have one or both.		Yes, one (or both) is established and reviewed properly in a timely manner.
		System / Responsibility	Do you have a designated person or structure assuming responsibility or promotion of this topic?		No		Yes, we have.		Yes, we have designated one, and it is reviewed properly in a timely manner.
		Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	4. Establishment of a whistle-blower system It is expected that a system is in place for employees who have learned of a compliance problem in the company's business activities in general, such as a legal violation or wrongful act or an act that could be a compliance problem, or for employees who themselves have suffered human rights or labor abuses to directly report to or consult with a dedicated department or outside contact. It is also expected that the system is set up to ensure confidentiality and that the whistleblower will not be treated unfavorably.	Policy	Do you have a policy and guidelines related to this topic?		No		Yes, we have one or both.		Yes, we have one (or both), and it is reviewed properly in a timely manner.
		System / Responsibility	Do you have a designated person or structure assuming responsibility or promotion of this topic?		No		Yes, we have.		Yes, we have designated one, and it is reviewed properly in a timely manner.
		Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	5. Dispatch of CSR-related information inside and outside the company It is expected that financial information and (5) non-financial information is dispatched appropriately inside and outside the company in response to requests from society and (6) stakeholders for transparency and accountability regarding corporate activities.	Policy	Do you have a policy and guidelines related to this topic?		No		Yes, we have one or both.		Yes, we have one (or both), and it is reviewed properly in a timely manner.
		System / Responsibility	Do you have a designated person or structure assuming responsibility or promotion of this topic?		No		Yes, we have.		Yes, we have designated one, and it is reviewed properly in a timely manner.
		Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
Comments	Use the right column if there is anything you would like to add, such as initiatives your company is taking in regards to this theme.								

Theme	Topic	Approach	Question	Answer	Response Level 1	Response Level 2	Response Level 3	Response Level 4	Response Level 5
II. Human rights	1. Basic attitude toward human rights Companies should respect and protect human rights as declared in international standards and frameworks and ensure that they are not complicit in (or contributing to) human rights violations. Major international frameworks and norms: (7) Universal Declaration of Human Rights, (8) Ten Principles of the UN Global Compact, (9) UN Guiding Principles on Business and Human Rights, (10) OECD Guidelines for Multinational Enterprises, (11) UK Modern Slavery Act, etc.	Legal awareness	Are you aware of international standards and frameworks, national legislation as well as (12) social norms/(13) industry norms and standards at home and abroad related to this category?		No		Yes, but the existence of violations is not checked.		Yes, and the existence of violations is checked.
		Policy	Do you have a policy and guidelines related to this topic?		No		Yes, we have one or both.		Yes, we have one (or both), and it is reviewed properly in a timely manner.
		System / Responsibility	Do you have a designated person or structure assuming responsibility or promotion of this topic?		No		Yes, we have.		Yes, we have designated one, and it is reviewed properly in a timely manner.
	2. Respect for human rights and prohibition of discrimination Companies should respect human rights and have a responsibility to conduct decision-making and business activities without discrimination based on race, nationality, gender, (14) sexual orientation, age, ancestry, religion, ethnicity, or immigration, etc., or against children, senior citizens, persons with disabilities, indigenous populations, the poor, or persons with HIV/AIDS, etc.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	3. Avoidance of complicity in (or contribution to) human rights abuses Companies should ensure that the company's decision-making, business activities, and products and services do not lead to complicity in (or contributions to) human rights abuses of consumers or members of the local community.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	4. Respect for indigenous peoples and local communities It is important for companies that conduct business in regions where indigenous peoples and ethnic minorities live to respect their unique cultures and histories, to abide not only by local laws and ordinances but also international standards, and to give consideration to the rights of indigenous peoples. Also, beyond the issue of indigenous peoples, it is essential to conduct responsible business operations with sensitivity to local communities that are affected, in order to maintain the right to operate and to obtain permits and licenses.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
Comments	Use the right column if there is anything you would like to add, such as initiatives your company is taking in regards to this theme.								

Theme	Topic	Approach	Question	Answer	Response Level 1	Response Level 2	Response Level 3	Response Level 4	Response Level 5
III. Labor	1. Basic attitude toward labor practices Companies should recognize and comply with the labor principles presented in international norms, etc., and to apply basic workplace principles as universal values. Main international frameworks and norms: (7) Universal Declaration of Human Rights, (15) International Labor Organization's (ILO) Declaration on Fundamental Principles and Rights at Work, (8) Ten Principles of the UN Global Compact, (9) UN "Guiding Principles on Business and Human Rights," (10) OECD Guidelines for Multinational Enterprises, (11) UK Modern Slavery Act, etc.	Legal awareness	Are you aware of legislation as well as social norms/ industry norms and standards at home and abroad related to this category?		No		Yes, but the existence of violations is not checked.		Yes, and the existence of violations is checked.
		Policy	Do you have a policy and guidelines related to this topic?		No		Yes, we have one or both.		Yes, we have one (or both), and it is reviewed properly in a timely manner.
		System / Responsibility	Do you have a designated person or structure assuming responsibility or promotion of this topic?		No		Yes, we have.		Yes, we have designated one, and it is reviewed properly in a timely manner.
	2. Prohibition of discrimination in the workplace Companies should not discriminate at the workplace, including during recruitment process, based on race, nationality, gender, sexual orientation, age, ancestry, religion, ethnicity, immigration, the existence of a disability, etc., or any factors other than factors such as the applicant's abilities and aptitude.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	3. Provision of equal opportunities to employees regarding human resources development and (16) career advancement, etc. Companies are expected to play a critical role in ensuring that opportunities, such as for promotion and training, are provided equally without undermining fairness on the grounds of race, nationality, gender, sexual orientation, age, ancestry, religion, ethnicity, immigration, the existence of a disability, marital status, or the condition of health, etc.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	4. Prohibition of inhumane treatment Companies should respect employees' human rights. Inhumane treatment, such as abuse, physical punishment and harassment, is prohibited.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	5. Payment of fair wages Companies should abide by the legal minimum wage of the country and region in which they are operating, and ensure that an appropriate (17) collective agreement is concluded regarding matters such as overtime, and that extra pay and payment methods, etc., are applied fairly.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	6. Fair application of working hours, time off, and paid time off, etc. Companies should abide by working hours designated by law or agreed to in advance. They should ensure that employees' working hours are managed appropriately and that they are given the right to take paid time off. Employees should be given at least one day off per week.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	7. Prohibition of forced labor Companies should avoid making people work against their will and making people do work that restricts their freedom to leave their jobs. Work coercion using unjustified means of restraint and compulsion of overtime work, etc., should not be practiced. In addition, (18) unjustified retention of identification documents, etc., and unjustified collection of (19) deposit should not be practiced.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	8. Prohibition of child labor Companies should avoid employing children under the legal working age in that country or region. In addition, children should not be made to perform work that could harm their health, safety, or morals.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	9. Respect for the religious traditions and customs of the country of operation Companies should respect the traditions and customs of the country and region in which they are operating, and respect their employees' religious traditions and customs. Care should be taken through uniform employment regulations, etc., to not hinder them.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	10. Recognition of and respect for (20) freedom of association and the right to collective bargaining Companies should respect their employees' freedom of association, freedom to join a labor union, and freedom to protest without being subject to retribution, threats, or harassment and should provide opportunities for labor-management dialogue.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.

Intent of question: To question whether work environments are provided that are safe and healthy for workers, including their mental health.	11. Proper management of employee safety and health	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
	Companies should take steps so that the risk of accidents occurring during work and the risks of harmful chemical substances, noise, and odors on the human body are understood and that appropriate safety measures, etc., are taken (including statutory inspections, (21) safeguards, (22) danger signals, control of the handling of chemical substances, measures against dangerous work, and compliance with designations for protective equipment, etc.). In addition, measures that give consideration to employees' mental health should also be taken.	Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
Comments	Use the right column if there is anything you would like to add, such as initiatives your company is taking in regards to this theme.								
Theme	Topic	Approach	Question	Answer	Response Level 1	Response Level 2	Response Level 3	Response Level 4	Response Level 5
IV. Environment	1. Basic attitude toward environmental initiatives Companies are expected to be aware of environmental issues in (23) business processes and to establish systems to resolve them. They are also required to identify factors that have an impact on the environment and to take responsibility for managing them. Main international frameworks and norms: (24) Rio Declaration on Environment and Development, (8) Ten Principles of the UN Global Compact, (25) ISO 14001, (26) Paris Agreement, (27) Basel Convention, (28) Major laws and regulations related to the environment: Japan: Basic Environment Act; Chemical Substance Control Law; Industrial Safety and Health Act; Water Pollution Prevention Act; Act on Advancement of Water Resources Development; Act Relating to the Prevention of Marine Pollution and Maritime Disasters; River Act; Waste Management and Public Cleansing Act; Basic Act on Establishing a Sound Material-Cycle Society; various recycling laws US: TSCA EU: REACH Regulation South Korea: Toxic Chemical Control Act; Occupational Safety and Health Act China: Provisions on the Environmental Management of New Chemical Substances Taiwan: Occupational Safety & Health Act	Legal awareness	Are you aware of legislation as well as social norms/ industry norms and standards at home and abroad related to this category?		No		Yes, but the existence of violations is not checked.		Yes, and the existence of violations is checked.
	2. Management of chemical substances indicated in laws and regulations, etc., in production processes, products, and services Companies should manage chemical substances in products and, moreover, ascertain and report the amount of handled chemical substances to the government.	Policy	Do you have a policy and guidelines related to this topic?		No		Yes, we have one or both.		Yes, we have one (or both), and it is reviewed properly in a timely manner.
		System / Responsibility	Do you have a designated person or structure assuming responsibility or promotion of this topic?		No		Yes, we have.		Yes, we have designated one, and it is reviewed properly in a timely manner.
	3. Control and reduction of waste water, sludge and air emissions Companies are expected to set targets at the level prescribed by law or more rigorous voluntary environmental impact reduction targets. In addition, efforts should be made to prevent pollution, to monitor and control waste water, (29) sludge and air emissions etc., and to reduce outflow.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	4. Sustainable and efficient utilization of resources (energy, water, raw materials, etc.) Companies are expected to set independent targets for implementing resource conservation and energy savings, and to make efforts to effectively use sustainable resources and energies.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	5. Reduction of (30) GHG (greenhouse gases) Companies are expected to set independent reduction targets for greenhouse gases, such as carbon dioxide, methane and fluorocarbons, and make efforts to reduce them to help combat climate change.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	6. Identification, management, reduction, and (31) responsible disposal or recycling of waste Companies are expected to set independent reduction targets for waste, and make efforts to reduce it.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	7. Initiatives related to (32) biodiversity Companies are expected to conduct investigations into the direct and indirect impacts of business on the ecosystem, and make efforts to protect biodiversity and ensure its sustainable utilization.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.

Comments	Use the right column if there is anything you would like to add, such as initiatives your company is taking in regards to this theme.			
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Theme	Topic	Approach	Question	Answer	Response Level 1	Response Level 2	Response Level 3	Response Level 4	Response Level 5
V. Fair business practices	1. Basic attitude toward fair business practices Companies are expected to engage in fair business practices (e.g., prevention of corruption, responsible political involvement, fair competition, rejection of relationships with (33) antisocial forces/ organizations) in (23) business processes producing/providing products and services. Major international frameworks and norms related to fair business practices: (8) Ten Principles of the UN Global Compact, (10) OECD Guidelines for Multinational Enterprises, (34) United Nations Convention against Corruption Major laws and regulations related to fair business practices: (35) Domestic laws regarding competition: Antimonopoly Act (Japan), antitrust laws (US), European Union competition law (EU)	Legal awareness	Are you aware of legislation as well as social norms/industry norms and standards at home and abroad related to this category?		No		Yes, but the existence of violations is not checked.		Yes, and the existence of violations is checked.
		Policy	Do you have a policy and guidelines related to this topic?		No		Yes, we have one or both.		Yes, we have one (or both), and it is reviewed properly in a timely manner.
		System / Responsibility	Do you have a designated person or structure assuming responsibility or promotion of this topic?		No		Yes, we have.		Yes, we have designated one, and it is reviewed properly in a timely manner.
	2. Establishment of appropriate relationships with local governments and public officials in and outside countries where business activities are conducted It is expected that healthy relationships will be maintained between the company and public officials, such as by managing the entertainment of public officials to prevent corruption.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	3. Prevention of the giving and receiving of improper advantages with customers and trade partners, etc., in sales and purchasing activities, etc. Healthy relationships must be maintained with customers.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	4. (36) Prevention of competition law violations in sales activities, etc. (37) Bid rigging, (38) cartels, (39) abuse of dominant bargaining position, and other (40) unfair trading practices should be prevented from occurring.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	5. Rejection of relationships with antisocial forces/organizations Relationships with violent groups and corporate extortionists, etc., should be rejected.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	6. Prevention of unauthorized use of a third party's intellectual property and of illegal reproduction of copyrighted works Intellectual property rights, including (41) patent rights, copyrights, and trademark rights, should be respected.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	7. Services for responding to complaints from outside the company and for consultations There should be a system in place for persons involved with trade partners or consumers who have knowledge of important risk information related to transactions with the company allowing them to directly report to or consult with a dedicated department or outside contact. Also, the system should be set up to ensure confidentiality and to ensure that the informant will not be treated unfavorably.	System / Responsibility	Do you have a designated person or structure assuming responsibility or promotion of this topic?		No		Yes, we have.		Yes, we have designated one, and it is reviewed properly in a timely manner.
		Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	8. Prohibition of insider trading Persons involved with a listed company, etc., are prohibited from using undisclosed company information to trade that company's stocks, etc.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	9. Prohibition of acts with conflicting interests In situations in which there is a conflict between an employee's interest and the company's interest, employees are prohibited from enjoying personal benefits at the expense of the company's benefits.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
Comments	Use the right column if there is anything you would like to add, such as initiatives your company is taking in regards to this theme.								

Theme	Topic	Approach	Question	Answer	Response Level 1	Response Level 2	Response Level 3	Response Level 4	Response Level 5
VI. Quality and safety	1. Basic attitude toward product and service quality and safety Companies are required to ensure the quality and safety of products and services provided through business activities and to respond appropriately to customers/ consumers, etc., in the event of an accident. Main international frameworks and norms: (42) ISO 9001, ISO/IEC Guide 51, EU New Approach Directives, and HACCP (43) Major laws and regulations related to quality and safety: PL Act; Consumer Product Safety Act; Electrical Appliances and Materials Safety Act; Gas Business Act; LP Act; PMD Act; Radio Act; Food Sanitation Act; JAS Act; Water Supply Act; Quality Labeling Act; Housing Quality Act; Road Transport Vehicle Act; Building Standards Act; Premiums and Representations Act, etc.	Legal awareness	Are you aware of legislation as well as social norms/industry norms and standards at home and abroad related to this category?		No		Yes, but the existence of violations is not checked.		Yes, and the existence of violations is checked.
		Policy	Do you have a policy and guidelines related to this topic?		No		Yes, we have one or both.		Yes, we have one (or both), and it is reviewed properly in a timely manner.
		System / Responsibility	Do you have a designated person or structure assuming responsibility or promotion of this topic?		No		Yes, we have.		Yes, we have designated one, and it is reviewed properly in a timely manner.
	2. Ensuring product and service quality and safety Companies are expected to qualify and ensure safety when supplying products and services. [In-house quality management system, use of a third-party certification system, etc. (S mark, SG mark, ST mark, JIS mark, JAS mark, etc.)]	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, and they are audited.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	3. Appropriate response to product and service accidents and the circulation of defective goods Companies should establish a system in case of situations such as information disclosure, notification of the relevant authorities, product recall, and safety measures for supply destinations.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, and they are audited.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
Comments	Use the right column if there is anything you would like to add, such as initiatives your company is taking in regards to this theme.								
Theme	Topic	Approach	Question	Answer	Response Level 1	Response Level 2	Response Level 3	Response Level 4	Response Level 5
VII. Information security	1. Basic attitude toward information security Businesses are required to properly manage and protect information obtained through business activities and to take defensive measures against threats on computer networks. Major laws and regulations related to information security: Penal Code; Basic Act on Cybersecurity; Act on the Protection of Personal Information; Act against Unauthorized Access; Act on Electronic Signature Certification, etc.	Legal awareness	Are you aware of legislation as well as social norms/industry norms and standards at home and abroad related to this category?		No		Yes, but the existence of violations is not checked.		Yes, and the existence of violations is checked.
		Policy	Do you have a policy and guidelines related to this topic?		No		Yes, we have one or both.		Yes, we have one (or both), and it is reviewed properly in a timely manner.
		System / Responsibility	Do you have a designated person or structure assuming responsibility or promotion of this topic?		No		Yes, we have.		Yes, we have designated one, and it is reviewed properly in a timely manner.
	2. Defense against attacks on computer networks Defensive measures should be taken against attacks on computer networks, and managed so as to not cause damage to the company or other businesses.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, and they are audited.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	3. Protection of personal data and privacy The personal information of customers, third parties, and employees should be properly managed and protected.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, and they are audited.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	4. Prevention of misuse of confidential information Confidential information received from customers and third parties should be properly managed and protected.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, and they are audited.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
Comments	Use the right column if there is anything you would like to add, such as initiatives your company is taking in regards to this theme.								

Theme	Topic	Approach	Question	Answer	Response Level 1	Response Level 2	Response Level 3	Response Level 4	Response Level 5
VIII. (44) Supply chain	1. Basic attitude toward the supply chain Companies are required to fulfill corporate responsibility in business processes that create products and services. It is advisable to establish a CSR/sustainable procurement policy and to make it widely known and instilled in and outside the company, with the aim of practicing CSR activities not only in the company but also throughout the supply chain. Accordingly, it is necessary to inform and instill in the company's suppliers the practice of the matters included in each SAQ. Major laws and regulations related to the supply chain: (45) EU RoHS Directive, (28) REACH Regulation, (11) UK Modern Slavery Act, (46) California Transparency in Supply Chains Act	Legal awareness	Are you aware of legislation as well as social norms/industry norms and standards at home and abroad related to this category?		No		Yes, but the existence of violations is not checked.		Yes, and the existence of violations is checked.
		Policy	Do you have a policy and guidelines related to this topic?		No		Yes, we have one or both.		Yes, we have one (or both), and it is reviewed properly in a timely manner.
		System / Responsibility	Do you have a designated person or structure assuming responsibility or promotion of this topic?		No		Yes, we have.		Yes, we have designated one, and it is reviewed properly in a timely manner.
		Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, and they are audited.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	2. Use of raw materials not involved in conflict or crime (initiatives against (47) conflict minerals) Companies are expected to survey suppliers and conduct verification, in case of the purchase and use of gold (Au), tantalum (Ta), tungsten (W), and tin (Sn), which are conflict minerals connected to inhumane acts committed by local armed groups in the Democratic Republic of the Congo and surrounding regions and elsewhere. The purchase and use of such minerals are prohibited. Major laws and regulations related to conflict minerals: (48) Dodd-Frank Act	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, and they are audited.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
Comments	Use the right column if there is anything you would like to add, such as initiatives your company is taking in regards to this theme.								
Theme	Topic	Approach	Question	Answer	Response Level 1	Response Level 2	Response Level 3	Response Level 4	Response Level 5
IX. Harmonious coexistence with (49) local communities	1. Initiatives to reduce negative effects on local communities Companies are required to carry out initiatives eliminating health, safety, and other hazards to local communities and residents from the production process and operation of products and services.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
	2. Initiatives with local communities towards sustainable development Companies are expected to carry out initiatives with local communities aimed at sustainable development. Examples of initiatives with local communities: Job creation, skills development, priority purchasing of local products and services, supplier development, etc.	Checking initiative results	Do you have initiatives related to this topic? In addition, do you have a mechanism for checking initiative results?		No		Yes, but we have no mechanism for checking results.		Yes, we have both.
		Corrective actions	Do you have a mechanism for corrective actions related to this topic as necessary?		No		Yes, we have.		Yes, and it is reviewed properly in a timely manner.
Comments	Use the right column if there is anything you would like to add, such as initiatives your company is taking in regards to this theme.								

GCNJ CSR/Sustainable Procurement SAQ - Explanation of Terms

No.	Term	Meaning
1	Corporate governance	A mechanism for companies to practice transparent, fair, swift, and resolute decision-making while taking into consideration the standpoints of shareholders, customers, employees, local communities, and other stakeholders.
2	CSR	Corporate Social Responsibility. Refers to a company's attitude and initiatives to contribute to society by giving consideration to its impact on society as a whole, not just its own profit. It is thought that companies should give consideration not only to generating earning, maintaining dividends, and observing the law, but also to their economic, environmental, and social impacts, bearing in mind the various social groups connected to the company—that is, stakeholders.
3	Internal controls	Mechanisms for controlling organizations to ensure proper and efficient performance of operations in a company or administrative body, etc. They are established by prescribing and applying operational rules, standards, and processes and by continually conducting assessments of their effectiveness and risks in order to prevent wrongdoing, illegal acts, and errors in organizations and ensure that organizations are run effectively. Adoption of IT is also required, including the establishment of information systems.
4	Business continuity planning (BCP)	Planning that organizes routine activities and emergency actions (e.g., methods and means) in order for a company that has fallen into a state of emergency (due to natural disaster, major fire, terrorism, etc.) to minimize damage suffered, continue its core business, and recover quickly.
5	Non-financial information	Refers to information about a company other than financial information such as financial statements. In order to understand corporate activities, there is now a demand for the disclosure of non-financial information that has an impact of any kind on the financial state, in addition to financial information.
6	Stakeholders	Individuals or groups that could have an impact on the decisions or activities of an organization, that could be impacted by those decisions or activities, or that are recognized as being impacted by those decisions or activities. Examples include customers, owners, shareholders, bankers, regulators, suppliers, employees/ labor unions, contractors/partners, and society including the government and residents (sometimes including competitors or opposition lobby groups).
7	Universal Declaration of Human Rights	A declaration adopted by the third United Nations General Assembly on December 10, 1948, as a universal standard for all people and all nations to achieve. It arose from reflection amidst the devastation following World War II that, "this mistake must never be repeated." The Declaration, which consists of a preamble and articles 1 to 30, clearly expresses liberty rights and social rights. Liberty rights include personal liberty, prohibition of torture and slavery, freedom of thought and expression, suffrage and so on. Social rights include the right to education, the right of workers to unionize, the right to lead life with human dignity and so on.
8	Ten Principles of the UN Global Compact	The UN Global Compact is an initiative that was advocated by then UN Secretary-General Kofi Annan to the World Economic Forum (Davos meeting) in 1999 and officially launched at UN Headquarters the following year. It fulfills its role as a forum (a place for the exchange and practice of opinions) for addressing various issues arising from globalization through the implementation of activities based on 10 principles established in the four domains of human rights, labor standards, environment, and anti-corruption. At present, 12,480 organizations (of which about 9,456 are companies) in around 160 countries have signed the Compact (as of May, 2017). Principle 1: Support and respect the protection of human rights; Principle 2: Make sure that one is not complicit in human rights abuses; Principle 3: Freedom of association and recognition of the right to collective bargaining; Principle 4: Elimination of forced labor; Principle 5: Effective abolition of child labor; Principle 6: Elimination of discrimination in employment and occupation; Principle 7: Precautionary approach to environmental challenges; Principle 8: Initiatives to promote environmental responsibility; Principle 9: Development and diffusion of environmentally friendly technologies; Principle 10: Work against corruption in all its forms, including extortion and bribery. (UNGC website: https://www.unglobalcompact.org/)
9	UN Guiding Principles on Business and Human Rights	Principles conceived as the "Protect, Respect and Remedy" framework by Harvard University professor John Ruggie, who served as a UN Special Representative from 2005. The UN unanimously endorsed the principles on June 16, 2011. The objective is to strengthen standards and practices related to business and human rights, in order to contribute to sustainable globalization. The principles are applicable to all states and businesses.

No.	Term	Meaning
10	OECD Guidelines for Multinational Enterprises	Guidelines established by the OECD in 1976 to recommend multinational corporations to voluntarily act in the responsible manner that is expected of them. The Guidelines consist of principles related to responsible corporate activities in a wide range of areas including general policies; disclosure; human rights; employment and industrial relations; environment; combating bribery, bribe solicitation and extortion; customer interests; science and technology; competition; and taxation. The Guidelines are legally nonbinding. Participating nations besides OECD member countries are Argentina, Brazil, Columbia, Costa Rica, Egypt, Jordan, Lithuania, Morocco, Peru, Rumania, and Tunisia.
11	UK Modern Slavery Act	Enacted in the UK as of March 2015. It is a law requiring commercial organizations and companies operating in the UK with annual turnover exceeding £36 million to disclose annual statements and report to ensure that slavery and human trafficking are not taking place in the business.
12	Social norms	Rules that people must observe when interacting within social life. These include manners, morals, customs, role models and so on.
13	Industry norms	Self-imposed rules established through the cooperation of companies and organizations in an industry that serve as standards for behavior and judgments that must be observed.
14	Sexual orientation	Refers to the concept of showing the direction of a person's romantic or sexual attraction. These include heterosexuality, homosexuality, bisexuality and so forth. In recent years, some of these have started to be widely recognized as LGBT*. *Lesbian, gay, bisexual, and transgender
15	International Labour Organization's (ILO) Declaration on Fundamental Principles and Rights at Work	Refers to the ILO Declaration of the Fundamental Principles and Rights at Work adopted by the International Labor Organization (ILO), which is one of the ILO's most important key documents alongside the ILO Charter and Declaration of Philadelphia. It establishes the minimum standards related to labor. It consists of eight articles in four areas related to the basic human rights of freedom of association, prohibition of forced labor, elimination of child labor, and elimination of discrimination in employment and occupation.
16	Career advancement	The acquisition of higher qualifications and abilities. The improvement of one's career.
17	Collective agreement	A written agreement concluded between a labor union or representative of workers and an employer.
18	Unjustified retention of identification documents, etc.	In developing countries and elsewhere, there are instances of employment intermediaries forcing migrant workers from neighboring countries to hand over their work permits and passports to prevent them from running away and withholding unreasonable sums from their wages (e.g., migrant workers from neighboring countries in Southeast Asia losing their freedom of movement when their passports are confiscated by employment intermediaries). However, the safekeeping of documents such as passports and alien registration cards is an obligation of the person whose documents they are; forced retention of such documents by employment intermediaries and employers is illegal. This also applies to foreign technical intern trainees in Japan.
19	Deposit	A general term for a certain amount of money placed interest-free by a borrower into the keeping of the lender when making a rental agreement; also called a security deposit or key money. In terms of CSR, refers to unjustified costs collected from foreign workers by employment services in the sending country and is regarded as a primary factor leading to debt labor and forced labor.
20	Freedom of association	The ability of anyone to form a group or association. It includes the right to join or leave a group and the right to disband.
21	Safeguards	Measures to prevent workers from having work-related accidents. These include employers providing for the safety of equipment and working environments, etc., and workers themselves engaging in work with an understanding of dangers and hazards of that work and a thorough familiarity with the appropriate ways to cope with those dangers and hazards. See Chapter VI of Japan's Industrial Safety and Health Act.
22	Danger signals	Reducing envisioned dangers through warning labels by directly posting stickers, signs and so on and around dangerous spots.
23	Business processes	The series of activities conducted to achieve a business objective, such as the production and sale of a product or provision of a service.

No.	Term	Meaning
24	Rio Declaration on Environment and Development	Rio Declaration on Environment and Development. An agreement made at a UN Conference on Environment and Development held in June 1992. Consists of 27 principles on environment and development, for example that States have, in accordance with the Charter of the United Nations, etc., the sovereign right to exploit their own resources, and the responsibility to ensure that their own activities do not cause damage to the environment of other States.
25	ISO 14001	A certification standard for an Environmental Management System (EMS), issued by the International Organization for Standardization (ISO) in 1996. It requires the establishment and implementation of the Plan-Do-Check-Act (PDCA) cycle aimed at objectives such as the reduction of environmental load, in line with an environmental policy drawn up by management. A review by a third party is needed to acquire certification.
26	Paris Agreement	A multilateral agreement concerning climate change, adopted at the 21st Conference of the Parties of the UN Framework Convention on Climate Change (COP 21) held in Paris in December 2015. A stated goal is to achieve net zero emissions worldwide by the second half of this century. It requires all countries to independently establish reduction targets and to take domestic measures aimed at their achievement.
27	Basel Convention	Officially the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal. A treaty that requires as a matter of principle processing hazardous wastes by the country that produced it, as well as ensuring international safety standards when moving hazardous wastes across borders, giving advance notice to countries receiving the waste and/or through which the waste passes and obtaining their consent, preventing illegal transfer, and establishing punishment measures, etc.
28	Major laws and regulations related to the environment	National laws related to the control and regulation, etc., of chemical substances and chemical substances used in products, enacted by Japan, the US, EU, South Korea, China, and Taiwan to ensure the health and safety of workers. <Explanation of abbreviations> • Chemical Substance Control Law (Japan): Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. • TSCA (US): Toxic Substances Control Act • REACH Regulation (EU): Registration, Evaluation, Authorization and Restriction of Chemicals
29	Sludge	The mass of the final inorganic and organic products from the treatment process of a sewage treatment plant or the waste liquid treatment process of a factory, etc. It is buried in final landfill sites as industrial waste or recycled.
30	GHG (greenhouse gases)	A general term for gases that warm the atmosphere near the surface of the Earth by absorbing infrared rays. Regarded as substances that cause global warming (climate change). The Kyoto Protocol, which was adopted at the third session of the Conference of Parties to the UNFCCC (COP 3), specified six gases, including carbon dioxide, methane, chlorofluorocarbons, and dinitrogen monoxide, to be reduced. The Intergovernmental Panel on Climate Change (IPCC) has nearly concluded that rising surface temperatures are an anthropogenic result of an increase in GHG emissions since the Industrial Revolution of the 18th century.
31	Responsible disposal	Japan's Waste Management and Public Cleansing Act, for example, stipulates that in Article 3 that "business operators must take responsibility for the proper disposal of wastes generated in connection with their business activities." This makes it explicit that emitters are responsible for disposal. It is also stipulated that "business operators strive to reduce the amount of waste generated in connection with their business activities through means such as recycling," and "business operators must cooperate with the policies of local public bodies in relation to the reduction of waste and the ensuring of its proper disposal, etc."
32	Biodiversity	Biological diversity can be perceived on three levels: ecosystem, species, and genetic diversity. The Convention on Biological Diversity is a treaty whose goals are the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of benefits arising out of the utilization of genetic resources. The 10th Conference of the Parties to the Convention on Biological Diversity (COP 10), held in 2010, adopted the "Aichi Targets," which is a strategy for reducing the speed of biodiversity loss by 2050, and the "Nagoya Protocol" on the handling of genetic resources.
33	Antisocial forces/ organizations	A general term for groups and individuals who pursue economic benefits through unreasonable demands using violence, power, or fraudulent means.

No.	Term	Meaning
34	United Nations Convention against Corruption	A treaty for preventing economic crimes including corrupt practices (including corruption by public officials, foreign public officials, and officials of a public international organization), bribery, embezzlement, and money laundering. It plays a complementary role to the United Nations Convention against Transnational Organized Crime and is incorporated into the principles of the UN Global Compact.
35	Domestic laws regarding competition: Antimonopoly Act (Japan), antitrust laws (US), European Union competition law (EU)	“Competition law” is a general term for laws and regulations with the purpose of preventing monopolistic, coordinated, or unfair practices as a means of competition, in order to maintain sound and fair competition in a capitalist market economy. Below are some domestic laws. Antimonopoly Act (Japan): A law aimed at sound market development and the protection of consumer interests by maintaining free competition among companies. Antitrust laws (US): Antimonopoly laws in the United States. A general term for the basic laws of the Sherman Act, the Clayton Act, and the Federal Trade Commission Act plus a series of laws and regulations that amend and supplement these statutes. European Union competition law (EU): Antimonopoly law in the EU.
36	Prevention of competition law violations	When competition laws such as an antitrust law have been violated, the violator may face civil (e.g., an injunction) and administrative (e.g., payment of a fine) measures and, in some offense, criminal charges. Furthermore, as violators may lose social credibility through press coverage, it is important to prevent violations and, toward that end, it is important to have correct knowledge.
37	Bid rigging	Illegal behavior to ensure that a certain bidder wins a bid as a result of an agreement among relevant bidders.
38	Cartels	A form of alliance in which companies and business operators in the same industry, which is in a state of oligopoly, strike a deal on matters such as price, production volume, and sales outlets to avoid competition, with the aim of obtaining exclusive benefits. Also called syndicates, cartels are prohibited in Japan by the Antimonopoly Act.
39	Abuse of dominant bargaining position	Causing disadvantage to a trading partner through unjust behavior in light of normal business practices by using the dominant bargaining position of one's own company (e.g., making burdensome requests such as delayed payment of bills, demand for price reductions, and demand for support money, and making demands for the dispatch of employees). The Antimonopoly Act prohibits these behaviors in Japan.
40	Unfair trading	Acts that could impede fair competition, which are prohibited by Japan's Antimonopoly Act. There are 16 types of unfair trade practices applicable to all categories of business, including “concerted refusal to deal,” in which companies refuse to deal with a certain vendor, and “discriminatory pricing,” in which products and services are provided and received unfairly at discriminatory prices.
41	Patent rights, copyrights, and trademark rights	Patent right: A set of exclusive rights granted by a sovereign state to an inventor or assignee for a limited period of time in exchange for detailed public disclosure of an invention. Copyright: The right to exclusive control of works that creatively express one's own thoughts and feelings through forms of expression such as language, music, and graphic arts. Trademark rights: The right to protect as an asset trademarks attached to products and services, where “trademark” refers to a mark (including letters, graphics, symbols, three-dimensional shapes, and combinations thereof) used to differentiate the products and services of one's own company from those of other companies.
42	ISO 9001, ISO/IEC Guide 51, EU New Approach Directives, and HACCP	ISO 9001: A certification standard for quality management systems, issued by the International Organization for Standardization (ISO) in 1987. It is used to improve quality through the implementation of the Plan-Do-Check-Act (PDCA) cycle aimed at increasing quality. A review by a third party is needed to acquire certification. ISO/IEC Guide 51: An international standard that stipulates guidelines for the inclusion of safety aspects in standards. It is positioned at the top of various safety standards. EU New Approach Directives: A new EU legal structure and means of regulation implemented with the integration of Europe as the EU with the purpose of reducing “technical trade barriers” that impede the flow of goods within the EU. HACCP (Hazard Analysis and Critical Control Point): A system for analyzing health and quality risks that could occur in the production process of foods, specifying the critical control points that should be monitored to ensure safety, and practicing rigorous control and record keeping.

No.	Term	Meaning
43	Major laws and regulations related to quality and safety	<Explanation of abbreviations> • LP Act: Act on the Securing of Safety and the Optimization of Transaction of Liquefied Petroleum Gas • PMD Act: The Law on Securing Quality, Efficacy and Safety of Products Including Pharmaceuticals and Medical device • Housing Quality Act: Housing Quality Assurance Act • Premiums and Representations Act: Act against Unjustifiable Premiums and Misleading Representations
44	Supply chain	A series of activities or stakeholders related to the chain of all business processes (including development, procurement, production, delivery, and sale) leading from the stage of raw materials to the delivery of products and services to the customers. The business approach for cohesive management of the supply chain is called supply chain management.
45	EU RoHS Directive	EU legislation restricting the use of hazardous substances in electrical and electronic equipment and promoting the collection and recycling of such equipment, enacted in February 2003. Target hazardous chemical substances include lead, mercury, cadmium, and hexavalent chromium, and flame retardants such as polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE).
46	California Transparency in Supply Chains Act	A law that went into effect in January 2012 that requires companies with worldwide annual revenues of \$100 million or more to report on their specific actions to eradicate slavery and human trafficking in their supply chains.
47	Conflict minerals	A general term for minerals produced in conflict-torn regions where the purchase of those minerals could lead to the funding of local armed groups and, it is feared, could result in complicity in conflicts in those regions. (See No. 48 Dodd-Frank Act)
48	Dodd-Frank Act	A US financial regulatory reform act established in 2010 with the aim of preventing a recurrence of the financial crisis. One part of the act imposes an obligation on companies listed in the US to report to the Securities and Exchange Commission (SEC) matters related to their use of minerals including tantalum, tin, gold, and tungsten produced in the Democratic Republic of the Congo and surrounding regions, out of concern that mineral resources in those regions have become a source of funds for armed groups.
49	Local community	The people or groups living or working in an area impacted economically, socially, and environmentally by a business.

Sustainable Procurement

▶ Management System

▶ Supplier Sustainability Evaluation and Improvement Support

▼ Participating in Sustainable Procurement-related Initiatives

Participating in Sustainable Procurement-related Initiatives

Participate in UN Global Compact Network Japan Supply Chain Subcommittee Meetings

Mitsui Chemicals has been participating in UN Global Compact Network Japan supply chain subcommittee meetings since fiscal 2013. As part of its efforts together with participating companies to improve sustainable procurement throughout the supply chain, Mitsui Chemicals has been involved in drafting industry-wide Self-assessment Questionnaires (SAQs), exchanging opinions with NGOs and experts, and raising awareness of these efforts among other organizations and companies.

Moreover, the following concepts for drafting the questionnaire were stated at the UN Global Compact Network Japan supply chain subcommittee meeting.

- Hold discussions on equal treatment for companies that comprise supply chains regardless of the size of management resources (personnel, assets, funds); sustainable procurement is becoming important for creating a sustainable society.
- Foster a shared vision, mutual understanding/growth based on SAQ responses from all companies that comprise the supply chain, while aiming to make SAQs a baseline by making them easy to understand, user friendly, and open-ended in order to implement sustainable procurement on a global level.
- Take steps to facilitate the channeling of management resources toward improving internal and supply-chain sustainable procurement by sharing SAQs among suppliers and buyers while working to reduce workloads for both parties.

Sharing these ideas, the Group has taken the initiative in adopting the SAQ to improve sustainable procurement not only in its own supply chain but throughout society and along with other participating companies.

Participating in ESG Information Sharing Platforms and Acquiring Supply Chain Certification

The Group is participating in platforms (Sedex, EcoVadis) that aim to improve corporate environmental and social practices within the supply chain through the sharing of information relating to these practices. Moreover, Mitsui Chemicals has acquired RSPO (Roundtable on Sustainable Palm Oil) supply chain certification.

→ Sedex 



→ EcoVadis 



→ Mitsui Chemicals Receives the Top Gold Rank in Eco Vadis Supplier Survey

→ RSPO Certification 

▶ RSPO Certification Certificate (PDF : 706KB) 



CERTIFICATE

CU-RSPO SCC-842870

Based on an audit according to the requirements stated in the RSPO Supply Chain Certification Systems, version November 2014 and a signed contract, Control Union Certifications herewith certifies that the facility(s) listed below are found to be in compliance with the RSPO Supply Chain Certification Systems, version November 2014. This guarantees that the criteria for processing RSPO certified palm oil products through one or more of the supply chain models as stated in the RSPO Supply Chain Certification Systems have been met.

Name of certified company	Mitsui Chemicals, Inc
Full address certified company	Shiodome City Center, 1-5-2 Higashi-shinbashi 105-7122 Minato-ku Tokyo JAPAN
RSPO Number (if applicable)	4-0664-15-000-00
Other sites certified (see annex 1)	☒
RSPO registered parent company (if applicable)	
RSPO member number parent company	

Scope of assessment	Procurement and processing of Fatty Acid Methyl Ester, including storage and selling as nonionic surfactant.
----------------------------	--

Start date certificate	21-12-2015
Expiration date certificate	20-12-2020
Date of first RSPO certification	21-12-2015
Certificate number	CU-RSPO SCC-842870
Supply chain model	☐ Identity Preserved (IP) ☒ Mass Balance (MB) ☒ Segregation (SG)

Authorised signatory name

Ms. N Atiqah

Date of issue: 21-12-2015

On behalf of the Managing Director

Authorised signature



Issued by

Control Union Certifications
Meeuwenlaan 4-6, P.O. Box 161,
8000 AD ZWOLLE
The Netherlands
tel.: +31(0)38 426 01 00
<http://www.controlunion.com>
certifications@controlunion.com

Control Union Certifications is accredited to provide RSPO Supply Chain Certification on 06/06/2014 (RSPO-ACC-014)

This certificate including the annex remains the property of Control Union Certifications and can be withdrawn in case of terminations as mentioned in the licensee contract, or in case changes or deviations of the above-mentioned data occur. The licensee is obliged to inform CUC immediately of any changes in the above mentioned data.

Only an original and signed certificate is valid.

Certificate version: C842870CU-RSPO SCC-01.2015





Annex 1 to Certificate – RSPO SCC

Certificate No.: CU-RSPO SCC-842870

CU Code:	Name of facility:	Location address:
PRU-01	Osaka Works, Manufacturing Dept.1 EO section	6, Takasago 1-chome, Takaishi, Osaka 592-0001 Takaishi Osaka JAPAN
PRU-02	Osaka Works, Logistics Department	6, Takasago 1-chome, Takaishi, Osaka 592-0001 Takaishi Osaka JAPAN

Authorised signatory name

Ms. N Atiqah

Date of issue: 21-12-2015

On behalf of the Managing Director

Authorised signature



Issued by

Control Union Certifications

Meeuwenlaan 4-6, P.O. Box 161,
8000 AD ZWOLLE

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tel.: +31(0)38 426 01 00

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Certificate version: C842870CU-RSPO SCC-01.2015



Human Resources Management

▼ Management System

▶ Human Resources Development

▶ Evaluation/Compensation

▶ Employee-friendly Working Environment

▶ Diversity

We at the Mitsui Chemicals Group are committed to giving our employees a sense of personal and professional motivation, with the goal of helping them find happiness and self-fulfillment. In addition, we encourage our employees to take good care of their health and make every effort to provide employee-friendly working environments, placing top priority on occupational health and safety.

* Please refer to "Occupational Health" for details regarding measures that help employees address a host of issues including lifestyle-related diseases and mental health.

➡ Occupational Health

Management System

Policy

The Human Resources Management Policy of the Mitsui Chemicals Group outlines our attitude toward our employees as well as society including those individuals considering joining the Group. The Policy focuses on maintaining a high regard for people. This in turn enables the Company and its employees to stimulate and actively enhance one another as they work to create a better future.

We will position the Policy as the cornerstone of the human resources initiatives of subsidiaries and affiliates all over the world, and aim to strike a balance between the sustainable growth of the Mitsui Chemicals Group and the happiness and self-fulfillment of our employees.

Disclosed in Japanese, English and Chinese, the Policy covers the languages spoken by the majority of employees.

➡ Action Guidelines

Human Resources Management Policy of the Mitsui Chemicals Group

1. "Always Act in Good Faith"

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

2. "Maintain a High Regard for People and Society"

1. Mitsui Chemicals will require employees to "have a high regard for people and society" as stipulated in "The Action Guidelines," highly appreciate such employees and offer an appropriate environment for them to give full rein to their strengths.
2. Mitsui Chemicals will protect employees' safety and health in the workplace.
3. Mitsui Chemicals does not tolerate any form of harassment, and in turn supports and respects the protection of human rights.

3. "Dream-inspiring Innovation"

1. Mitsui Chemicals will require employees to have the following attitudes and engage in certain behavior in order to pursue the dream-inspiring innovation as stipulated in "The Action Guidelines," highly appreciate such employees and offer an appropriate environment for them to give full rein to their strengths:
 - To take on challenges unflinchingly with full trust in our potential without fear of failure.
 - To create novel value by enhancing our sensitivity.
 - To consider and act proactively based on the actual data and facts at the workplace.
 - To aim to be world-class professionals with a global view.
 - To develop the future generation by passing on our experiences and technologies.
 - To integrate individual strengths into the organization through active communication.

The Company established three Core Values to capture the spirit of all employees working at Mitsui Chemicals Group sites all over the world and to act as a unifying force, ensuring that we are all working toward the same goals. The “spirit of challenge,” “respect for diversity,” and “teamwork” established in the Action Guidelines are each connected to the three core values of Challenge, Diversity, and One Team.

4. Mitsui Chemicals, based on the aforementioned, will conduct Human Resources Practices under the following policies:

	Toward sustainable growth of the Company	Toward the happiness and fulfillment of employees
Organization	Create an organization based on the strategy and conduct job allocation suited for realization of the strategy.	Conduct job allocation in consideration of each personal motivation and capability.
Recruiting	arefully recruit human resources that contribute to the organization's growth.	Give equal opportunities for employment to any motivated and capable candidates.
Assignment	Proactively promote employees that yield fruitful results.	Allocate suitable jobs for employees so that they can exercise their motivation and capabilities.
Training	Foster world-class professionals from a long-term perspective.	Support employees in making self-reliant efforts to become world-class professionals.
Evaluation	Evaluate achievement appropriately.	Conduct fair evaluation to enhance motivation and the capability of employees.
Compensation (Remuneration)	Build up and operate a competitive compensation system to control operating costs.	Build up and operate a competitive compensation system to secure motivated and capable human resources.

We also strive not to violate minimum wage regulations and working hours regulations on the basis of the laws and regulations stipulated by each country and region.

Overview of Human Resources Management: Relationship between the Company and Employees



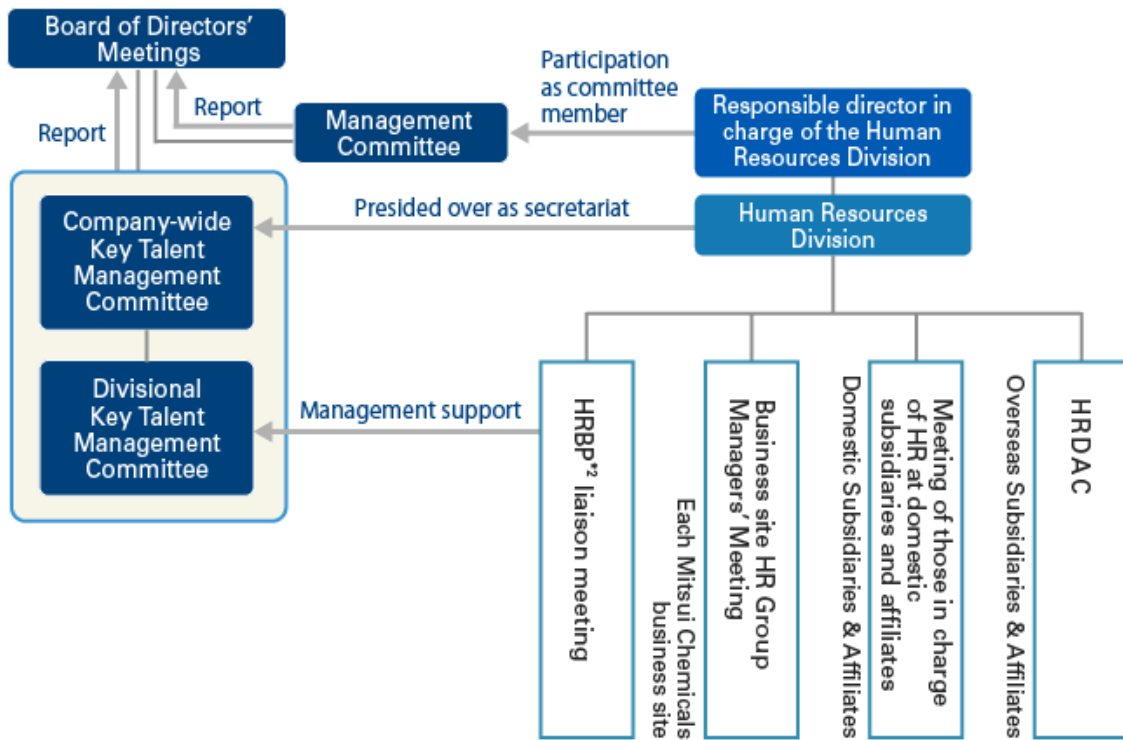
System and Responsible Officers

With the responsible director (president) in charge, the Human Resources (HR) Division plays a central role in setting the mid-term and fiscal year plans for human resources management while sharing and implementing those plans with the HR department at each site, domestic and overseas site, subsidiary, and affiliate. The HR¹ managers from each business site as well as domestic subsidiaries and affiliates and HR managers from overseas regional headquarters periodically confirm and discuss the state of progress, which leads to the drafting and implementation of related policies. The priority issues of the fiscal year plans are reported to the director in charge on a quarterly basis. Important managerial issues are also discussed mainly by the Management Committee and the Key Talent Management Committee. Furthermore, in order to draft and implement global HR policies, the Mitsui Chemicals Group has established the HR Development Advisory Committee (HRDAC), a virtual global HR organization under the general manager of the Human

Resources Division that gathers HR managers together in Japan, Europe, the Americas, and Asia. This organization is addressing a range of issues, such as (1) global HR marketing, (2) global HR development, (3) global mobility, and (4) global compensation/appraisal systems.

*1 HR:
Human Resources.

Human Resources Management System



*2 HRBP:
Human Resources Business Personnel. Person in charge of the Human Resources Division who supports key talent management, Key Talent Management Committee management and the personnel changes/placements, etc. at each division.

Monitoring Methods

The status of compliance relating to human resources management at each business site and at each subsidiary and affiliate company is regularly checked by means of internal control audits. Monitoring is also undertaken with regard to the state of progress made with the priority issues in the fiscal year plans and related policies.

Target	Monitoring Forum	Frequency
Domestic sites	Business site HR Group Managers' Meeting	Approx. once a month
Domestic subsidiaries and affiliates	Meeting of those in charge of HR at domestic subsidiaries and affiliates	Twice a year
Overseas subsidiaries and affiliates	Meeting of personnel from regional headquarters (the Americas, Europe, China and Asia-Pacific) (HRDAC)	Twice a year (Information gathering for quarterly reports also implemented)

Goals and Results

KPI	Scope of Compilation	FY2017			FY2018	Medium to Long-term
		Goals	Results	Level Achieved	Goals	Goals
Regular recruitment for regular	Mitsui Chemicals, Inc.	75	77	○	80	—

The number of	positions	registered employees					
	Regular recruitment for general positions	Mitsui Chemicals, Inc. registered employees	100	125	○	122	—
	Mid-career recruitment for regular positions	Mitsui Chemicals, Inc. registered employees	90	96	○	100	—
	Mid-career recruitment for general positions	Mitsui Chemicals, Inc. registered employees	58	35	×	58	—
Ratio of female employees hired through the regular recruitment	Regular administrative positions	Mitsui Chemicals, Inc. registered employees	40%	46%	○	40%	40% (FY2019)
	Regular technical positions	Mitsui Chemicals, Inc. registered employees	15%	11%	×	15%	20% (FY2019)
	General positions	Mitsui Chemicals, Inc. registered employees	5%	3.2%	×	5%	5% (FY2019)
Ratio of women in line manager or higher positions		Mitsui Chemicals, Inc. registered employees	2.5%	2.7%	○	3.2%	4.0% (FY2019) 10% (FY2025)
The number of employees who attended Leadership Development-Program		Mitsui Chemicals, Inc. registered employees	approx.100	98	○	approx.100	—
Employee engagement survey implementation status		Mitsui Chemicals Group	Decide survey method	Survey method was decided	○	Conduct the first survey, ascertain engagement level	—

Review and Challenges

In accordance with the requirements to expand business toward achieving the Long-term Business Plan, the securing of human resources has become an urgent management task, and we are actively conducting recruitment for regular and general positions. To give rise to innovation and balanced decision-making, we have adopted the raising of the ratio of female employees as a KPI and are working to improve organizational diversity.

Human Resources Management

► Management System

▼ Human Resources Development

► Evaluation/Compensation

► Employee-friendly Working Environment

► Diversity

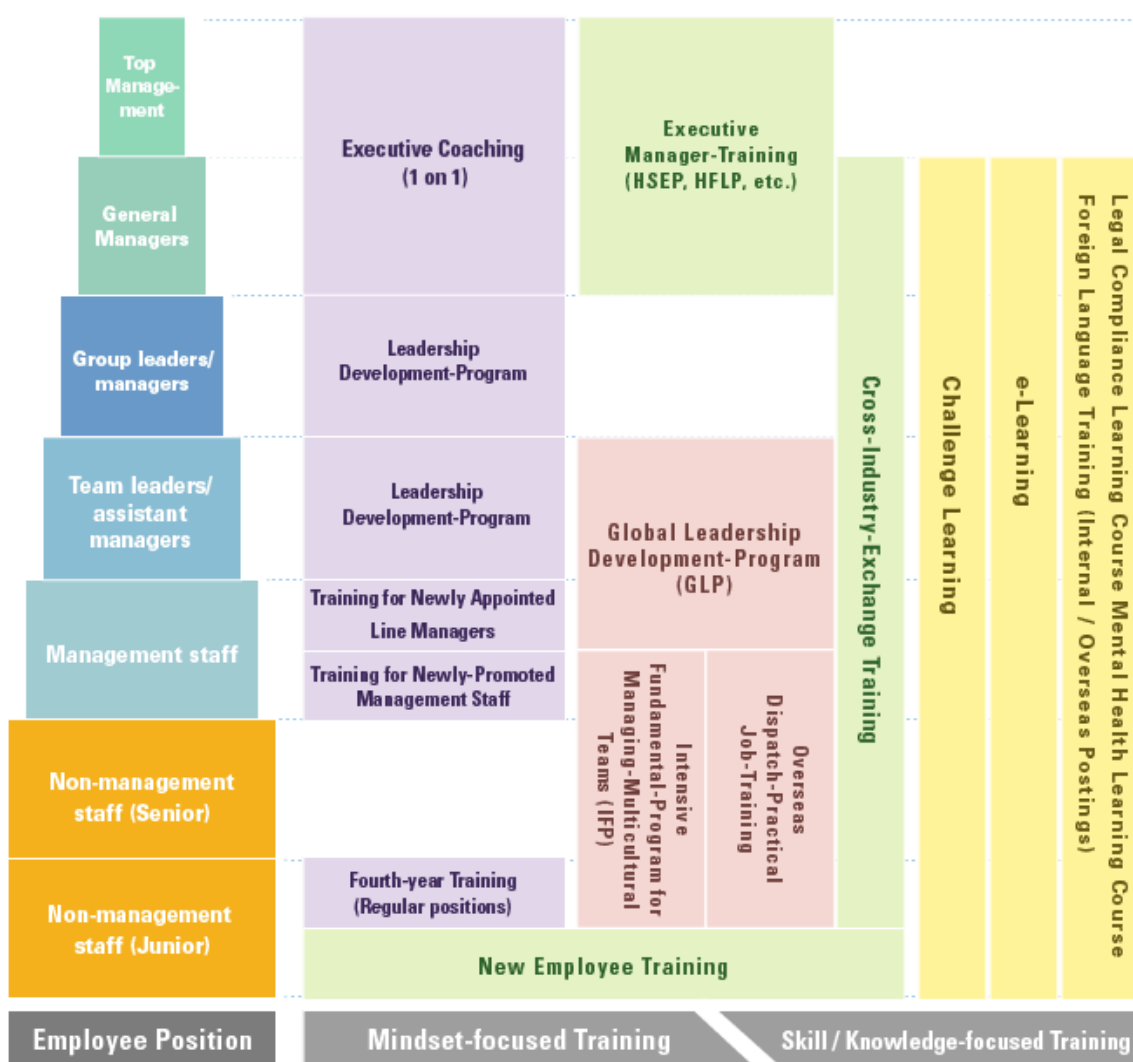
Human Resources Development

Based on the Human Resources Management Policy of the Mitsui Chemicals Group, the Group is developing, from a long-term perspective, human resources who are able to work on the world stage. The Group's approach to human resource development is to "proactively support employees who are willing to grow autonomously on their own, in order to foster them so that they able to create the value demanded by society now and in the future while repeatedly communicating with global markets and colleagues."

Programs in Line with Stages in Development Based on a Leadership Pipeline Concept

Aiming for a smooth transition to the upper management level, stratified training programs are designed on the basis of the skills and an awareness of the professional duties demanded by each rank. Minimizing knowledge cramming style training, we are aiming for the employees themselves to repeat "cycles of experience and introspection," while subjectively acting in accordance with higher level job requirements, and thereby to create behavioral changes that can produce results.

Outline of Stratified Training Based on a Leadership Pipeline Concept (Mitsui Chemicals, Inc.)



Key Achievements of Stratified Training (Mitsui Chemicals, Inc. registered employees)

Name of Training	No. of	Training
------------------	--------	----------

Program	Trainees in FY 17	Hours per Person (hr)	Key Training Content
New Employee Training (Regular positions)	77	320	Corporate Mission, core values, CSR, compliance, diversity, safety, quality, R&D, occupational health, internal systems, management strategy, understanding stakeholders, internal department functions, cultivating professionalism, teamwork, self-awareness, business manners & literacy
Fourth-year Training (Regular positions)	41	23	The 7 Habits of Highly Effective People, understanding one's role, cultivating proactive career awareness, managerial accounting fundamentals
Training for Newly-promoted Management Staff	165	15	Business strategy awareness, The 7 Habits of Highly Effective People, enhancing proactive thinking/actions, leadership
Intensive Fundamental-Program for Managing-Multicultural Teams	30	54	Understanding and utilizing cultural differences, communication skills, self-expression, presentations

Leadership Development Program

Allowing exceptional human resources to demonstrate their abilities—despite time constraints caused by life-changing events, such as child care and family care, and regardless of differences in nationality, ethnicity, and religion—requires improvements in line managers' management capabilities. Mitsui Chemicals is focusing on developing leadership skills to guide the organization toward an even better direction by incorporating coaching methods into each level of manager training and by promoting specific innovations in daily operations by core leaders at each division.

We have introduced 360° feedback assessments for trainees before and after training programs as a means to measure the effectiveness of these programs.

Moreover, attempts at analyzing correlations between results of annual workplace stress surveys and the performance of training program graduates were unable to verify a clear relationship regarding stress levels but did confirm improvement specifically in terms of "boss/colleague support" factors.

In addition to the above, we regularly measure the level of engagement through employee engagement surveys that began in 2018, which in turn help to measure the effectiveness of organizational culture improvement initiatives such as these leadership training programs.

Number of Leadership Development Program Participants (Mitsui Chemicals, Inc. registered employees)

Name of Training Program	Scope	FY 2017 results	Cumulative Total	FY 2018 Plans
Executive Coaching (1 on 1)	Executive managers General managers	8	38 (From FY2013)	10
Leadership Development Program	Line managers	60	241 (From FY2013)	40
	Supervisors	38	75 (From FY2016)	60

Global Human Resources Management

In keeping with the Group's global development, the training of global human resources is becoming an issue of unprecedented importance.

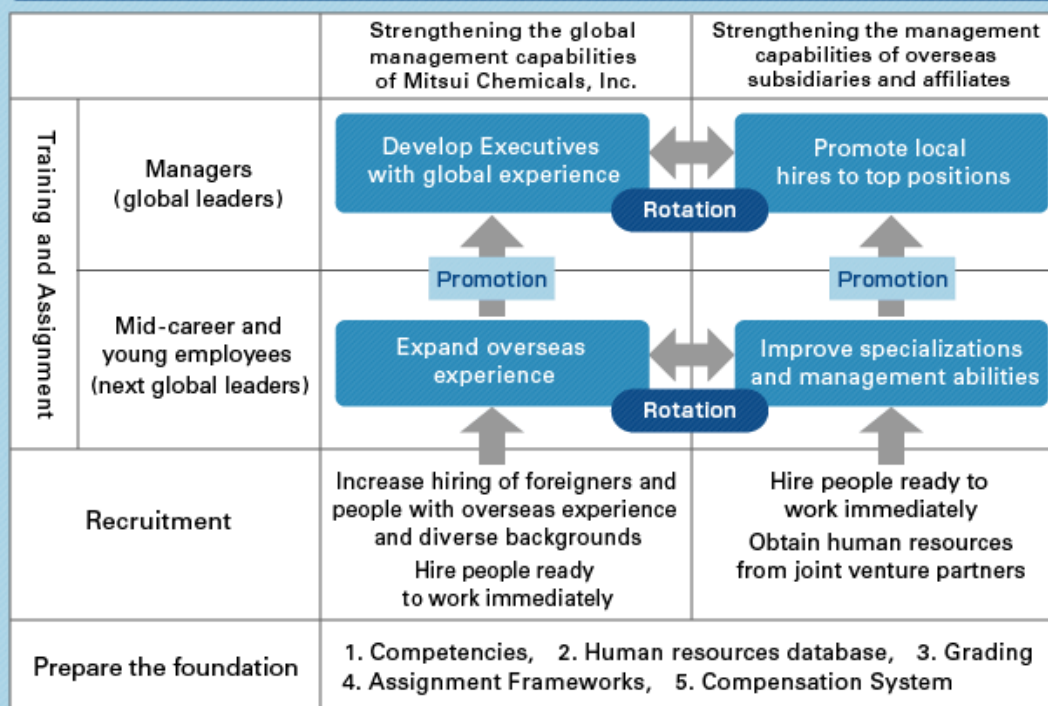
Qualities of a Global Leader

To continue gaining a greater share of domestic and overseas markets, we will secure exceptional human resources who are intimately familiar with local conditions and strengthen our global leadership that enable them to coordinate and manage the operations at each of our domestic sites with those overseas. The Mitsui Chemicals Group is clarifying the requirements for global leaders, securing those exceptional human resources with diverse backgrounds and working to methodically develop global leaders by optimally assign them to its sites all over the world. To underpin these efforts, we are introducing improvements, such as common global competencies (quality prerequisites), human resource databases, grading systems, assignment frameworks, and compensation systems.

Overview of Global Human Resources Management

Qualities of a Global Leader

- * Able to strategically and efficiently lead global business development
- * Able to rapidly develop business in regions in tune with regional characteristics



Organization Designed to Implement Global Human Resource Policies: HRDAC

We established the Global HR Development Advisory Committee (HRDAC) in 2014 to establish and appropriately manage the platforms for accelerating global management on a Group-wide basis. The HRDAC is composed of human resources managers from regional headquarters and key affiliates. We have also put in place the Mitsui Chemicals Academy to work toward global common and standardized training programs centered on the instilling of our corporate culture and core values as well as on the strengthening of leadership. Through these initiatives, we are also making progress in promoting locally hired staff to key positions, including the level of president of an overseas affiliate.

Trends in Promotions of Locally Hired Staff



* Overseas subsidiaries and affiliates excluding mergers and acquisitions

Key Talent Management

We built and from fiscal 2016 started to operate the systems for "Key Talent Management" with the aim of effectively promoting Global Human Resources Management and securing the human resources for Group global management.

Through this initiative, we will conduct the early selection of exceptional, high-potential human resources, regardless of nationality, where they were hired or the company to which they are assigned, and conduct their training in a strategic manner.

Selecting Key Talent and Potential Executive Management Candidates

From among the Group's worldwide human resources, we are selecting employees who consistently demonstrate high levels of performance, competency, potential, and enthusiasm as Key Talent. From these, we are selecting employees who possess the potential to become future managers as executive management candidates.

Establishment of Key Talent Management Committees

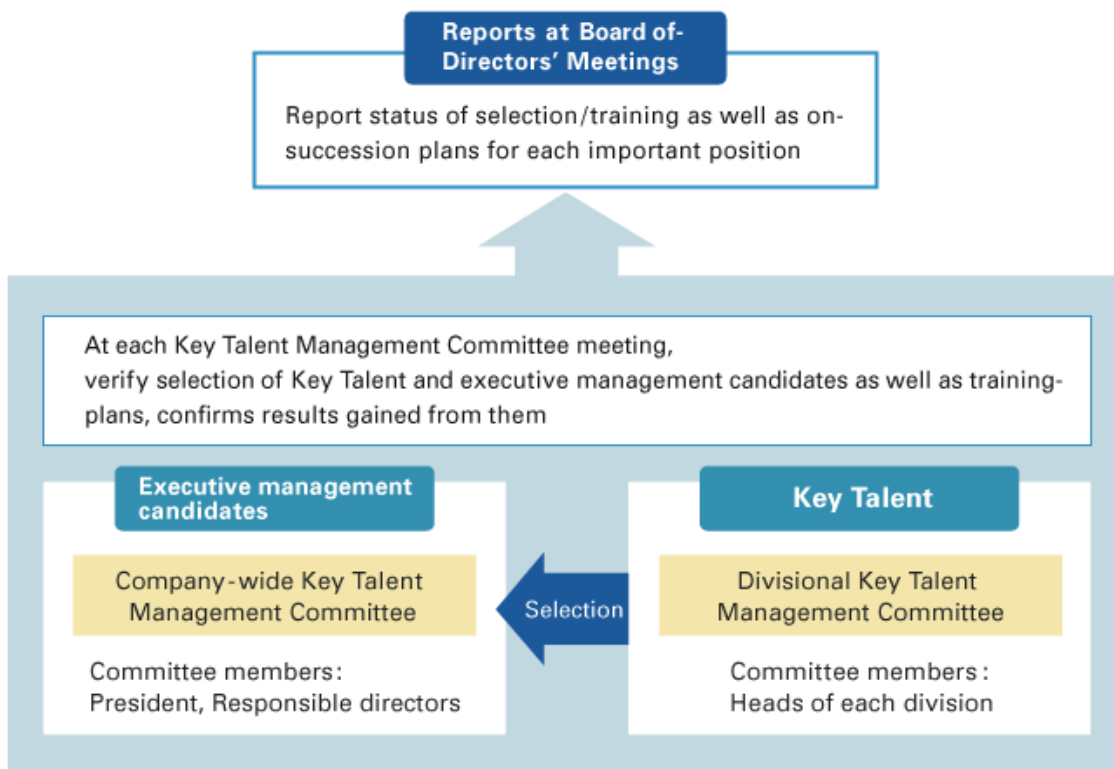
We have established Key Talent Management Committees to act as the organizations that will select Key Talent and executive management candidates as well as verify the training plans and confirm the results gained from them. The Divisional Key Talent Management Committee, chaired by a division head executive will undertake responsibility for Key Talent, and the Company-wide Key Talent Management Committee, headed by the president and the responsible director in charge, will undertake responsibility for the executive management candidates, respectively. The committees are obliged to report on the status of selection and training as well as on the succession plans for each important position at Board of Directors' meetings.

In addition, employees from the Human Resources Division are appointed as HR Business Partners (HRBPs) for each division. HRBPs support Key Talent Management activities in each division, Key Talent Management Committee operations, and other endeavors including personnel changes/allocation. HRBPs take rapid steps to share issues worth noting faced by each division and regularly hold HRBP liaison meetings in order to solve these issues.

Personalized Development Plans

The Key Talent Management Committee reviews the work experience of selected personnel and decides on the subsequent on-the-job training (OJT) from five perspectives: management perspective, business restructuring, new business development, cross-company projects, and overseas corporation management. The Committee also discusses and decides on Off-JT dispatch to / participation in management human resource development programs both in Japan and overseas based on the arrangement plan and required competency.

Key Talent Management System



Human Resources Management

▶ Management System

▶ Human Resources Development

▼ Evaluation/Compensation

▶ Employee-friendly Working Environment

▶ Diversity

Evaluation/Compensation

We believe that treatment in line with proper appraisal is an important system that improves employee motivation, secures and fosters talented human resources, and is closely related to the Group's development.

Evaluation Feedback

At all levels, Mitsui Chemicals has systemized feedback interviews and meetings to set goals for evaluation results with superiors. In goal-setting interviews, we not only set performance targets for a single fiscal year but also, at the same time, conduct a "capability / career development interview" to confirm the business tasks the interviewee would like to experience as well the skills he or she would like to acquire in the short term (within three years) and long term. Employees are thus able to give due consideration to their own careers on their own initiative. In addition, the manager appreciates the career perspectives, the strengths and weak areas as well as the future goals of his or her staff and appropriate support is made possible. Moreover, the Mitsui Chemicals Labor Union studies the take-up ratio of feedback interviews among its members and the degree of satisfaction with the feedback. The results of the survey are shared by labor and management, and we are striving to manage the evaluation system appropriately.

Since fiscal 2017, Mitsui Chemicals has been engaging in processes ranging from setting goals to evaluating performance based on its Talent Management System (Success Factors). This system was initially applied to management staff, and there are plans to extend it to all employees while its operational status is closely monitored.

Ratio of Evaluation Result Feedback Interviews Provided and Degree of Satisfaction (Mitsui Chemicals Labor Union Registered Members)

	FY2015	FY2016	FY2017
Ratio of Evaluation Result Feedback Interviews in the Previous Fiscal Year	98%	96%	98%
Degree of Satisfaction over Evaluation Feedback (Ratio of those answering "satisfied", "generally satisfied")	89%	89%	90%

Global Evaluation Guidelines

Global evaluation guidelines were formulated in May 2016 as means to organize Mitsui Chemicals Group evaluation mechanisms, approaches, and design, and have been disseminated to all Group companies. These guidelines consist of two concepts: (1) Management By Objectives (MBO), management techniques for setting goals and (2) global core competencies. Leveraging these guidelines, HR departments of four regional headquarters (the Americas, Europe, Asia-Pacific and China) support the development, revision, and operation of evaluation systems for companies in their respective regions.

Specifically, global core competencies are used as a shared index within the Mitsui Chemicals Group "Key Talent Management" system, while 360° feedback assessments undertaken in tandem with leadership development program are based on these core competencies.

Improving assessments and training is becoming an urgent issue with regards to identifying and utilizing talented Group-wide human resources in the years ahead. We are deepening our cooperation with Group companies in order to apply shared Group evaluation indices broadly and fairly.

➡ Key Talent Management

➡ Leadership Development Program

Legal Wage Compliance

Following far-reaching investigations, pays (including bonuses, overtime pay, midnight work allowances, and compensatory day-off systems) and benefit packages provided by Mitsui Chemicals Group companies are set above statutory levels in each country and region as well as at levels that encourage a sense of personal growth and improved motivation among employees.

Human Resources Management

▶ Management System

▶ Human Resources Development

▶ Evaluation/Compensation

▼ Employee-friendly Working Environment

▶ Diversity

Employee-friendly Working Environment

Maintaining a “high regard for people and society” is the basis of the Human Resources Policy of the Mitsui Chemicals Group. Guided by this policy, we strive to achieve “high levels of sustainable growth” in conjunction with the “happiness and self-fulfillment of our employees”. Against this backdrop, support measures in tune with the life events of each and every employee are becoming increasingly important to an environment in which each employee can maintain a high degree of motivation and continue to generate results.

A Message from the President

The Mitsui Chemicals Group is targeting operating income of ¥200 billion in 2025 under its Long-term Business Plan. In order to achieve this lofty goal, it is vital that each and every member of the Group takes up this unprecedented challenge and pursues every possible avenue while rethinking their approach to certain concepts and work. Equally important is the need for management to take the lead in ensuring the sound health of all employees, raising productivity, and putting in place an environment in which creativity is the norm. By addressing each of the following issues, I pledge to promote work style reform across the Mitsui Chemicals Group.

<Work Style Reform at Mitsui Chemicals>

1. Strive to ensure that the sum total of overtime and hours worked on designated holidays for each individual employee is less than 80 hours for each month

- Executive manager and management staff will take the initiative in reforming mindsets and promoting varied work styles.
- Management staff will review operational processes as well as human resources systems and improve operational efficiency while strictly controlling the number of hours worked.
- Employees will abandon the notion that the number of hours worked will lead to a favorable assessment and in principle endeavor to carry out their duties within scheduled working hours.

2. Looking beyond child and family care needs, promote the utilization of the work-from-home program in order to address a host of issues. This includes efforts to improve the work-life balance of employees, increase productivity, secure outstanding human resources, and improve business continuity in periods of emergency

- Management staff will take the initiative and incorporate working from home as a viable option. Thought will also be given to the effective management of subordinates with respect to working from home hours.
- Employees will consider how they can raise productivity with respect to their duties while working from home and endeavor themselves to put in place the necessary environment.
- Related departments will establish rules regarding the promotion of work from home and put in place the necessary framework.

Tsutomu Tannowa
President and CEO
January 1, 2017

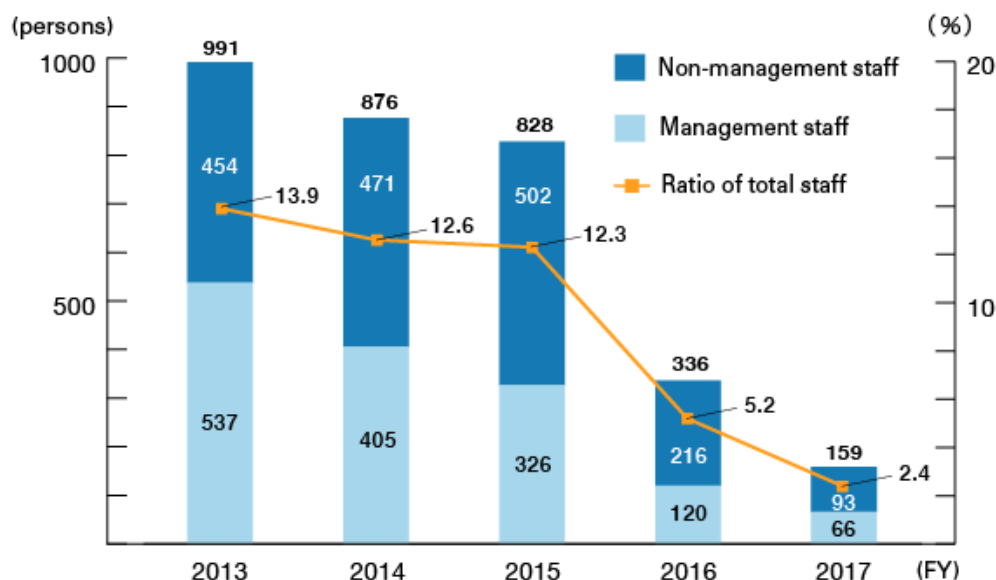
Reducing Overtime

The Mitsui Chemicals Group is striving to ensure that the sum total of overtime and hours worked on designated holidays for each individual employee is less than 80 hours for each month. When an employee is found to have worked more than 80 hours of overtime each month, the Human Resources Division conducts an interview with workplace superiors, and reviews and executes specific measures towards discovering the cause of the overtime and making improvements for each individual employee. The results of these efforts have significantly reduced the number of workers with overtime over the past five years. We will continue this initiative in order to ensure that “no employees exceed 80 hours.”

Initiative Example

In general, chemical plants operate continuously for long periods of time, but it is necessary to conduct periodic maintenance during which the entire plant is shutdown for a specific, limited period of time in order to make repairs and inspections that both minimize the impact on production and ensure a sufficient level of facility safety. In order to avoid concentrating tasks during the specified periods when this periodic maintenance takes place, we have been working to review tasks and reinforce personnel. Starting in fiscal 2016, we have provided skill training aimed at reducing overtime. Non-management staff are provided with time management training, during which they are taught specific approaches to reviewing working habits, scheduling, and e-mail handling. Management staff are provided with organization management workshop training, during which they acquire specific approaches to holding meetings and to efficiently managing organizations. Workshop attendees also create plans to reduce overtime. In fiscal 2017, we held each training session twice, which were attended by 37 non-management staff and 29 management staff. Training for fiscal 2018 is scheduled in the same manner as in fiscal 2017.

Number of Employees whose Overtime Exceeded 80 Hours/Month (Mitsui Chemicals, Inc. registered employees)



Responding to Life Events

Mitsui Chemicals has put in place various programs that exceed statutory requirements in response to employees' circumstances outside work including child and family care. These programs encompass paid leave, unpaid leave, and working hours while also taking individual earnings and costs into consideration. Every effort has also been made to increase awareness toward these programs.

In order to encourage mainly male employees to take childcare leave, the Company has introduced additional incentives, which include treating the first five days as paid leave. As a result, the utilization rate among male employees is increasing steadily. In the case of family care leave, eligibility was originally limited to those who care for a person requiring long-term care. Mitsui Chemicals has also expanded the eligibility of family care leave for employees who care for a person requiring support.

Moving forward, we will work to increase the use of the Company's various programs by upgrading our ICT environment, reviewing work flows, and promoting measures that help change the mindset of the organization as a whole.

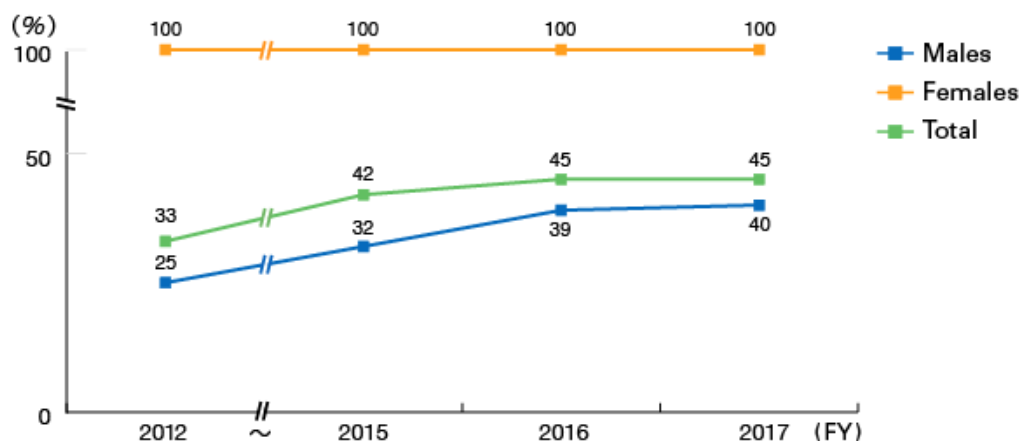
List of Support Measures That Help Balance Life Events and Work Commitments (Mitsui Chemicals, Inc.)

		Permanent Employees	Contract Employees		
			Re-employment	Indefinite-term contract and part-time	Fixed-term contract and part-time
	5-day workweek (Saturday and Sunday holidays)	○	○	○	○
	Public holidays and New Years Holidays (company holidays)	○	○	○	○
	Annual paid leave (20 days/year, starting during the second year of employment*)	○	○	○	○
	Leave for those on an unaccompanied assignment to return home*	○		○	○

Holidays, Vacation, and Leave	Marriage leave (8 consecutive days)*	☐		☐	☐
	Refreshment leave (two consecutive days off/year)*	☐		☐	☐
	Leave to care for a sick family member (paid leave*)	☐	☐	☐	☐
	Paid family care leave*	☐	☐	☐	☐
	Childcare leave (the first five days are treated as paid leave*, eligibility lasts until the end of the fiscal year when the child reaches the age of three*)	☐	☐	☐	☐
	Family care leave (eligibility also extended to employees caring for family members certified as being in need of support*, eligibility lasts up to one year*)	☐	☐	☐	☐
	Special leave (paid leave, leave for illness or injury, family care leave, childcare leave, leave to participate in social activities)*	☐		☐	☐
	Leave of absence to accompany spouse's overseas assignment*	☐		☐	
	Social activities leave (paid leave)*	☐		☐	☐
Working Hours	Shortened working hours (childcare/family care leave)*	☐	☐	☐	☐
	Restrictions on overtime (childcare/family care leave)	☐	☐	☐	☐
	Restrictions on late night work (childcare/family care leave)	☐	☐	☐	☐
	Work-from-home program (childcare/family care leave)*	☐		☐	☐
	Company childcare center*	☐	☐	☐	☐
	Flextime system (without core period)*	☐	☐	☐	☐
Income	Maternity pay*	☐		☐	
	Childcare assistance*	☐		☐	
	Maternity leave allowance*	☐		☐	
	Family care leave assistance*	☐		☐	
	Subsidies for home-care services*	☐		☐	
	Subsidies for babysitting services*	☐		☐	

Measures marked with an asterisk (*) exceed statutory requirements

Childcare Leave Utilization Rate (Mitsui Chemicals, Inc. registered employees)



Please refer here for details on the utilization status of other systems.

➡ ESG Performance Data

Program That Supports Employees Returning to Work after Taking Childcare Leave

Mitsui Chemicals formalized a program that supports employees returning to work. The principal goal is to put in place an environment that allows employees rearing young children to return seamlessly to work after giving birth to a child or taking childcare leave and to help instill a high sense of motivation.

The program clarifies the types and details of support for each period from the time before maternity leave through childcare leave to the return to work. Prior to taking leave, each employee and his or her manager engage in one-on-one interviews to discuss the handover of duties, contact details while on leave, various procedures, and other important issues. Meetings between employees and their managers are also conducted while taking leave to share details of work styles as well as systems that ensure an environment to accept employees as well as details of duties after the return to work and to deepen mutual understanding. After returning to work, the Company provides an explanation of procedures and support regarding its various programs.

In this manner, every effort is being made to relieve employees' anxieties with respect to taking maternity and childcare leave as well as returning to work. This in turn helps to alleviate the need to resign from the Company and allows employees to continue their careers.

Return Rate and Retention Rate of Employees Having Taken Childcare Leave (Mitsui Chemicals, Inc. registered employees)

		FY2017
Return Rate from Childcare Leave (%)	Males	97
	Females	100
	Total	98
Retention Rate Three Years After Returning from Childcare Leave (%)	Males	91
	Females	96
	Total	92

Toward Work-life Balance and Promoting Work Style Reform

Mitsui Chemicals is working to increase the rate at which employees utilize the Company's 20-day annual paid leave program as a way to reform the way people work. In order to lift the utilization rate of employees in management positions, which currently remains particularly low, the Company has implemented a compulsory "refreshment leave" system that in principle requires employees to take two consecutive leave days. Among a host of endeavors, the Human Resources Division puts forward various requests. Work days that are sandwiched between holidays are treated as "days to support the taking of paid leave." Managers are requested not to arrange meetings and issue instructions regarding non-urgent work to subordinates on these days. Through these means, we are creating an environment that allows employees to take leave easily.

Measures Relating to the Promotion of Work Style Reforms

- Encouraging employees to systematically take long-term leave

- Putting in place days to support the taking of paid leave
- Encouraging employees to take half-day afternoon leave on Premium Friday (excluding Works and branches)
- Calculate, inform and provide guidance about the annual paid leave utilization rate by workplace
- Run telework trials

Annual Paid Leave Utilization Rate (Mitsui Chemicals, Inc. registered employees)

		FY2015	FY2016	FY2017	Goals
Annual Paid Leave Utilization Rate (%)	Non-management staff	86	81	79	—
	Management staff	63	56	56	60
	Total	76	70	69	—

Employee Engagement Survey

The Mitsui Chemicals Group aims to develop a corporate culture by which the company acts as a single team that encourages employees to take up challenges and respect diversity. As a more advanced version of the various surveys we have conducted in the past, the Group will distribute the Employee Engagement Survey in fiscal 2018. This survey will be conducted at every Mitsui Chemicals Group company throughout the world, and will help grasp our employees' morale and desire to contribute towards executing strategies, as well as help grasp the corporate and organization culture at the global level. In addition, the survey will help discover issues, and help plan and execute initiatives.

Support Childcare at the Ichihara Dream Plaza, Mitsui Chemicals Daycare Center

The Ichihara Dream Plaza, Mitsui Chemicals Daycare Center opened near Ichihara Works and the Sodegaura Center in Chiba in April 2009 to provide support for employees who continue to work while bringing up children. The center's capacity was increased to 30 children in fiscal 2011. The south wall of the center is made entirely from glass with a host of improvement features including under-floor heating.

Labor-management Relations Based on Frank Dialog and Mutual Understanding

Mitsui Chemicals has incorporated the realization of its Corporate Mission and the achievement of the happiness and self-fulfillment of employees as common goals in its labor agreements and is working to build constructive and stable relations with labor. In order to help achieve 2025 long-term targets, labor and management are endeavoring to share and exchange opinions regarding a host of management issues. Efforts are also being made to engage in ongoing frank discussions between labor and management on such themes as improving productivity as well as the work-life balance of employees. In this manner, we are working to lay the necessary foundation so that employees can work in a more enjoyable and meaningful manner. Moreover, we have adopted a rule that employees must generally be notified at least one month prior to transfers that entail moving and relocation.

Major Labor-management Discussion Themes (fiscal 2017)

- Revision of the increase in starting salaries
- Bonus amounts and profit sharing
- Revision of the re-employment system
- Revision of the increase in wages
- Explanation of the management condition

Mitsui Chemicals operates as a union shop; therefore, all employees that are eligible to join a labor union under the labor agreement agreed upon by labor and management join the labor union. The Mitsui Chemicals Labor Union represents all non-management staff, and the negotiation outcomes between labor and management are applied without condition to all non-management staff. Moreover, management staff and other employees on or above the management level are not eligible to join the union as per the labor-management agreement.

Overseas sites are operated in a way that allows labor unions to be formed under the labor-related laws of each country and under the freewill of the employees. We do not take any actions whatsoever to limit such moves.

Human Resources Management

► Management System

► Human Resources Development

► Evaluation/Compensation

► Employee-friendly Working Environment

▼ Diversity

Diversity

The Mitsui Chemicals Group has set "Diversity," "Challenge" and "One Team" as the three core values to be shared and held in high regard among Group employees all over the world. To realize the wish, encapsulated in those core values, to "create a company in which all employees can actively make the most of their diversity and put their all into their work," we actively deploy initiatives designed to encourage "Diversity" and "Inclusion."

Aiming for human resource diversity that emphasized gender equality, we expanded our Group's Diversity & Inclusion initiatives, which had started with the establishment of a Promotion and Development of Women Team in 2006. We added new perspectives, such as "Acceptance of / Co-existence with Different Cultures" associated with the expansion of global management and the recruitment and active utilization of people with disabilities, and reorganized into the Diversity Promotion Team (2011) and the Diversity Promotion Department (2015). In addition to aiming to realize our core values, we are working to raise awareness of diverse employee career paths and adapt to changing values toward work styles.

Female Employees' Active Participation and Advancement in the Workplace

The Mitsui Chemicals Group was focusing its efforts on proactively leveraging the capabilities of women in its operations even before establishing the Promotion and Development of Women Team in 2006. These efforts include assigning female employees to plants and employing women in positions with promotion prospects. Although we have made steady progress in our efforts to foster a corporate culture that encourages the ongoing employment of women over the past decade, we are still facing challenges. There remains a lack of consistency in annual female employment rates, there are small numbers of women with technical backgrounds applying for jobs and being hired, and a low percentage of female managers. Under the 2025 Long-term Business Plan, we have set a target rate of female managers (line managers or higher) of 10% or more (Mitsui Chemicals, Inc. registered employees). One factor for the currently low numbers is that the ratio of women among all employees is comparatively small. In our hiring practices, we work to set a numerical target for the ratio of female employees in regular recruitment for respective job types, namely, for regular technical positions, regular administrative positions and general positions (primarily factory operators), as the situation for each of these is different.

A Message from the President

Our goal is to remain an attractive corporate group in which all employees are able to fully demonstrate their capabilities.

The Mitsui Chemicals Group recognizes the importance of diversity in ensuring sustainable growth both for the Group and society. Based on this understanding, we have positioned diversity as one of our core values.

Advancing diversity is an important business strategy. We strongly believe that a diverse pool of human resources, characterized by wide-ranging experiences and a wealth of new ideas, is the driving force behind innovation, a key source of sustainable growth.

As a part of its efforts to promote diversity, the Mitsui Chemicals Group works diligently to foster a corporate culture in which female employees are able to excel. Moving forward, we will redouble our efforts to support female employees to take up the challenge of advancing their careers. We will also look to promote a growing number of women to positions of senior management.

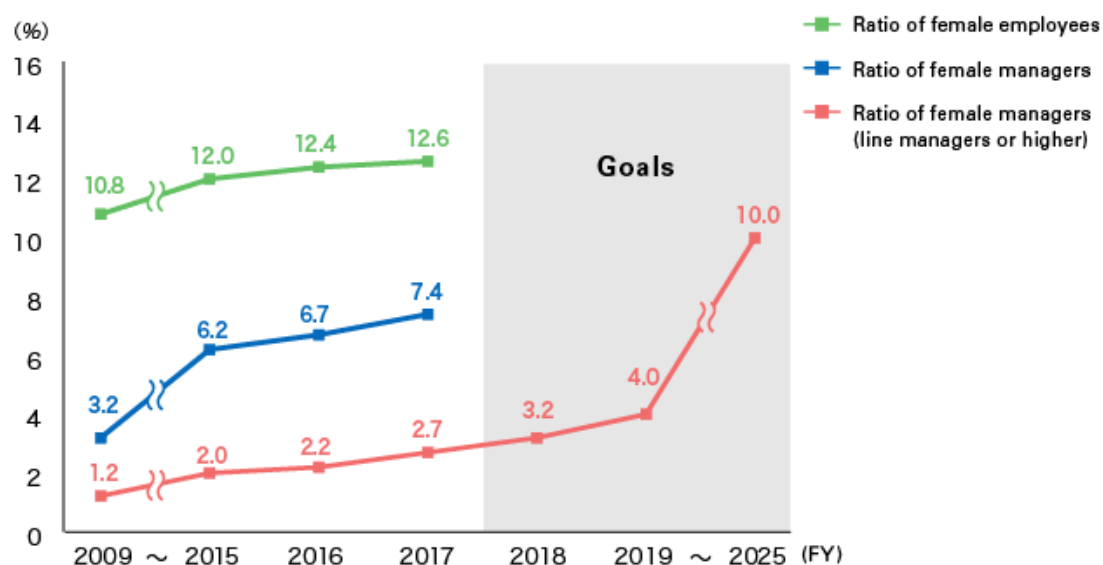
The Mitsui Chemicals Group is committed to building a workplace environment in which employees can make the most of their strengths and capabilities. In this manner, we will continue to pursue innovation and work toward becoming an attractive corporate group.

Tsutomu Tannowa
President and CEO

A Message from the Outside Director

I believe that for the Mitsui Chemicals Group to improve its corporate value, our Group must be an organization where a diverse pool of human talent, including women, can play an active role in the workplace. To that end, I believe that it will be critical for the Group to place higher priority on and work toward achieving the above goal as a management challenge. As the outside director representing stakeholders, I will keep a close eye on the direction of management and offer my advice.

Ratio of Female Employees (Mitsui Chemicals, Inc. registered employees)



Ratio of Female Employees Hired through the Regular Recruitment (Mitsui Chemicals, Inc. registered employees)

		FY2017		FY2018	FY2019
		Goals	Results	Goals	Goals
Ratio of Female Employees Hired through the Regular Recruitment	Regular Administrative Positions	40%	46%	40%	40%
	Regular Technical Positions	15%	11%	15%	20%
	General Positions	5%	3.2%	5%	5%

Average Length of Service (Mitsui Chemicals, Inc. registered employees)

		FY2016	FY2017
Average Length of Service	Males	19.7	19.2
	Females	21.1	21.1
	Total	19.9	19.5

Non-Japanese Employees' Active Participation in the Workplace

The Company began the full-scale hiring of non-Japanese employees in Japan in 2005. For non-Japanese employees working in Japan, we provide dedicated consultation services and the systems to enable them to exchange and share information on a daily basis via an internal social networking service (SNS). In addition to supporting trouble-free work and life styles, we are aiming to remain a company where it is easy for non-Japanese employees to work and to secure talented human resources.

Specific Examples of Assistance Provided to Non-Japanese Employees

- Assisted with Japanese language training
- Assisted with visa procedures
- Addressed daily inquiries regarding HR systems, initiatives, company regulations
- Conveyed information required for working in Japan in English and Japanese
- Conduct inclusion study lectures (promote awareness of cultural differences)
- Created English manuals for HR-related applications
- Responses to life consultations from non-Japanese employees (assigned staff in charge to each business site)

Number of Non-Japanese Employees (Mitsui Chemicals, Inc. registered employees)

	FY2015	FY2016	FY2017
Number of Non-Japanese Employees	56	55	57

Enabling Employees with Disabilities to Reach Their Full Potential in the Workplace

In hiring employees with disabilities, the Company goes beyond achieving the legally required employment ratio and works to maintain environments in which people with disabilities can play an active role while accumulating skills, and have a sense that they are a member of the organization. In addition to conducting training sessions at sites that accept employees with disabilities to help other employees better understand the needs of those with disabilities, we establish incubation periods and adaptation / learning periods for certain lengths of time after hiring and devise measures, depending on the nature of each person's disability, to enable him or her to smoothly commence work. We also support employees with disabilities with skills training that includes languages and computer skills, so as to raise the capabilities of employees in a way that is suitable to their individual talents.

We also hold inclusion lecture meetings with the aim of fostering a climate that accepts into the organization not only people with disabilities but also people with a variety of personalities and characteristics. At the lecture meetings, participants learn about sexual minorities, and we provide a forum for employees with disabilities to take roles as lecturers and talk about their own disabilities and experiences.

Ratio of Employees with Disabilities (Mitsui Chemicals, Inc. registered employees)

	FY2015	FY2016	FY2017
Ratio of Employees with Disabilities	2.2%	2.3%	2.3%
Legally Required Ratio for Employment of People with Disabilities	2.0%	2.0%	2.2%

Employee Comments

Opportunities for Learning That Are Useful on the Job Lead to Sustained Motivation

Mitsui Chemicals offers a variety of training and learning programs, building a framework which facilitates studies. In the year and a half since I entered the Company, I have taken language, PC skills and other programs. I learned business English in the English language training that the Company offers. With the new expressions and insights I learned from the native English teacher, I was able to set new goals for myself with regard to English learning. In the correspondence course I took covering Excel, the learning method was to read the text and advance at my own pace, which suited me as an easy way to understand the documents I was reading. After the course I realized that I was able to use the Excel cell formulas to improve the efficiency of my work. In the training I took to make my work more productive, for me, with my traits of developmental disabilities, it was possible to learn ways to approach things that I could both put into practice and continue as well, so I felt that this was extremely meaningful. Actually, the time management methods I learned at training are useful on the job. The opportunity for this kind of learning is connected to my maintaining a high level of motivation.

Developmental disabilities
Joined the Company in fiscal 2016

Retired Employees' Active Participation in the Workplace

Mitsui Chemicals is moving forward to leverage the wealth of experience possessed by senior human resources, and to those retired employees who wish to continue working, calls for ongoing employment through its system of rehiring. We do this to address the challenges of insufficient numbers of human resources associated with expanded business operations and the generational retirement of those employees that had been hired in large groups, as well as to utilize employees who are highly motivated to work, even after their retirement. From fiscal 2018, we will improve conditions of remuneration at the time of rehiring, and aim to expand the numbers of those who wish to continue working.

Examples of Training and Lectures related to Diversity at Mitsui Chemicals Inc.

Year	Target audience	Theme	Lecturer	No. of Participants
	Management staff (line managers or higher positions)	Promotion of women's participation and advancement in the	The director of Diversity Promotion Department	

FY2016		workplace		629
	MCI employees	IkuBoss (an ideal boss who supports his or her subordinates' work-life balance and manages his or her work-life balance)	expert outside the company	
	MCI employees	Management with understanding of sex differences	expert outside the company	
	MCI employees	Employment of persons with disabilities	expert outside the company	
	MCI employees	Developmental disability	expert outside the company	
	MCI employees	Developmental disability	employee with disability	
	MCI employees	LGBT (lesbian, gay, bisexual, and transgender)	expert outside the company	
FY2017	MCI employees	Influence of diversity on management	expert outside the company	578
	employees in charge of consultation services for harassment at the head office, each branch, works and affiliates	LGBT (lesbian, gay, bisexual, and transgender)	expert outside the company	
	female employees	Women's career and health	expert outside the company	
	MCI employees	Support system related to babysitting services	The director of Diversity Promotion Department	
	MCI employees	Family care	expert outside the company	
	MCI employees	Learning disabilities	employee with disability	
	MCI employees	Dementia Supporter Training Lecture	expert outside the company	
	MCI employees	How to approach/instruct employees with developmental disabilities	expert outside the company	
	MCI employees	Physical impairment (Visceral impairment)	expert outside the company	
	MCI employees	Understanding Muslims	expert outside the company	
	MCI employees	Supporters for Employees with Disabilities	expert outside the company	
	MCI employees	Necessity of Work Style Reform and Diversity	expert outside the company	
	Supervisors of Female Factory Operators	Mitsui Chemicals Promotion and Advancement of Women and Management of Female Subordinates	The director of Diversity Promotion Department	
	Female Factory Operators	Fostering the Career Awareness of Factory Operators	expert outside the company	
	Employees with Disabilities	Development of Various Capabilities (Computer skills, languages, others)	expert outside the company	

Support for Female Operators' Participation and Advancement in the Workplace

In the quarter century since 1992, Mitsui Chemicals has hired women as operators at manufacturing sites, and moving forward, will further promote the active participation and advancement of women at its factories. In fiscal 2016, briefings on the social background of the promotion of women's active participation and advancement in the workplace, the initiatives that companies, organizations and individuals should take as well as Mitsui Chemicals' goals and action plans toward the promotion were conducted for line managers at all Works in Japan. In addition, at Works that accept women operators for the first time, we are continuing to hold training sessions that cover the promotion of women's active participation and advancement in the workplace and the management of female subordinates.



Employees at training

In fiscal 2017, we conducted training with a theme of raising career awareness, bringing together female operators who work at all of our Works. For participants in this training, this also proved to be a venue where they could get to know other employees in the same situation better. The president also attended a social gathering, and provided the message that "I believe that there are numerous challenges with regard to women working at manufacturing sites, but our hiring of women will continue unabated, and there is a necessity to increase the numbers of female employees who work at manufacturing sites. As for the Company as well, I hope to support with the creation of an environment in which all of you can perform an active role."

Consolidating Expertise to Streamline Business Operations

Mitsui Chemicals has employed many female employees in general administrative positions who can be said to be "veterans," given their lengthy career experience. It is the knowhow of such women, who possess a thorough understanding of business operations, which will prove invaluable as we move forward with business reforms. Given this, in fiscal 2016, we implemented training in which we invited external instructors so that employees engaged in sales support and delivery operations could learn basic schemes for making the execution of their tasks more efficient, as well as to sublimate the "challenge" of discontent, such as inefficiencies or difficulties experienced in the course of their daily work. Over the course of six months, we conducted this training in order to find solutions to these challenges. In fiscal 2017, eight of 25 people who had participated in this training took part in a new project in which they progressed from a "proposal" stage, to "taking action." The project theme was education of an SAP system that is employed in the delivery of the Company's products. SAP processing is categorized vertically in terms of product or application, and it was such that operational expertise was not being shared. For this reason, this project worked to launch portals managed by participants, and to develop FAQs based on useful experience that would be shared as part of beginner education training materials. In addition, the project developed a training environment in which beginners could practice SAP input, and had the aim of improving SAP processing skills. In fiscal 2018, new members will get together to identify and take on new challenges.



Training

Social Activities

▼ Management System

▶ Laboratory Classes on the Wonders of Chemistry

▶ Nurturing Future Generations

▶ Environment Communication

▶ International Exchanges and Cooperation

▶ Support for Employees' Participation in Social Activities

▶ Disaster Relief

▶ Working in Harmony with Local Communities

The Mitsui Chemicals Group believes that it can effectively help to resolve social challenges by harnessing its strengths and unique characteristics as a Group. With that in mind, we utilize our chemical technologies and products and roll out a host of social contribution activities that include efforts to nurture future generations and to provide disaster relief. At the same time, we undertake various endeavors to encourage our employees to participate in social contribution activities of their own accord. In addition, and with the aim of ensuring that our sites are always open to the local community, we place the utmost importance on communication with members of the local community while working in harmony with all those around us.

Management System

Policy

The Mitsui Chemicals Group engages in activities in line with the Group's Social Activities Policy.

The Mitsui Chemicals Group Social Activities Policy

The Mitsui Chemical Group will continually strive to:

1. Harness and improve its chemical technologies to contribute to society as a whole
2. Work in harmony with local communities and ensure that its sites are as open as possible
3. Do its bit to nurture future generations, on whose shoulders the future rests
4. Carry out activities aimed at protecting the environment
5. Engage in active international exchange and cooperation
6. Create a corporate environment in which individual employees can actively participate in social activities

System and Responsible Officers

With the responsible director in charge of the Corporate Communications Division, the Head Office Corporate Communications Division formulates and executes annual plans for activities. In addition, each business site enacts voluntary and ongoing efforts while coordinating with the Corporate Communications Division.

Monitoring Methods

The Corporate Communications Division conducts a survey of the results of social contribution activities of each of the Company's business sites as well as domestic and overseas subsidiaries and affiliates once a year to confirm activity details.

Review and Challenges

The Mitsui Chemicals Group engages steadily in a wide range of activities in line with its Social Activities Policy and fiscal year targets. In addition to reconfirming the significance of activities based on such key criteria as the Social Activities Policy and business details, we will carefully examine the details of activities.

Social Activities

▶ Management System

▼ Laboratory Classes on the Wonders of Chemistry

▶ Nurturing Future Generations

▶ Environment Communication

▶ International Exchanges and Cooperation

▶ Support for Employees' Participation in Social Activities

▶ Disaster Relief

▶ Working in Harmony with Local Communities

Laboratory Classes on the Wonders of Chemistry

Point three in the Mitsui Chemicals Group Social Activities Policy is, "Do its bit to nurture future generations, on whose shoulders the future rests." In order to further this goal on a global basis, the Mitsui Chemicals Group launched the Laboratory Classes on the Wonders of Chemistry program. Since 2006, we have organized various types of classes, from off-site classes, whereby members of staff from each of our sites go out to local schools, summer vacation events and festivals, to those held during tours round our works and research centers. Approximately 5,000 children took part in classes over the course of fiscal 2017.

Taking into account the interests and opinions of the participants, the Laboratory Class themes are determined and developed by the Head Office and the Sodegaura Center. The Head Office also provides support for the creation and maintenance of manuals allowing development of the program at domestic and overseas group locations.

In recognition of these activities, we received the Catalysis Society of Japan's 2015 Award for Education and the Ministry of Education, Culture, Sports, Science and Technology (MEXT) Award for Companies Promoting Experience-based Learning Activities for the Youth (Judge's Commendation) in the large corporation category for 2015. In addition, we registered with the Ministry of Education, Culture, Sports, Science and Technology Support Group for Saturday Educational Activities Program and are working to spread education to even more children.

→ Catalysis Society of Japan's 2015 Award for Education

→ Mitsui Chemicals Receives Catalysis Society of Japan Award for Education
~ Educational programs in chemistry receive high marks ~

→ Received "Award for Companies Promoting Experience-based Learning Activities for Youth (Judges' Commendation) from Ministry of Education, Culture, Sports, Science and Technology (MEXT)

→ Ministry of Education, Culture, Sports, Science and Technology Support Group for Saturday Educational Activities Program 



Holding our first Laboratory Classes on the Wonders of Chemistry in Mexico

Group affiliate Advanced Composites Mexicana (ACP-M) held Laboratory Classes on the Wonders of Chemistry at the company's annual Family Day on 26 August 2017. While this was the first time these classes were held in Mexico, the local workers were able to benefit from the experience of Head Office staff to assure safety, procure the necessary materials, and translate manuals written in Japanese into Spanish. The children watched carefully as they learned how a liquid can turn into a solid and appear to have enjoyed the experience and the wonders of chemistry. Looking ahead, we will also extend Laboratory Classes on the Wonders of Chemistry to each of the Mitsui Chemicals Group's bases.



A laboratory class in Mexico

Laboratory Class on the Wonders of Chemistry Held in Sunagawa City, Hokkaido

Affiliate Hokkaido Mitsui Chemicals Co., Ltd. jointly held a Laboratory Class on the Wonders of Chemistry with the City of Sunagawa, Hokkaido, on May 20, 2017.

Having invited Dr. Akira Suzuki (Emeritus Professor of Hokkaido University), who had won the Nobel Prize in Chemistry in 2010, 80 elementary school pupils from the city participated.

Prior to the laboratory class, Professor Suzuki gave a lecture entitled "The Fun of Study and Research." He spoke about how he himself had studied chemistry and followed a researcher's path. His message was for the children to seek to have interests and to study them widely for future possibilities, and to make friends overseas.

With the cooperation of students from Sunagawa High School, experiments were conducted for the laboratory class to, for example, identify a liquid with an indicator made from red cabbage and create a blowing agent for bath use from baking soda and citric acid. The children who took part gave feedback comments that included: "We found out that the properties of an aqueous solution can be distinguished by color change using an indicator," "Although I'm no good at science, I enjoyed taking part," and "I would like to do chemistry in the future."



The laboratory class in which even Professor Suzuki took part



Professor Suzuki with the children and others who kindly took part

Laboratory Classes on the Wonders of Chemistry Experiments

* Experiment titles are subject to change.

No.	Experiment title	Field		Related Group products	Description
1	Foamy urethane experiment	Chemistry	Chemical reactions	Isocyanate Polyol	Participants watch urethane, the uses of which include cushion materials, pillows and refrigerator insulation, being foamed and experience reaction heat and differences in hardness
2	Slime • Making your own slime • Making jumbo slime together • Shiny slime • Slime ball	Chemistry	Polymer properties		By making "slime" (i.e. cross-linking polyvinyl alcohol with water using borax), participants learn that water can be confined and about the gels around us in our everyday lives

3	Light experiments with polarizing plate	Physics	Light		Participants learn about the passage of light through a kaleidoscope fitted with a polarizing plate that converts natural light into linear light, as used in mobile phones and other such devices
4	Chromatography art	Chemistry	Adsorption and separation		Participants learn that the ink in a water-based pen contains a mixture of various different colors (pigments)
5	Plastic board	Chemistry	Polymer properties	General plastics	Participants learn about the properties and separation of plastics, by using the heat shrinkable properties of polystyrene to make their own original accessories
6	Let's make Cartesian divers!	Physics	Buoyancy		Participants learn about buoyancy and pressure, by making a Cartesian diver from a PET bottle and a plastic soy sauce container
7	Let's investigate the properties of aqueous solutions using red cabbage	Chemistry	Acids and alkalis		Using anthocyanin extracted from red cabbage, participants investigate the properties of everyday liquids and learn about acids and alkalis
8	Let's make an air freshener using spongy polymers	Chemistry	Polymer properties	Nonwoven fabrics	Participants learn about the principle of water retention, by making an air freshener from a water-absorbing polymer, as used in disposable diapers, gardening supplies and other such products
9	Let's make a rainbow tower	Physics	Specific gravity		Participants learn about the specific gravity (relative density) of fluids, by pouring colored waters with varying concentrations together to make a tower
10	Let's make a freezer!	Chemistry	Heat of solution	Urea	Participants learn about the principle of heat adsorption via the heat of solution of urea, as used in such products as fertilizer and moisturizing cream
11	Learn how bubble bath works!	Chemistry	Reaction of acid and salt		Participants learn about how carbon dioxide is produced, by making bubble bath from baking soda and citric acid
12	Learn about acid rain!	Chemistry	Acid and alkali Oxidation/reduction		Participants learn about acid rain and what causes it, by measuring the pH using red cabbage extract and conducting a bleaching experiment using iodine
13	Let's make paper!	Technology	Recycling / Making paper	Acrylamide	Using everyday implements, participants experience paper recycling from old paper and learn about papermaking and recycling
					Participants learn about the

14	Let's make small objects from melted plastic!	Chemistry	Polymer properties	General thermoplastics	properties of thermoplastics, which melt when heated, by using a glue gun to melt resin and make small objects
15	Experience the wonders of shrinking films!	Chemistry	Polymer properties	Films, PET, etc.	Participants learn about the principle of heat shrinkage, by using shrinkable film to attach labels and make their own PET bottle
16	See the power of air!	Physics	Hydrodynamics		Participants learn about air resistance, by observing air rings emitted from an air cannon
17	Let's make snow on pine cones!	Chemistry	Crystals	Urea	Participants learn about crystal deposition, by observing dissolved urea being sprayed onto pinecones and drying
18	Let's make light like a firefly!	Chemistry	Enzymes		Participants learn about the difference between bioluminescence and chemiluminescence by making light using each of luciferase enzymes taken from fireflies and using mineral-based chemicals
19	Let's try and absorb oil!	Chemistry	Polymer properties	TAFNEL™, Oil Blotter™	Participants learn about the principles and how to use adsorbent materials, by absorbing only the oil from mixed oil and water substances They also learn about the impact on the environment of oil spillage
20	Expand? Shrink? Disappear?! Let's look into the properties of mystery plastics!	Chemistry	Polymer properties	Absortomer™	Participants learn about the properties of a variety of plastic films, by taking steps to expand, shrink, and dissolve various plastics. They also learn about changes in polymers (plastics) attributable to temperatures

Social Activities

▶ Management System

▶ Laboratory Classes on the Wonders of Chemistry

▼ Nurturing Future Generations

▶ Environment Communication

▶ International Exchanges and Cooperation

▶ Support for Employees' Participation in Social Activities

▶ Disaster Relief

▶ Working in Harmony with Local Communities

Nurturing Future Generations

The future rests on the shoulders of adolescents and children. With that in mind, we carry out various activities aimed at teaching the young that chemicals are all around us, and showing them how fun, interesting and mystifying chemistry can be, as well as getting them interested in science, and inspiring them to create the technologies of the future.

Cosponsoring of Robotics Competition

Mitsui Chemicals cosponsored the Japanese portion of "FIRST LEGO League 2017* (FLL 2017)," the world's largest robotics competition. In line with our social activities policies aimed at fostering the next generation as well as the active promotion of development in a wide range of robot materials, the Company endorses FLL's idea of "providing children with an opportunity to experience the excitement of solving issues in the real world while applying mathematics, science and technology."

In addition to cosponsoring the Japanese portion of "FIRST LEGO League 2017 (FLL 2017)," Mitsui Chemicals created an exhibition booth at the event and introduced a wide range of robot materials manufactured by the company. The Company also exhibited examples of its Laboratory Classes on the Wonders of Chemistry and conducted experiments in oil adsorption using the performance nonwoven fabric TAFNEL™ Oil Blotter™ in tune with the "Hydro Dynamics" theme of FLL 2017 at the competition held on February 11, 2017.

* FIRST LEGO League 2017:

FIRST LEGO League is one of the world's largest robotics competitions sponsored by FIRST, a nonprofit organization in the United States, and the LEGO Group (the Japanese championship is sponsored by For Inspiration and Recognition of Science and Technology). FLL is currently held in more than 88 countries around the world, and the number of students participating in FLL is more than 260,000. Two to 10 children make a team to participate in the robotics competition and conduct scientific research and its presentation based on the theme of the competition. Top teams at the championship in each country will qualify for the world competition.



Tournament



Mitsui Chemicals' booth

→ Laboratory Classes on the Wonders of Chemistry

→ Mitsui Chemicals Cosponsors the Japanese Championship of FIRST LEGO League 2017

Receiving Internship Trainees

The Mitsui Chemicals Group accepts internship trainees at each of its offices and business affiliates. Internship training was undertaken for 201 interns at Group companies in fiscal 2017.

Shimonoseki Mitsui Chemicals, Inc.

For four days beginning on 13 February 2018, Mitsui Chemicals affiliate Shimonoseki Mitsui Chemicals, Inc. accepted as interns three students studying applied chemical engineering at Shimonosekikogyo High School in Yamaguchi Prefecture. The company provides this opportunity each year so that students can learn about the rigors, enjoyment, and significance of work in the field, and to provide a place for self-improvement.

Two of the students learned about the structure and flow of the manufacturing

facilities, as well as safety-related initiatives, while the remaining student focused on product analysis and the importance of quality. In discussing their impressions, the students noted that, “safety appeared the number one priority”, “they were able to learn about the importance of quality control and the day-to-day management of the manufacturing process” and “they were excited to be able to work with analysis equipment they had never seen before at school.”



Internship training

P.T. Petnesia Resindo (PNR)

Mitsui Chemicals affiliate P.T. Petnesia Resindo (PNR) accepts local students as interns every year. In fiscal 2017, the company accepted two university students from January to March and two high school students from September to November. Focusing on fostering human resources and promoting generational change, PNR sets the internship period at about one to two months with the goal of discovering and nurturing those with the talent to become managers in the future. Operations at PNR are focused mainly on manufacturing and selling PET resins used in PET bottles. Students participating in the program are trained in the manufacturing department, learning about the PET resin production process, from raw materials through to the polymerization reaction process. Under the supervision of PNR, the students produce long-term training reports. The university the students attend accepts these as thesis reports and together with PNR maintains the reports for future use.



Internship trainee (left) and PNR employees

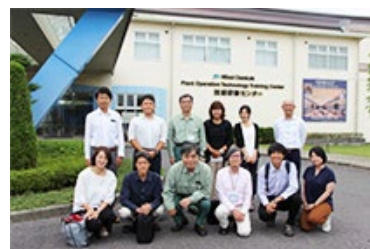


Intern paper describing the training

Cooperation in Experiential Study Programs for Teachers

The Company held Experiential Study Programs for Teachers from August 2, 2017. Sponsored by the Japan Institute for Social and Economic Affairs, these training sessions date back to 1983. Geared towards teachers from elementary, junior high and high schools, the aim is for them to experience corporate activities, and to convey these experiences to the children who hold the future in their hands. The Company has participated in this program every year since fiscal 2006.

This year, six teachers from elementary schools in the Tokyo metropolitan area participated. At the Head Office, the educators learned more about the Group's corporate philosophy, Responsible Care initiatives, and human resources development. They also saw a demonstration of the Laboratory Class on the Wonders of Chemistry. They visited the production site at the Ichihara works and participated in hands-on laboratory training at the Mitsui Chemicals Plant Operation Technology Training Center. The educators and researchers at the Plant Operation Technology Training Center engaged in a lively exchange of opinions, including on the importance of “experience and feeling” as well as “taking notice of and giving thought to something.”



An educator training session at the Plant Operation Technology Training Center

→ Laboratory Classes on the Wonders of Chemistry

→ Mitsui Chemicals' Plant Operation Technology Training Center

→ Safety and Prevention Training Mitsui Chemicals' Plant Operation Technology Training Center

Social Activities

▶ Management System ▶ Laboratory Classes on the Wonders of Chemistry

▶ Nurturing Future Generations ▼ Environment Communication

▶ International Exchanges and Cooperation ▶ Support for Employees' Participation in Social Activities

▶ Disaster Relief ▶ Working in Harmony with Local Communities

Environment Communication

With the goal of realizing a cohesive society in harmony with the environment, the Mitsui Chemicals Group engages in a variety of environment communication activities.

Donating Benches with Wood Protective Paint NONROT™

As part of the Mitsui Chemicals Group's Protecting Our World Heritage Project series, Mitsui Chemicals, Inc. and affiliate Mitsui Chemicals Industrial Products Ltd. donated 12 benches in September 2014 to Yakushima Town, which sought to increase the attractiveness of the island as a UNESCO World Natural Heritage site. These benches were made by Yakushima cedar craftsman, using thinning cedar lumber. The benches are applied with Mitsui Chemicals' wood protective paint NONROT™*.

As a World Natural Heritage site, Yakushima Town receives a number of tourists from home and abroad. However, it lacked benches where a visitor could relax, admire the beautiful scenery, or take a break, and the town had recognized this as an issue. Consequently, this project got underway. Following their donation, Mitsui Chemicals has continued to maintain the benches, including recoating them, in cooperation with the people of Yakushima Town.



A bench donated to Yakushima protected by NONROT™

* NONROT™:

With ultra water-repellency, UV resistance, anti-septic / anti-fungal / anti-insect properties, NONROT™ is highly safe paint which maximizes the breathability (humidity control) that wood naturally possesses. It does not disturb the breathing of wood, allowing it to release the refreshing wood aroma.

 Mitsui Chemicals CSR Project Video in Yakushima 

Wildlife Survey on Rice Fields Providing Opportunities to Learn about Biodiversity

Mitsui Chemicals' affiliate Mitsui Chemicals Agro, Inc. (MCAG) held the Wildlife Survey on Rice Fields together with JA (Japan Agriculture) Asahina (Taiwa Town, Kurakawa-gun, Miyagi Prefecture) on June 2017. MCAG has been conducting these surveys each year since 2012, which involves giving JA members, agricultural organizations, farmers, and consumers an opportunity to investigate what organisms live in rice fields while also facilitating serious consideration about agriculture, food, and the environment going forward. This year, 40 people, including 16 grade three students from Tsurusu Elementary School located in Taiwa Town participated in the program, during which they observed a diverse variety of wildlife living in rice paddies while learning about the importance of growing rice in harmony with the environment. We also conducted a program in cooperation with the Tohoku University Qatar Science Campus* and JA Sendai. This program involved 62 participants, including elementary school students and their guardians selected from regions across Miyagi Prefecture.

Not only involved in sales of agrochemicals, MCAG surveys the effects of agrochemical use on wildlife in rice paddies, which is useful for the improvement and development of agrochemical products. Further, MCAG conducts wildlife surveys, and we publish results summaries of these wildlife surveys that certify that rice was grown in rice paddies inhabited by a wide variety of wildlife, which contributes to adding value to local rice.



Wildlife survey on rice fields

- * Tohoku University Qatar Science Campus:
The Qatar Science Campus was created using funds from the Qatar government for the fostering of next-generation leaders in reconstruction efforts following the Great East Japan earthquake. As part of the project, the Tohoku University School of Engineering conducts manufacturing and scientific experiment-related events for elementary, junior high school, and high school students in Miyagi Prefecture.

➡ MCAG Wildlife Survey on Rice Fields Support Team 🗺

Participation in Junior Eco-Club Nationwide Festival

On March 25, 2018, Mitsui Chemicals participated in the Junior Eco-Club* Nationwide Festival 2018. The Junior Eco-Club Nationwide Festival is an event where members who represent their community can introduce to each other the activities they have done through articles and drawings. The members also visit special booths set up by companies and interact with other members from around Japan.

Aiming to realize a cohesive society in harmony with the environment, Mitsui Chemicals has operated a booth at this event since 2014, lending its support of the Junior Eco-Club Nationwide Festival's main activity to help children learn more about the environment.

At the booth, the Company introduced the children to its products that help protect the environment. We conducted a demonstration simulating ocean pollution cleanup measures using our high-performance oil adsorbent TAFNEL™ Oil Blotter™ to help participants to learn about biodiversity and get a first-hand look at the special properties of products that can absorb oil.



Junior Eco-Club Nationwide Festival

- * Junior Eco-Club:
The Junior Eco-Club is a project run by the Japan Environment Association for the purpose of helping children participate in environmental protection and learn more about the environment.

Social Activities

► Management System ► Laboratory Classes on the Wonders of Chemistry

► Nurturing Future Generations ► Environment Communication

▼ International Exchanges and Cooperation ► Support for Employees' Participation in Social Activities

► Disaster Relief ► Working in Harmony with Local Communities

International Exchanges and Cooperation

Do Green™ Activities

As part of the Mitsui Chemicals Group's efforts to realize a cohesive society in harmony with the environment, the Group offers a wide selection of plant-derived products under the name Do Green™.

Do Green™ MR-60™ and MR-174™ are the world's first high-refractive-index lens materials for vision correction to be plant-derived, allowing for CO₂ emissions to be cut by roughly 14 percent when compared to conventional lenses. These materials have received biomass product certification from JORA*¹ and USDA*², and provide the same level of material quality as conventional petroleum-derived lens materials. Other products include the plant-derived poly-isocyanate STABIO™, and ECONYKOL™, a polyol derived from plants used in automobile seat cushions.

Based on fostering awareness toward the global environment through Do Green™ products, we pursue Do Green™ activities with the aim of promoting ethical, humanitarian initiatives to improve the lives of producers of raw plant materials and help solve challenges facing agricultural regions.

Working with South Korean-based lens manufacturer CHEMILENS*³, which supported and endorsed the efforts taken here, Mitsui Chemicals undertook a third round of activities under its Do Green™ initiative. Over an eight-day period from November 10, 2017, we implemented "Activities for Eye Health," which included eye examinations for 1,011 local residents and children along with education on eye treatment and care for vision loss prevention in Jhabua, part of the Indian state of Madhya Pradesh. The eye examinations carried out here revealed 247 people needing glasses, prompting a second period of activity from June 27, 2018, that spanned three days. Individually prescribed glasses were distributed to these local residents, helping to improve conditions for work and education.



First activity: Residents receive a talk on the importance of eye treatment and care



Second activity: Happy students wear their new glasses

➡ Mitsui Chemicals Provides Third Round of Do Green™ Support Activities for Rural Communities in India

- *1 JORA (Japan Organics Recycling Association) certification:
Provided to environmentally friendly products using plant-derived resources (biomass) certified by the Japan Organics Recycling Association and which meet certain quality, related laws, standards and regulations, etc.
- *2 USDA (U.S. Department of Agriculture) certification:
USDA BioPreferred® provided to plant-derived products certified by the United States Department of Agriculture.
- *3 CHEMILENS:
A plastic lens manufacturer established in South Korea in 1988 and the world's top producer of lenses using Mitsui Chemicals' high-refractive-index Do Green™ MR materials.

Outline of Do Green™ Activities in India

Period	November 10 to November 17, 2017 (eight days) June 27 to June 29, 2018 (three days)
Subjects	A total of 1,011 residents of Jhabua, Madhya Pradesh, India
Content	First period of activity (November 2017): • Eye examinations delivered by doctors, with prescriptions issued to those needing glasses and cataract patients referred to hospital Second period of activity (June 2018):

	• Distribution of individually prescribed glasses to a total of 241 residents (81 school students, 160 villagers)
Supporting organizations	Coordination: • The Institute of Cultural Affairs (Director: Shizuyo Sato) • Holistic Child Development India (Director: N. Thomas Rajkumar) Eye examinations: • Navjeevan Kendra Jhabua (Director: Sr. Jolly SJSM) • Jeevan Jyothi Hospital Jhabua (Eye technicians)

As part of its Do Green™ activities, the Mitsui Chemicals Group is a YOKOHAMA SUPPORTER and cosponsors the ITU World Triathlon Yokohama, which aims to promote harmony between society and the environment. In fiscal 2017, the event was held May 13-14 and, continuing on from fiscal 2016, we presented Do Green™ sunglasses developed expressly for the event to participants, judges, and event staff members.

 Mitsui Chemicals Cosponsors 2017 ITU World Triathlon Yokohama

Social Activities

▶ Management System ▶ Laboratory Classes on the Wonders of Chemistry

▶ Nurturing Future Generations ▶ Environment Communication

▶ International Exchanges and Cooperation ▼ Support for Employees' Participation in Social Activities

▶ Disaster Relief ▶ Working in Harmony with Local Communities

Support for Employees' Participation in Social Activities

As its employees maintain a keen awareness toward social challenges, Mitsui Chemicals provides support for them to remain human resources that voluntarily take it upon themselves to contribute to society.

One-Coin Club

We set up the One-Coin Club in November 2007. Employees who join the club choose an amount to be deducted from their wages or bonuses, which is then donated to organizations involved in social activities. The review and selection process of an organization that will benefit from the donations is conducted by the One-Coin Club Management Committee, which is made up of club volunteers and gives due consideration to the organization's connection to Mitsui Chemicals' businesses. As of March 2018, the club had 755 members, who between them donated approximately ¥3.9 million to the fund in fiscal 2017. In fiscal 2017, we donated a total of ¥6.4 million—¥3.2 million from One-Coin Club and the contribution of a matching gift* from the Company—to a total of 16 organizations involved in a range of social activities.



* Matching gifts :

A support that supports employees' social contribution activities whereby the Company provides a matching donation of the same amount whenever an employee makes a donation to a social or environmental organization.

Organizations That Benefited from Donations in Fiscal 2017

Organization Name (In random order)	Priority Area of Support	Past Donation History (Years)
United Nations World Food Programme (Japan)	Activities aimed at nurturing future generations/saving lives and protecting the livelihoods of children	08~17
Japan Committee, Vaccines for the World's Children	Activities aimed at nurturing future generations/saving lives and protecting the livelihoods of children	08~17
ASHINAGA	Activities aimed at nurturing future generations/saving lives and protecting the livelihoods of children	09~17
Education for Development Fund (EDF-Japan)	Activities aimed at nurturing future generations/saving lives and protecting the livelihoods of children	09~17
Support Unit for Children Community with Effective Strategy and Solution	Activities aimed at nurturing future generations/saving lives and protecting the livelihoods of children	11~17
Nanbyo Network	Activities aimed at nurturing future generations/saving lives and protecting the livelihoods of children Activities aimed at supporting people with disabilities/contributing to patients with intractable diseases	09~17
Guide Dog & Service Dog & Hearing Dog Association of Japan	Activities aimed at nurturing future generations/saving lives and protecting the livelihoods of children Activities aimed at supporting people with disabilities/contributing to patients with intractable diseases	08~17

	diseases	
Japan Marrow Donor Registry Promotion Conference 	Activities aimed at nurturing future generations/saving lives and protecting the livelihoods of children Activities aimed at supporting people with disabilities/contributing to patients with intractable diseases	08、10~17
Helicopter Emergency Medical Network (HEM-Net) 	Activities that contribute to medical/maintenance disaster response systems	10~17
team RESCUE 	Activities that contribute to medical/maintenance disaster response systems	12~17
Peace Winds Japan 	Activities aimed at nurturing future generations/saving lives and protecting the livelihoods of children Activities that contribute to medical/maintenance disaster response systems	09、12~17
Asia Prevention of Blindness Association 	Activities that contribute to medical/maintenance disaster response systems	13、16、17
MEDECIN SANS FRONTIERES 	Activities that contribute to medical/maintenance disaster response systems	14~17
Japan Environmental Action Network 	Activities that contribute to medical/maintenance disaster response systems Activities that protect the global environment	15~17
Cooperative Network for Cultural Studies 	Activities aimed at nurturing future generations/saving lives and protecting the livelihoods of children	16、17
Chance for Children 	Activities aimed at nurturing future generations/saving lives and protecting the livelihoods of children	New

An amount of ¥6.0 million, which included a matching gift from the Company was donated to the NPO Japan Committee, Vaccines for the World's Children to coincide with the One-Coin Club's 10th Anniversary Project. This donation was used to help provide vaccination support for children in Laos. The scope of the Project covers the necessary proceeds to inoculate approximately 200,000 people for BCG (tuberculosis) and TD (tetanus, diphtheria) for one year.



Vaccinating young children in Laos

Moreover, the Company and labor union have called on employees to participate in the "WFP Walk the World" charity walk event put on by the United Nations' World Food Programme, which affords employees an opportunity to help raise awareness of world hunger, since fiscal 2014.

Social Activity Leave Program

In August 2008, we introduced a social activity leave program to provide support for employees participating in social activities, by enabling them to take up to two day's paid leave a year.

In fiscal 2017, employees made use of the program 118 times.

Since 2011, we have also been allowing employees to take up to eight days' special leave each year, so that they can engage in social activities aimed at providing disaster relief.

 **Employee-friendly Working Environment** List of Support Measures That Help Balance Life Events and Work Commitments

Social Activities

▶ Management System

▶ Laboratory Classes on the Wonders of Chemistry

▶ Nurturing Future Generations

▶ Environment Communication

▶ International Exchanges and Cooperation

▶ Support for Employees' Participation in Social Activities

▼ Disaster Relief

▶ Working in Harmony with Local Communities

Disaster Relief

The Mitsui Chemicals Group is committed to building a system that can quickly and effectively provide relief that closely fits the needs of people in areas affected by a disaster by working closely with organizations such as NPOs and local authorities. We are also exploring actions that can contribute to enhanced co-creation as part of our New Disaster Recovery Activities.

Disaster Relief Supplies

Our disaster relief activities here at Mitsui Chemicals originated from suggestions submitted by employees, who wanted to help those affected by earthquakes and other major disasters by providing them with useful Mitsui Chemicals products. In fiscal 2009, we set up warehouses to store relief supplies at two of our sites – the Iwakuni-Ohtake Works (Yamaguchi Prefecture) to cover West Japan and the Mobara Branch Factory (Chiba Prefecture) to cover East Japan – and put in place the necessary framework to swiftly send out supplies upon request from contact partners^{*1} and local governments. We have stockpiles of items such as urethane mattresses (cushioned materials to lay on the floors of gymnasiums being used as evacuation shelters), waterproof tarps (to cover buildings damaged by water or landslides), and air cushions^{*2} (for use at evacuation shelters) at both of these warehouses.

In addition to the support sent to the areas affected by the Great East Japan Earthquake in March 2011, emergency relief supplies were also forwarded to areas stricken by flooding and landslides after the torrential rains in eastern Japan caused the Kinu River to burst its banks in September 2015 and areas affected by the Kumamoto earthquake in April 2016.

^{*1} Contact partners:

Team Rescue (<http://teamrescue.jimdo.com/>)

Peace Winds Japan (<http://peace-winds.org/en/>)

^{*2} Air cushion:

Developed by Wako Plastic Industry Co., Ltd. in response to comments from people affected by the Great East Japan Earthquake, air cushions provide an alternative to pillows, conventional cushions, and mattresses. Boasting a host of features, air cushions provide sound protection and comfort against the hard and cold floors of evacuation shelters. Made from the polyethylene EVOLUE™ material manufactured by Prime Polymer Co., Ltd., a Mitsui Chemicals Group company, the cushioning properties of these air cushions can be adjusted using a single straw. These air cushions also withstand heavy loads and offer environmentally friendly properties.



Relief supplies dispatched from the Company's warehouse



Relief supplies delivered to an evacuation shelter by an NPO



The Company's supplies (air cushions) distributed to an evacuation shelter

Distribution of Disaster Relief Supplies in Fiscal 2017

The northern area of Kyushu suffered from torrential downpours in July 2017. The Mitsui Chemicals Group provided company products in a bid to help victims and rebuild the afflicted area.

Summary of Relief Supplies (Fiscal 2017)

Date Provided	Location	Contact	Details of Relief Supplies Provided
July 7	Haki branch, Asakura City Hall, Fukuoka Prefecture	Peace Winds Japan	• Blue sheets (300)
July 8	Haki Junior High School refuge center, Asakura City, Fukuoka Prefecture	Peace Winds Japan	• Urethane mattresses (100)
July 11	Asakura City Hall, Fukuoka Prefecture	Team Rescue	• Air cushions (300) • Emergency water bags (300) • Blue sheets (100)



Urethane mattresses transported to the area impacted by the disaster

Establishment of SEMA, Japan's First Private-led Disaster Response Alliance

Alongside 17 other private companies*1 and six non-profit organizations*2 Mitsui Chemicals participated in the establishment of SEMA (Social Emergency Management Alliance), Japan's first privately led disaster support alliance. The organization provides one-stop support, including goods and services of participating companies and NPOs in the event of a large-scale natural disaster in Japan. The Great East Japan Earthquake showed us that municipalities themselves can be greatly damaged in a disaster, making the assessment of local conditions and support to those in need all the more difficult. The SEMA organization crosses the divide between companies and NPOs and aims to minimize the impact of natural disasters of the nation's citizens and speed recovery efforts.

The SEMA organization makes in advance a list of goods and services offered by participating companies and organizations, and during a natural disaster can rapidly send packaged support based on that list to afflicted areas. The organization also aims to cooperate with public institutions in offering support and exchanging information, with the general aim of reducing the burden on municipalities and cutting down on waste and unnecessary support.

SEMA organization partners

*1 Private companies:

Askul, FSX, Oisix.daiichi, Kirin, Gunze, Saraya, JG Marketing, Johnson & Johnson Japan, Star Festival, Snow Peak, Seino Transportation, Seibu Properties, SoftBank, Heart Moving Service, FamilyMart, Yahoo! Japan.

*2 Non-profit organizations:

Asia Pacific Alliance for Disaster Management (Japan), specified non-profit corporation ADRA Japan, specified non-profit corporation HuMA, Civic Force (a public interest incorporated association), specified non-profit corporation Peace Winds (Japan), and The NGO Collaboration Center for Hanshin Earthquake Rehabilitation.

Great East Japan Earthquake: Working to Support New Disaster Recovery Activities

In 2016, five years after Great East Japan Earthquake, the Mitsui Chemicals Group, alongside four companies already supporting the town of Minamisanriku and one new company, launched Discover the Future Minamisanriku, centered on co-creative activities, with the goal of meeting the town's request to "create industries that bring together the community and companies while fostering local pride."

The initiative involves engaging in discussions about creating a vision of community pride, what is required to realize this, and what companies can do to help, including how to utilize businesses and products, and cooperation between companies and NGOs to "build back better*" based on the community's history, culture, and disaster status. In keeping with the town's characteristics under the key words—forest, home, ocean, and people—the project presented a future-oriented joint business creation action to the community that leverages the strengths of each company.

Collaborating companies including Mitsui Chemicals developed activities under the "Design the Future Minamisanriku" theme in fiscal 2017 in order to realize this goal. Together with those working in the forest and ocean domains, collaborating companies are engaged in discussions regarding specific actions aimed at creating a new Minamisanriku by 2030.

As a new way to support reconstruction efforts moving forward, we will continue to promote cooperative action with the people of the town and the partner organizations.

* Build back better:

Build back better refers to reconstruction after a disaster with an eye toward creating a more resilient community able to better withstand any future disasters.

 2017 DESIGN THE FUTURE Minamisanriku 【Short Ver.】 

 2017 DESIGN THE FUTURE Minamisanriku 【Long Ver.】 

Social Activities

▸ Management System ▸ Laboratory Classes on the Wonders of Chemistry

▸ Nurturing Future Generations ▸ Environment Communication

▸ International Exchanges and Cooperation ▸ Support for Employees' Participation in Social Activities

▸ Disaster Relief ▾ Working in Harmony with Local Communities

Working in Harmony with Local Communities

At each of its business sites, the Mitsui Chemicals Group believes that relationships of trust, based on close-knit relations with everyone in the local area, are crucial to the normal and stable operation of its businesses. The Group thus provides opportunities for communication with everyone in the vicinity of its facilities.

Local Communication at Each Business Site

At each of our business sites, we invite local residents living in the vicinity to opinion exchange meetings and tours of our facilities. At the opinion exchange meetings, we provide an overview of the works and showcase our efforts to protect the environment, safety initiatives and activities designed to contribute to society. Lively discussions have ensued from residents living in the vicinity of our facilities speaking about their day-to-day feelings and any requests they had. We would like to reflect everyone's opinions and requests in the management of our business sites.

We are working to further deepen mutual understanding by holding events and actively taking part in local events.

Opinion Exchange Meetings and Facility Tours

Site Name	Date	Those for Whom Meeting / Tour Organized	Details
Ichihara Works	Nov. 10, 2017	Local women's association	- Summarized explanation of plant - Plant tour
	Dec. 1, 2017	All neighboring town representatives	- Introduction to Safety and Environment Initiatives - Plant tour - A meeting to exchange opinions
Ichihara Works Mobara Branch Factory	Feb. 17, 2018	Local elementary schools	- Technology Training Center tour - Conducted Laboratory Class on the Wonders of Chemistry
Nagoya Works	Aug. 9, 2017	Children's clubs from neighboring school districts	- Plant tour - Conducted Laboratory Class on the Wonders of Chemistry
	Sept. 14, 2017	Nagoya City, Minami Ward Lifelong Learning Center	Plant tour
	Nov. 13, 2017	Officers from neighboring school districts	Plant tour
	Feb. 27, 2018	Women's associations from neighboring school districts	Plant tour
	Mar. 22, 2018	Heads (men and women) of neighboring school district associations, ward office staff	A meeting to exchange opinions (About environmental protection and process safety as well as disaster prevention initiatives, dialogue with local communities, etc.)
Osaka Works	Jun. 2, 2017	Local neighborhood council officers	- Plant overview and explanation on such matters as safety and disaster prevention activities - Plant tours - Meetings to exchange opinions
	Mar. 3, 2018		
			Summarized explanation of plant

	Oct.-Nov. 2018 (Total of 7 times)	Local elementary schools	• Fire fighting facilities and plant tours • Conducted Laboratory Class on the Wonders of Chemistry
Iwakuni-Ohtake Works	July 6, 2017	Heads of local neighborhood councils and those in charge of volunteer disaster response organizations	• A meeting to exchange opinions
Omuta Works	Oct. 13, 2017	Related parties of local neighborhood councils	• Plant overview and explanation on such matters as safety and disaster prevention activities • A meeting to exchange opinions
	Aug.-Sept. 2017 (Total of 4 times)	Local residents	• Plant tour
Sodegaura Center	Feb. 15, 2017	Local neighborhood council officers	• Summarized explanation of business sites and R&D • Tour inside the Center • Introduction to safety and environmental initiatives



Plant tour (Ichihara Works)



Holding of a chemistry laboratory class on the wonders of chemistry (Ichihara Works Mobara Branch)



Meeting to exchange opinions (Nagoya Works)



Sponsoring youth baseball tournament (Osaka Works)



Meeting to exchange opinions (Iwakuni-Ohtake Works)



Participating in the Daijyama Festival (Omuta Works)



Tour inside the Sodegaura Center

Participation in "Fureai" Programs and Concerts

We have been providing support for the activities carried out by the "Fureai (Friendship) Trio," which brings classical music to people throughout Japan, since 2003.

The Fureai Trio undertakes support activities in the areas of education, culture and welfare. There are three mainstay activities: "Fureai Programs" aimed at elementary school children who rarely get the opportunity to experience live music; "Fureai Concerts" designed to get more people interested in classical music; and "Fureai Markets" held in conjunction with social welfare facilities. To date, the trio has put on more than 450 performances in towns and cities around



A "Fureai" Concert

Japan.

In fiscal 2017 as well, employees and their families volunteered to assist with performances for audiences primarily made up of people with disabilities in Osaka and Tokyo. The participants provided general assistance and helped members of the audience to share in the wonders of classical music, through activities such as trying to play the violin.



The "Fureai" Program

Survey Index by Objective

Details of the Mitsui Chemicals Group's policies and data regarding the environment, society, and governance (ESG) are presented in a variety of guideline cross-reference tables.

▶ List of Policies

▶ ESG Performance Data

▶ [Environment](#)

▶ [Society](#)

▶ [Governance](#)

▶ Guideline Cross-reference Tables

▶ [GRI Content Index / ISO 26000 Cross-reference Table](#)

▶ [The 10 principles of the UN Global Compact Cross-reference Table](#)

▶ External Assessments

ESG Performance Data

▼ Environment ▸ Society ▸ Governance

Environment

Greenhouse Gas(GHG) / Energy

	Scope			FY2015	FY2016	FY2017	Unit	Related Page
GHG emissions	Japan	Mitsui Chemicals, Inc.	—	4.12	4.08	3.96	million tons	 
		Subsidiaries and affiliates	*1	0.57	0.48	0.43		
		Total		4.69	4.55	4.40		
	Overseas	Subsidiaries and affiliates	*1	0.71	0.80	0.81		
	Global			5.40	5.35	5.21		
GHG emissions intensity per unit of sales	Global			4,020	4,410	3,920	tons/billion yen	
GHG emissions reduction rate (compared with fiscal 2005, operating at full capacity)	Japan	Mitsui Chemicals, Inc.	*1	17.5	22.6	24.5	%	
Energy consumption	Japan	Mitsui Chemicals, Inc.	—	71.6	71.8	70.1	PJ	
		Subsidiaries and affiliates	*1	4.1	4.0	4.1		
		Total		75.8	75.8	74.1		
	Overseas	Subsidiaries and affiliates	*1	12.8	14.3	14.6		
	Global			88.6	90.1	88.7		
Unit energy consumption index (fiscal 2009: 100)	Japan	Mitsui Chemicals, Inc.	—	87.9	91.1	92.3	—	
Per-unit energy consumption average reduction rate over five years	Japan	Mitsui Chemicals, Inc.	—	2.3	1.7	0.9	%	
Scope 3 CO ₂ emissions	Japan	Mitsui Chemicals, Inc.	—	 Click here for details.			—	

Industrial Waste

	Scope			FY2015	FY2016	FY2017	Unit	Related Page
Waste generated	Japan	Mitsui Chemicals, Inc.	*2	148.5	131.8	125.8	thousand tons	 
		Subsidiaries and affiliates	*3	—	—	54.0		
		Total		—	—	179.7		
	Overseas	Subsidiaries and affiliates	*3	—	—	56.0		
	Global			—	—	235.7		
Waste sent off-site	Japan	Mitsui Chemicals, Inc.	*2	86.1	82.3	94.9	thousand tons	
		Subsidiaries and affiliates	*3	29.5	35.0	34.3		
		Total		115.6	117.3	129.2		
	Overseas	Subsidiaries and affiliates	*3	42.3	39.9	42.9		
	Global			157.9	157.2	172.1		
Amount recycled externally	Japan	Mitsui Chemicals, Inc.	*2	59.3	54.3	61.4	thousand tons	
		Subsidiaries and affiliates	*3	26.3	31.5	31.1		
		Total		85.6	85.8	92.5		
	Overseas	Subsidiaries and affiliates	*3	35.8	31.3	32.3		
	Global			121.4	117.1	124.8		
Landfill	Japan	Mitsui Chemicals, Inc.	*2	0.7	0.6	0.5	thousand tons	
		Subsidiaries and affiliates	*3	0.1	0.1	0.1		
		Total		0.8	0.7	0.5		
	Overseas	Subsidiaries and affiliates	*3	0.2	0.2	0.1		
	Global			1.0	0.9	0.7		
Landfill disposal rate for industrial waste	Japan		*2 *3	0.4	0.4	0.3	%	
	Overseas		*3	0.4	0.4	0.3		
	Global			0.4	0.4	0.3		

Substances Subject to the PRTR Act

	Scope			FY2015	FY2016	FY2017	Unit	Related Page
Substances subject		Mitsui						

to the PRTR Act emissions	Japan	Chemicals, Inc.	*2	1,099	789	766	tons	
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Air

	Scope			FY2015	FY2016	FY2017	Unit	Related Page
Volatile organic compound (VOC) emissions	Japan	Mitsui Chemicals, Inc.	*2	2,018	1,676	1,574	tons	
		Subsidiaries and affiliates	*3	379	408	395		
		Total		2,397	2,084	1,969		
	Overseas	Subsidiaries and affiliates	*3	67	84	62		
	Global			2,464	2,168	2,031		
NOx emissions	Japan	Mitsui Chemicals, Inc.	*2	2,786	2,588	2,311	tons	
		Subsidiaries and affiliates	*3	320	303	295		
		Total		3,106	2,892	2,606		
	Overseas	Subsidiaries and affiliates	*3	348	456	203		
	Global			3,454	3,348	2,809		
SOx emissions	Japan	Mitsui Chemicals, Inc.	*2	374	261	273	tons	
		Subsidiaries and affiliates	*3	145	135	131		
		Total		519	397	404		
	Overseas	Subsidiaries and affiliates	*3	22	25	41		
	Global			541	422	444		
Soot and dust emissions	Japan	Mitsui Chemicals, Inc.	*2	123	128	114	tons	
		Subsidiaries and affiliates	*3	34	22	18		
		Total		157	149	132		
	Overseas	Subsidiaries and affiliates	*3	21	27	30		
	Global			178	176	162		
Emissions of hazardous air pollutants	Japan	Mitsui Chemicals, Inc.	*2	24	14	15	tons	
		Mitsui Chemicals, Inc.	*2	5	3	4		

Fluorocarbons emissions	Japan	Subsidiaries and affiliates	*3	0	0	0	tons	
		Total		5	3	4		
	Overseas	Subsidiaries and affiliates	*3	6	4	11		
		Global		11	7	15		

Water

		Scope			FY2015	FY2016	FY2017	Unit	Related Page
Volume of water withdrawal(tap water, groundwater, industrial water, and seawater)		Japan	Mitsui Chemicals, Inc.	*2	473.2	474.3	460.4	million m ³	
			Subsidiaries and affiliates	*3	23.1	23.7	21.6		
			Total			496.3	498.0		
		Overseas	Subsidiaries and affiliates	*3	12.3	11.4	11.8		
		Global			508.5	509.5	493.8		
Tap water		Japan	Mitsui Chemicals, Inc.	*2	0.7	0.7	0.8	million m ³	
			Subsidiaries and affiliates	*3	0.3	0.3	0.3		
			Total			1.0	1.0		
		Overseas	Subsidiaries and affiliates	*3	0.6	0.5	0.6		
		Global			1.6	1.5	1.7		
Groundwater		Japan	Mitsui Chemicals, Inc.	*2	1.1	0.6	0.6	million m ³	
			Subsidiaries and affiliates	*3	2.6	2.6	2.5		
			Total			3.8	3.2		
		Overseas	Subsidiaries and affiliates	*3	0.2	0.2	0.2		
		Global			4.0	3.4	3.3		
Industrial water		Japan	Mitsui Chemicals, Inc.	*2	97.1	76.1	83.5	million m ³	
			Subsidiaries and affiliates	*3	3.8	12.1	10.3		
			Total			100.9	88.2		
		Overseas	Subsidiaries and affiliates	*3	10.7	11.1	11.0		
		Global			111.6	99.3	104.8		

			Mitsui Chemicals, Inc.	*2	374.2	396.9	375.5	
		Japan	Subsidiaries and affiliates	*3	9.0	8.8	8.4	
			Total		383.3	405.7	384.0	million m ³
	Seawater	Overseas	Subsidiaries and affiliates	*3	0.0	0.0	0.0	
		Global			383.3	405.7	384.0	
			Mitsui Chemicals, Inc.	*2	1829.2	1747.9	1692.4	
		Japan	Subsidiaries and affiliates	*3	101.2	101.0	101.2	
			Total		1930.4	1848.9	1793.6	million m ³
	Water recycling volume	Overseas	Subsidiaries and affiliates	*3	32.5	34.0	39.0	
		Global			1963.0	1882.9	1832.6	
		Japan	Mitsui Chemicals, Inc. / Subsidiaries and affiliates	*2 *3	79.5	78.8	78.8	
	Water recycling ratio	Overseas	Subsidiaries and affiliates	*3	72.6	74.8	76.8	%
		Global			79.4	78.7	78.8	
		Japan	Mitsui Chemicals, Inc.	*2	447.7	457.5	436.6	
			Subsidiaries and affiliates	*3	16.0	23.0	21.4	
			Total		463.7	480.5	458.0	million m ³
	Discharge water volume	Overseas	Subsidiaries and affiliates	*3	5.3	4.7	4.8	
		Global			469.0	485.2	462.9	
		Japan	Mitsui Chemicals, Inc.	*2	25.5	16.8	23.8	
			Subsidiaries and affiliates	*3	7.1	0.7	0.2	
			Total		32.6	17.6	23.9	million m ³
	Water consumption	Overseas	Subsidiaries and affiliates	*3	7.0	6.7	7.0	
		Global			39.5	24.3	30.9	
	Wastewater treatment	Japan	Mitsui Chemicals, Inc.	*2	61.2	54.9	55.5	million m ³
			Mitsui					



COD, BOD emissions	Japan	Chemicals, Inc.	*2	1,032	849	889	tons
		Subsidiaries and affiliates	*3	70	81	73	
		Total		1,102	930	962	
	Overseas	Subsidiaries and affiliates	*3	1,676	2,022	3,014	
	Global			2,778	2,952	3,976	
Total nitrogen emissions	Japan	Mitsui Chemicals, Inc.	*2	867	866	1,053	tons
Total phosphorous emissions	Japan	Mitsui Chemicals, Inc.	*2	39	40	33	tons

Environmental Accounting

		Scope			FY2015	FY2016	FY2017	Unit	Related Page
Environmental preservation costs	Investment	Japan	Mitsui Chemicals, Inc.	*2	1.4	0.9	1.3	billion yen	...
	Expenditure				22.2	22.0	21.2		
Economic impact of environmental initiatives		Japan	Mitsui Chemicals, Inc.	*2	1.8	1.4	1.3	billion yen	

Visualization of Contributions to the Environment

	Scope		FY2015	FY2016	FY2017	Unit	Related Page
Blue Value™ products sales ratio	Global	—	16	19	19	%	...

Others

	Scope			FY2015	FY2016	FY2017	Unit	Related Page
Number of environment-related accidents	Global		—	0	0	0	cases	
Number of violations to environmental laws and regulations	Global		—	0	0	0	cases	
Purchased raw materials	Japan	Mitsui Chemicals, Inc.	*2	5,272	4,936	5,122	thousand tons	
		Subsidiaries and affiliates	*3	502	515	534		
	Overseas	Subsidiaries and affiliates	*3	2,516	2,749	2,809		
	Global			8,290	8,200	8,465		
	Japan	Mitsui Chemicals, Inc.	*2	33	22	25		

Purchased materials		Subsidiaries and affiliates	*3	18	20	20	thousand tons	
	Overseas	Subsidiaries and affiliates	*3	93	88	89		
	Global			144	130	134		
Products shipped	Japan	Mitsui Chemicals, Inc.	*2	5,526	5,126	5,189	thousand tons	
		Subsidiaries and affiliates	*3	555	579	575		
	Overseas	Subsidiaries and affiliates	*3	2,529	2,867	3,009		
	Global			8,610	8,572	8,773		

*1 : Consolidated subsidiaries

*2 : Parent production sites and the Sodegaura Center

*3 : Production sites operated by consolidated subsidiaries and affiliated companies eligible for Responsible Care support

ESG Performance Data

► Environment

▼ Society

► Governance

Society

Employees

		Scope		FY2015	FY2016	FY2017	Unit	Related Page
Number of employees (by region)	Total	Global		—	13,423	17,277	persons	
	Japan			—	67.0	57.5	%	
	China			—	5.6	6.6		
	Asia			—	8.8	9.7		
	Europe			—	8.2	17.0		
	North, Central, and South America			—	10.3	9.2		
	Other			—	0.1	0.0		
Number of employees (by gender)	Male	Mitsui Chemicals, Inc.	*4	5,925	5,709	5,720	persons	
	Female			808	807	821	%	
	Total			6,733	6,516	6,541		
	Ratio of female			12.0	12.4	12.6		
Number of employees (by age)	10s (Ages 18 or older)			—	86	116	persons	
	20s	—	940	1,015				
	30s	—	1,082	1,128				
	40s	—	2,451	2,254				
	Over 50s	—	1,957	2,028				
Number of employees (by nationality)	Non-Japanese			56	55	57	persons	→
Ratio of employees with disabilities		Mitsui Chemicals, Inc.	*4	2.2	2.3	2.3	%	→
Number of management staff	Male	Mitsui Chemicals, Inc.	*4	2,739	2,748	2,777	persons	
	Female			181	197	223		
	Total			2,920	2,945	3,000		
	Ratio of female			6.2	6.7	7.4	%	
Number of line managers or higher positions	Male	Mitsui Chemicals, Inc.	*4	1,421	1,558	1,561	persons	
	Female			29	35	43		
	Total			1,450	1,593	1,604		
	Ratio of female			2.0	2.2	2.7	%	
Number of	Male			—	401	400	persons	
	Female			—	4	5		



general managers or higher positions	Total	Mitsui Chemicals, Inc.	*4	—	405	405	
	Ratio of female			—	1.0	1.2	%
Number of new promotions to line manager or higher positions	Male	Mitsui Chemicals, Inc.	*4	102	92	100	persons
	Female			3	7	9	
	Total			105	99	109	
	Ratio of female			2.9	7.1	8.3	%

Employee-friendly Working Environment

		Scope		FY2015	FY2016	FY2017	Unit	Related Page
Average length of service	Male	Mitsui Chemicals, Inc.	*4	—	19.7	19.2	years	
	Female			—	21.1	21.1		
	Total			—	19.9	19.5		
Employee turnover rate	Male	Mitsui Chemicals, Inc.	*4	—	1.1	1.0	%	
	Female			—	1.6	0.8		
	Total			1.24	1.1	1.0		
Voluntary turnover rate	Male	Mitsui Chemicals, Inc.	*4	—	0.9	0.9	%	
	Female			—	1.5	0.8		
	Total			0.99	1.0	0.9		
Number of employees whose overtime exceeded 80 hours/month	Non-management staff	Mitsui Chemicals, Inc.	*4	502	216	93	persons	
	Management staff			326	120	66		
	Total			828	336	159		
	Ratio of total staff			12.3	5.2	2.4	%	
Annual paid leave utilization rate	Non-management staff	Mitsui Chemicals, Inc.	*4	86	81	79	%	
	Management staff			63	56	56		
	Total			76	70	69		
Number of employees taking childcare leave	Male	Mitsui Chemicals, Inc.	*4	62	62	71	persons	
	Female			33	16	17		
	Total			95	78	88		
Childcare leave utilization rate	Male	Mitsui Chemicals, Inc.	*4	32	39	40	%	
	Female			100	100	100		
	Total			42	45	45		
Return rate from childcare leave	Male	Mitsui Chemicals, Inc.	*4	—	—	97	%	
	Female			—	—	100		
	Total			—	—	98		
Retention rate three years after returning from childcare leave	Male	Mitsui Chemicals, Inc.	*4	—	—	91	%	
	Female			—	—	96		
	Total			—	—	92		

Number of employees using shortened working hours for childcare	Male	Mitsui Chemicals, Inc.	*4	1	2	3	persons
	Female			86	88	91	
	Total			87	90	94	
Number of employees using the work-from-home program for childcare	Male	Mitsui Chemicals, Inc.	*4	5	5	9	persons
	Female			13	19	22	
	Total			18	24	31	
Number of employees taking paid family care leave		Mitsui Chemicals, Inc.	*4	0	0	0	persons
Number of employees using shortened working hours for family care		Mitsui Chemicals, Inc.	*4	1	1	1	persons
Number of employees using the work-from-home program for family care		Mitsui Chemicals, Inc.	*4	2	1	5	persons
Ratio of labor union members		Mitsui Chemicals, Inc.	*4	50	47	54	%

* The turnover rate is ratio of all employees who left the Company within the fiscal year irrespective of the reason.

* The voluntary turnover rate does not include employees who left the Company for any of the following reasons: (1) compulsory retirement, (2) expiration of medical leave period, (3) disciplinary dismissal, and (4) appointment as an officer of the Company in accordance with labor agreements and employment systems.

Recruitment

		Scope		FY2015	FY2016	FY2017	Unit	Related Page
Total number of employees hired	Male	Mitsui Chemicals, Inc.	*4	—	—	298	persons	 
	Female			—	—	35		
	Total			—	—	333		
	Ratio of female			—	—	11	%	
Number of mid-career hires	Male	Mitsui Chemicals, Inc.	*4	—	—	116	persons	
	Female			—	—	15		
	Total			—	—	131		
	Ratio of female			—	—	11	%	
Regular administrative positions: Number of regular employees hired	Male	Mitsui Chemicals, Inc.	*4	—	—	12	persons	
	Female			—	—	10		
	Total			—	—	22		
	Ratio of female			—	—	46	%	
Regular administrative positions: Number of mid-career employees hired	Male	Mitsui Chemicals, Inc.	*4	—	—	35	persons	
	Female			—	—	2		
	Total			—	—	37		
	Ratio of female			—	—	5.4	%	
Regular technical positions: Number of regular	Male	Mitsui Chemicals, Inc.	*4	—	—	49	persons	
	Female			—	—	6		
	Total			—	—	55		

employees hired	Ratio of female			—	—	11	%
Regular technical positions: Number of mid-career employees hired	Male	Mitsui Chemicals, Inc.	*4	—	—	52	persons
	Female			—	—	7	
	Total			—	—	59	
	Ratio of female			—	—	12	%
General positions: Number of regular employees hired	Male	Mitsui Chemicals, Inc.	*4	—	—	121	persons
	Female			—	—	4	
	Total			—	—	125	
	Ratio of female			—	—	3.2	%
General positions: Number of mid-career employees hired	Male	Mitsui Chemicals, Inc.	*4	—	—	29	persons
	Female			—	—	6	
	Total			—	—	35	
	Ratio of female			—	—	17	%

Human Resources Development / Evaluation

		Scope		FY2015	FY2016	FY2017	Unit	Related Page
Ratio of promotions of locally hired staff	General managers	Overseas	Overseas subsidiaries and affiliates excluding mergers and acquisitions	45.4	55	—	%	
	Line managers			93.3	91.2	—		
Training hours per person		Mitsui Chemicals, Inc.	*4	—	—	15	hr	
Training cost per person		Mitsui Chemicals, Inc.	*4	—	—	0.29	million yen	
Ratio of evaluation result feedback interviews in the previous fiscal year		Mitsui Chemicals, Inc.	Mitsui Chemicals labor union registered members	98	96	98	%	
Degree of satisfaction over evaluation feedback		Mitsui Chemicals, Inc.	Mitsui Chemicals labor union registered members	89	89	90	%	

Safety and Prevention

	Scope			FY2015	FY2016	FY2017	Unit	Related Page
Number of major accidents	Global			0	0	0	cases	
Number of	Japan	Mitsui Chemicals, Inc.	*5	10	4	4		
		Subsidiaries and affiliates	*6	0	0	0		

abnormal conditions/accidents	Total			10	4	4	cases
	Overseas	Subsidiaries and affiliates	*6	0	0	2	
	Global			10	4	6	
Work-related significant occupational injuries	Japan	Mitsui Chemicals, Inc.	*5 Includes contractors operating on site	0.25	0.15	0.42	—
		Subsidiaries and affiliates	*7	0.35	0.48	0.14	—
		Construction subcontractors	—	0.39	0.27	0.13	—
		Total		0.29	0.24	0.31	—
	Overseas	Subsidiaries and affiliates	*7	0.32	0.21	0.00	—
	Global			0.3	0.23	0.24	—
Number of occupational injuries resulting in zero or more lost work days by type	Global			Click here for details.			—

Occupational Health

		Scope		FY2015	FY2016	FY2017	Unit	Related Page
Average rate of lifestyle-related disease diagnosis	Male	Mitsui Chemicals, Inc.	*4	—	—	9.6	%	 
Frequency of absences from work due to health disorders		Mitsui Chemicals, Inc.	*4	—	—	0.6	—	
Frequency of absences from work due to mental health disorders		Mitsui Chemicals, Inc.	*4	—	—	0.34	—	
Ratio of smokers		Mitsui Chemicals, Inc.	*4	—	—	25.7	%	
Sick/accident allowances (Fiscal 2008: 100)		Mitsui Chemicals, Inc.	Mitsui Chemicals, Inc.	68	61	45	—	
			Mitsui Chemicals health insurance association	79	81	76	—	
Legally mandated benefits (Fiscal 2008: 100)		Mitsui Chemicals, Inc.	Mitsui Chemicals health insurance association	112	114	112	—	

Product Stewardship

	Scope		FY2015	FY2016	FY2017	Unit	Related Page
Product risk assessment	Mitsui						

implementation rate	Chemicals, Inc.	—	—	—	36	%	
Provision ratio of the latest safety information for all products	Mitsui Chemicals, Inc.	—	—	—	100	%	
Number of legal and regulatory violations	Mitsui Chemicals, Inc.	—	—	—	0	cases	

Sustainable Procurement

	Scope		FY2015	FY2016	FY2017	Unit	Related Page
Sustainable procurement ratio	Mitsui Chemicals, Inc.	—	—	—	39	%	

Social Activities

	Scope		FY2015	FY2016	FY2017	Unit	Related Page
Social contribution expenditure	Global		167	142	152	million yen	
Number of employees taking social services leave	Mitsui Chemicals, Inc.	*4	194	162	118	cases	

Visualization of Contributions to the Society

	Scope	FY2015	FY2016	FY2017	Unit	Related Page
Rose Value™ products sales ratio	Global	—	14	14	%	

*4 : Mitsui Chemicals, Inc. registered employees

*5 : Parent production sites and the Sodegaura Center

*6 : Affiliated companies eligible for Responsible Care support

*7 : Consolidated subsidiaries and affiliated companies eligible for Responsible Care support

ESG Performance Data

► Environment ► Society ▼ Governance

Governance

Board of Directors

		Scope		FY2015	FY2016	FY2017	Unit	Related Page
Number of members of the Board	Male	Mitsui Chemicals, Inc.	—	7	7	7	persons	
	Female			1	1	1	persons	
	Total			8	8	8	persons	
	Ratio of female			12.5	12.5	12.5	%	
	Outside directors			3	3	3	persons	
	Independent officers			3	3	3	persons	

R&D

	Scope		FY2015	FY2016	FY2017	Unit	Related Page
R&D expenses	Global	—	31.5	30.8	33.4	billion yen	...
Ratio of R&D expenses to net sales			2.3	2.5	2.5	%	

Compliance

	Scope		FY2015	FY2016	FY2017	Unit	Related Page
Incidence of major legal and regulatory violations	Global	—	0	0	1	cases	...
Risk Hotline Operating Performance	Global	—	7	12	13	cases	
Exclusion recommendations from relevant authorities, such as Fair Trade Commission	Japan	—	0	0	0	cases	
Operations / sales halted due to misconduct	Japan	—	0	0	0	cases	
Filing of criminal charges in compliance-related accidents/incidents	Japan	—	0	0	0	cases	
Detection following price cartel	Overseas	—	0	0	0	cases	
Detection following bribery	Overseas	—	0	0	0	cases	
Detection following other incidents	Overseas	—	0	0	0	cases	

Others

	Scope		FY2015	FY2016	FY2017	Unit	Related Page
Political donations	Mitsui Chemicals, Inc.	—	2.00	3.36	3.45	million yen	—

Guideline Cross-reference Tables

▼ GRI Content Index / ISO 26000 Cross-reference Table

► The 10 principles of the UN Global Compact Cross-reference Table

GRI Content Index / ISO 26000 Cross-reference Table

Mitsui Chemicals' online Sustainability site references "GRI Sustainability Reporting Standards 2016".

102	GENERAL DISCLOSURES	Corresponding Sections	Remarks	ISO26000
GRI 102 :	General Disclosures 2016			
1	Organizational profile			
102-1	Name of the organization	■ Corporate Overview		—
102-2	Activities, brands, products, and services	■ Corporate Overview ■ Business & Products		—
102-3	Location of headquarters	■ Corporate Overview		—
102-4	Location of operations	■ Domestic Sites ■ Domestic Subsidiaries & Affiliates ■ Overseas Subsidiaries & Affiliates		—
102-5	Ownership and legal form	■ Security Reports		—
102-6	Markets served	■ Targeted Business Domains to Drive Growth ■ Business & Products ■ Fact Book > Segment data		—
102-7	Scale of the organization	■ Corporate Overview ■ Fact Book > Financial highlights ■ Security Reports ■ INPUT⇒OUTPUT	■ Domestic Sites ■ Domestic Subsidiaries & Affiliates ■ Overseas Subsidiaries & Affiliates Subsidiaries & Affiliates : 154(Domestic:50, Overseas:104)	—
102-8	Information on employees and other workers	■ ESG Performance Data > Society		6.4 6.4.3
102-9	Supply chain	■ Sustainable Procurement		—
102-10	Significant changes to the organization and its supply chain	—	Closed Kashima Works (October 2017) Acquired ARRK Corporation	—
102-11	Precautionary Principle or approach	■ Key Issues and Initiatives ■ Product Stewardship		6.2
			■ Participating in Sustainable Procurement-related Initiatives • Participated in the Vector Control, Saving Lives (IVCC) and Innovation to Impact (I2I) partnerships that promote a variety of initiatives including the eradication of malaria.	

102-12	External initiatives	■ Support Initiatives	■ News release ■ IVCC  ■ I2I  • Provided support to the International Isocyanate Institute, an organization that engages in research and education on the impact of isocyanate and other compounds on people and the environment as well as such issues as handling safety. ■ International Isocyanate Institute 	6.2
102-13	Membership of associations	■ Support Initiatives		6.2
2	Strategy			
102-14	Statement from senior decision-maker	■ Message from the President		6.2
102-15	Key impacts, risks, and opportunities	■ Key Issues and Initiatives ■ Blue Value™ / Rose Value™ ■ Risk and Compliance		6.2
3	Ethics and integrity			
102-16	Values, principles, standards, and norms of behavior	■ Mitsui Chemicals Group's Future Vision ■ Action Guidelines		—
102-17	Mechanisms for advice and concerns about ethics	■ Risk Prevention Measures		—
4	Governance			
102-18	Governance structure	■ Corporate Governance ■ Sustainability Management		6.2
102-19	Delegating authority	■ Corporate Governance ■ Sustainability Management		—
102-20	Executive-level responsibility for economic, environmental, and social topics	■ Sustainability Management		—
102-21	Consulting stakeholders on economic, environmental, and social topics	—	■ Sustainability Management	6.2
102-22	Composition of the highest governance body and its committees	■ Corporate Governance		6.2
102-23	Chair of the highest governance body	■ Corporate Governance Report 	■ Corporate Governance ■ Board of Directors	6.2
102-24	Nominating and selecting the highest governance body	■ Corporate Governance Guidelines 		6.2
102-25	Conflicts of interest	■ Corporate Governance		6.2
102-26	Role of highest governance body in setting purpose, values, and strategy	■ Sustainability Management	■ Special Feature: Place ESG at the Core of Management	—
			■ Special Feature: Place ESG at the Core of	

102-27	Collective knowledge of highest governance body	—	Management ■ Sustainability Management	—
102-28	Evaluating the highest governance body's performance	—	■ Sustainability Management	6.2
102-29	Identifying and managing economic, environmental, and social impacts	■ Sustainability Management		6.2
102-30	Effectiveness of risk management processes	■ Sustainability Management ■ Risk and Compliance		—
102-31	Review of economic, environmental, and social topics	■ Sustainability Management		6.2
102-32	Highest governance body's role in sustainability reporting	—		—
102-33	Communicating critical concerns	■ Sustainability Management		6.2
102-34	Nature and total number of critical concerns	—		—
102-35	Remuneration policies	■ Corporate Governance ■ Security Reports		6.2
102-36	Process for determining remuneration	■ Corporate Governance ■ Security Reports		—
102-37	Stakeholders' involvement in remuneration	—		6.2
102-38	Annual total compensation ratio	—	Provided details of average annual salaries in the Company's Securities Report. ■ Security Reports	—
102-39	Percentage increase in annual total compensation ratio	—		—
5	Stakeholder engagement			
102-40	List of stakeholder groups	—		6.2
102-41	Collective bargaining agreements	—	■ Security Reports ■ ESG Performance Data > Society	6.3.10 6.4 6.4.3 6.4.4 6.4.5
102-42	Identifying and selecting stakeholders	—		6.2
102-43	Approach to stakeholder engagement	—		6.2 6.7 6.7.4 6.7.5 6.7.6 6.7.8 6.7.9
102-44	Key topics and concerns raised	—	■ Risk Prevention Measures ■ Fundamental Safety Initiatives	6.2
6	Reporting practice			
102-45	Entities included in the consolidated financial statements	■ Security Reports		6.2

102-46	Defining report content and topic Boundaries	■ Editorial Policy		—
102-47	List of material topics	■ The 2025 Long-term Business Plan Environmental and Social Targets ■ Key Issues and Initiatives		—
102-48	Restatements of information	There were no applicable instances.		—
102-49	Changes in reporting	There were no applicable instances.		—
102-50	Reporting period	■ Editorial Policy		—
102-51	Date of most recent report	■ Editorial Policy		—
102-52	Reporting cycle	■ Editorial Policy		—
102-53	Contact point for questions regarding the report	■ Contact Us		—
102-54	Claims of reporting in accordance with the GRI Standards	—		—
102-55	GRI content index	■ GRI Content Index / ISO 26000 Cross-reference Table		—
102-56	External assurance	■ Climate Change	Financial reporting-related audits. External certification including ISO 14001 and OHSAS 18001. ■ Responsible Care Audits Report to government agencies with respect to related laws and regulations.	7.5.3
103	Management Approach	Corresponding Sections	Remarks	ISO26000
GRI 103 :	Management Approach 2016			
103-1	Explanation of the material topic and its Boundary	■ The 2025 Long-term Business Plan Environmental and Social Targets ■ Key Issues and Initiatives		—
103-2	The management approach and its components	■ Sustainability in the Mitsui Chemicals Group ■ Responsible Care ■ Engagement with Society		—
103-3	Evaluation of the management approach	■ Sustainability in the Mitsui Chemicals Group		—

200	Economic	Corresponding Sections	Remarks	ISO26000
GRI 201 :	Economic Performance 2016	■ Key Issues and Initiatives		
201-1	Direct economic value generated and distributed	■ Security Reports		6.8 6.8.3 6.8.7 6.8.9
201-2	Financial implications and other risks and opportunities due to climate change	■ Climate Change ■ Climate Change > Climate change-related information (CDP) > C2.3, C2.3a, C2.4, C2.4a, C2.5 📄		6.5.5
	Defined benefit plan			

201-3	obligations and other retirement plans	■ Security Reports		—
201-4	Financial assistance received from government	■ Security Reports		—
GRI 202 :	Market Presence 2016			
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	—	■ Evaluation/Compensation > Legal Wage Compliance	6.4.4 6.8
202-2	Proportion of senior management hired from the local community	■ Human Resources Management > Human Resources Development ■ ESG Performance Data > Society		6.8 6.8.5 6.8.7
GRI 203 :	Indirect Economic Impacts 2016			
203-1	Infrastructure investments and services supported	■ Disaster Relief		6.3.9 6.8 6.8.3 6.8.4 6.8.5 6.8.6 6.8.7 6.8.9
203-2	Significant indirect economic impacts	—		6.3.9 6.6.6 6.6.7 6.7.8 6.8 6.8.5 6.8.6 6.8.7 6.8.9
GRI 204 :	Procurement Practices 2016			
204-1	Proportion of spending on local suppliers	—		6.6.6 6.8 6.8.5 6.8.7
GRI 205 :	Anti-corruption 2016			
205-1	Operations assessed for risks related to corruption	—	■ Bribery Prevention Introducing the Mitsui Chemicals Group Risk Management System, we take steps to analyze and address risks. Relevant departments verify risks in accordance with the basic principles of the UN Global Compact. From a corruption prevention perspective, the primary screening of 17 countries was undertaken based on the information of Transparency International. It was determined that risks may exist for seven of the 17 countries. Plans are in place to collect information in the future.	6.6 6.6.3
			Thoroughly adhering to the Mitsui Chemicals Group Action Guidelines, we publicize the details of these guidelines internally in the Compliance Guidebook as	

205-2	Communication and training about anti-corruption policies and procedures	—	well as raise awareness of these through various means that include holding workplace discussions, putting up posters, and conducting e-learning programs. The Compliance Guidebook contains a commitment by the president and promotes understanding of corruption prevention, including specific examples of unhealthy relationships with government officials focusing on entertaining and bribery. Regarding M&A and selecting new business partners, the Company not only complies with business-related laws but also hires consultants and legal advisors to conduct investigations based on its status as a signatory to the UN Global Compact. We also examine M&A based on legal due diligence in accordance with each country's legal regulations. In light of the high risk of fraud (including various permits and licenses) related to operating manufacturing facilities in emerging countries, Mitsui Chemicals' Internal Control Division in particular conducts audits covering all aspects of business operations. The Company provides advice and receives reports via risk hotlines available in the languages of each country as well as raises awareness of these hotlines. ■ Risk and Compliance	6.6 6.6.3
205-3	Confirmed incidents of corruption and actions taken	One incidence of a major legal and regulatory violation. ■ ESG Performance Data > Governance		6.6 6.6.3
GRI 206 :	Anti-competitive Behavior 2016			
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	There were no instances where the Group was involved in legal action. ■ ESG Performance Data > Governance		6.6 6.6.5 6.6.7

300	Environmental	Corresponding Sections	Remarks	ISO26000
The Mitsui Chemicals Group has acquired ISO 14001 certification for 49 (75%) of its 65 manufacturing facilities. Even at facilities that have yet to obtain ISO 14001 certification, the Group undertakes management that conforms to ISO standards as part of its Responsible Care Management activities. ■ Responsible Care Audits				
GRI 301 :	Materials 2016	■ Key Issues and Initiatives		
			TM	

301-1	Materials used by weight or volume	■ INPUT⇒OUTPUT	■ Blue Value / Rose Value™ In accordance with the Responsible Care Policy, the Mitsui Chemicals Group implements various measures from the standpoint of LCA (life cycle assessment). The Group promotes reduction and efficient use of raw materials through LCA environmental impact assessments that use the Blue Value™ Index. In addition, the Mitsui Chemicals Group Purchasing Policy requires "Harmony with the environment" ("We will endeavor to purchase goods and materials that have less impact on the environment").	6.5.4
301-2	Recycled input materials used	—		6.5.4
301-3	Reclaimed products and their packaging materials	—	■ ESG Performance Data > Environment	6.5.3 6.5.4 6.7.5
GRI 302 :	Energy 2016	■ Key Issues and Initiatives		
302-1	Energy consumption within the organization	■ Climate Change ■ ESG Performance Data > Environment	■ Climate change-related information (CDP) > C8.2 	6.5.4
302-2	Energy consumption outside of the organization	■ Climate Change ■ Initiatives to Reduce Environmental Impact in Logistics	■ Climate change-related information (CDP) > C8.2 	6.5.4
302-3	Energy intensity	■ Climate Change ■ ESG Performance Data > Environment		6.5.4
302-4	Reduction of energy consumption	■ Climate Change ■ ESG Performance Data > Environment	■ Climate change-related information (CDP) > C8.2 	6.5.4 6.5.5
302-5	Reductions in energy requirements of products and services	■ Blue Value™ / Rose Value™ ■ Climate Change	■ Climate change-related information (CDP) > C8.2 	6.5.4 6.5.5
GRI 303 :	Water 2016	■ Key Issues and Initiatives		
303-1	Water withdrawal by source	■ Water ■ ESG Performance Data > Environment	■ Water-related Information (CDP) > W1.2 	6.5.4
303-2	Water sources significantly affected by withdrawal of water	—	■ Water > Water Risk Assessments ■ Water-related Information (CDP) > W1.2 	6.5.4
303-3	Water recycled and reused	■ Water ■ ESG Performance Data > Environment	■ Water-related Information (CDP) > W1.2 	6.5.4
GRI 304 :	Biodiversity 2016	■ Key Issues and Initiatives		
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	■ Biodiversity		6.5.6

304-2	Significant impacts of activities, products, and services on biodiversity	■ Biodiversity		6.5.6
304-3	Habitats protected or restored	■ Biodiversity		6.5.6
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	■ Biodiversity		6.5.6
GRI 305 :	Emissions 2016	■ Key Issues and Initiatives		
305-1	Direct (Scope1) GHG emissions	Scope 1-category emissions of 4,100,000 tons included in 5,210,000 tons of greenhouse gas emissions in FY2017. (5,210,000 tons = Scope 1- + Scope 2-category sales amount) ■ Climate Change ■ INPUT⇒OUTPUT ■ ESG Performance Data > Environment	■ Climate change-related information (CDP) > C0.5, C5.1, C5.2, C6.1, C6.7, C6.7a, C7.1a 	6.5.5
305-2	Energy indirect (Scope 2) GHG emissions	Scope 2-category emissions of 1,480,000 tons included in 5,210,000 tons of greenhouse gas emissions in FY2017. (5,210,000 tons = Scope 1- + Scope 2-category sales amount) ■ Climate Change ■ INPUT⇒OUTPUT ■ ESG Performance Data > Environment	■ Climate change-related information (CDP) > C0.5, C5.1, C5.2, C6.3 	6.5.5
305-3	Other indirect (Scope3) GHG emissions	■ Climate Change	■ Climate change-related information (CDP) > C6.5 	6.5.5
305-4	GHG emissions intensity	■ Climate Change ■ ESG Performance Data > Environment	■ Climate change-related information (CDP) > C6.10 	6.5.5
305-5	Reduction of GHG emissions	■ Climate Change ■ ESG Performance Data > Environment	■ Climate change-related information (CDP) > C4.3a, C4.3b 	6.5.5
305-6	Emissions of ozone-depleting substances (ODS)	■ INPUT⇒OUTPUT ■ ESG Performance Data > Environment		6.5.3 6.5.5
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	■ Air ■ INPUT⇒OUTPUT ■ ESG Performance Data > Environment		6.5.3
GRI 306 :	Effluents and Waste 2016	■ Key Issues and Initiatives		
306-1	Water discharge by quality and destination	■ Water ■ INPUT⇒OUTPUT ■ ESG Performance Data > Environment		6.5.3 6.5.4
306-2	Waste by type and disposal method	■ Industrial Waste ■ INPUT⇒OUTPUT ■ ESG Performance Data > Environment Of the 125,800 tons of waste generated by Mitsui Chemicals, Inc. hazardous waste makes up 1,175.6 tons.		6.5.3
306-3	Significant spills	No incidence of significant spill.		6.5.3

306-4	Transport of hazardous waste	Difficulties in obtaining information: This information is not currently being collected.		6.5.3
306-5	Water bodies affected by water discharges and/or runoff	■ Water > Water Risk Assessments		6.5.3 6.5.4 6.5.6
GRI 307 :	Environmental Compliance 2016	■ Key Issues and Initiatives		
307-1	Non-compliance with environmental laws and regulations	■ ESG Performance Data > Environment	■ Responsible Care Audits ■ Environmental Compliance	4.6
GRI 308 :	Supplier Environmental Assessment 2016	■ Key Issues and Initiatives		
308-1	New suppliers that were screened using environmental criteria	—	■ Supplier Sustainability Evaluation and Improvement Support - Accompanying revisions to the Responsible Care Global Charter in 2014, Mitsui Chemicals provided assistance to its affiliates (including suppliers) by formulating the Responsible Care Shiodome Manifesto in an effort to promote Responsible Care activities. - Mitsui Chemicals is undertaking risk assessments in order to draft a “safety importance agreement” based on the Japan Chemical Industry Association's (JCIA) Japan Initiative of Product Stewardship (JIPS). - As a Joint Article Management Promotion-Consortium (JAMP) member company, Mitsui Chemicals is promoting measures that include suppliers in such areas as chemical substance and other information management. ■ JAMP 	6.3.5 6.6.6 7.3.1
308-2	Negative environmental impacts in the supply chain and actions taken	■ Supplier Sustainability Evaluation and Improvement Support		6.3.5 6.6.6 7.3.1

400	Social	Corresponding Sections	Remarks	ISO26000
GRI 401 :	Employment 2016	■ Key Issues and Initiatives		
401-1	New employee hires and employee turnover	■ Human Resources Management > Management System ■ Diversity ■ ESG Performance Data > Society		6.4 6.4.3
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	■ Employee-friendly Working Environment		6.4 6.4.3 6.4.4
401-3	Parental leave	■ ESG Performance Data > Society	■ Employee-friendly Working Environment	6.4 6.4.3

GRI 402 :	Labor/Management Relations 2016			
402-1	Minimum notice periods regarding operational changes	■ Labor-management Relations Based on Frank Dialog and Mutual Understanding		6.4 6.4.3 6.4.4 6.4.5
GRI 403 :	Occupational Health and Safety 2016	■ Key Issues and Initiatives		
The Mitsui Chemicals Group has obtained OHSAS 18001 certification for 22 (34%) of its 65 manufacturing facilities. ■ Responsible Care Audits				
403-1	Workers representation in formal joint management-worker health and safety committees	■ Safety and Prevention > Management System ■ Occupational Health > Management System		6.4 6.4.6
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	■ Safety and Prevention > Management System ■ Major Accidents and Work-related Occupational Injuries ■ Occupational Health ■ ESG Performance Data > Society • There have been no employee fatalities over the past three years in connection with work-related significant occupational injuries. • There was one incidence of a contractor fatality in connection with work-related significant occupational injuries (no incidence of contractor fatality in FY2015 and FY2016).		6.4 6.4.6
403-3	Workers with high incidence or high risk of diseases related to their occupation	—	■ Occupational Health Initiatives ■ Employee-friendly Working Environment	6.4 6.4.6 6.8 6.8.3 6.8.4 6.8.8
403-4	Health and safety topics covered in formal agreements with trade unions	■ Safety and Prevention > Management System ■ Occupational Health > Management System		6.4 6.4.6
GRI 404 :	Training and Education 2016	■ Key Issues and Initiatives		
404-1	Average hours of training per year per employee	■ Safety and Prevention Training ■ Human Resources Development ■ ESG Performance Data > Society		6.4 6.4.7
404-2	Programs for upgrading employee skills and transition assistance programs	■ Human Resources Development		6.4 6.4.7 6.8.5
404-3	Percentage of employees receiving regular performance and career development reviews	■ Evaluation/Compensation ■ ESG Performance Data > Society		6.4 6.4.7
GRI 405 :	Diversity and Equal Opportunity 2016			
		■ Corporate Governance		

405-1	Diversity of governance bodies and employees	■ Diversity ■ ESG Performance Data > Society ■ ESG Performance Data > Governance		6.3.7 6.3.10 6.4 6.4.3
405-2	Ratio of basic salary and remuneration of women to men	—		6.3.7 6.3.10 6.4 6.4.3 6.4.4
GRI 406 :	Non-discrimination 2016			
406-1	Incidents of discrimination and corrective actions taken	There were no applicable instances.		6.3 6.3.6 6.3.7 6.3.10 6.4.3
GRI 407 :	Freedom of Association and Collective Bargaining 2016			
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	—		6.3 6.3.3 6.3.4 6.3.5 6.3.8 6.3.10 6.4.3 6.4.5
GRI 408 :	Child Labor 2016			
408-1	Operations and suppliers at significant risk for incidents of child labor	—	■ Respect for Human Rights ■ Sustainable Procurement	6.3 6.3.3 6.3.4 6.3.5 6.3.7 6.3.10
GRI 409 :	Forced or Compulsory Labor 2016			
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	—	■ Respect for Human Rights ■ Sustainable Procurement	6.3 6.3.3 6.3.4 6.3.5 6.3.7 6.3.10
GRI 410 :	Security Practices 2016			
410-1	Security personnel trained in human rights policies or procedures	—	■ Respect for Human Rights	6.3 6.3.5 6.4.3 6.6.6
GRI 411 :	Rights of Indigenous Peoples 2016			
411-1	Incidents of violations involving rights of indigenous peoples	—		6.3 6.3.6 6.3.7 6.3.8 6.6.7
GRI 412 :	Human Rights Assessment 2016			
412-1	Operations that have been subject to human rights reviews or impact assessments	—	■ Respect for Human Rights 17 countries included in the scope of first human rights risk screening.	6.3 6.3.3 6.3.4 6.3.5
412-2	Employee training on human rights policies or	—	■ Respect for Human Rights	6.3 6.3.5

	procedures			
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	—	■ Consideration for Human Rights in Investment Activities	6.3 6.3.3 6.3.5 6.6.6
GRI 413 :	Local Communities 2016	■ Key Issues and Initiatives		
413-1	Operations with local community engagement, impact assessments, and development programs	—	■ Social Activities	6.3.9 6.6.7 6.8 6.8.5 6.8.7
413-2	Operations with significant actual and potential negative impacts on local communities	—	■ Fundamental Safety Initiatives ■ Initiatives to Prevent Major Accidents	6.3.9 6.5.3 6.5.6 6.8.9
GRI 414 :	Supplier Social Assessment 2016	■ Key Issues and Initiatives		
414-1	New suppliers that were screened using social criteria	—	■ Sustainable Procurement	—
414-2	Negative social impacts in the supply chain and actions taken	■ Supplier Sustainability Evaluation and Improvement Support		—
GRI 415 :	Public Policy 2016			
415-1	Political contributions	■ ESG Performance Data > Governance		—
GRI 416 :	Customer Health and Safety 2016	■ Key Issues and Initiatives		
416-1	Assessment of the health and safety impacts of product and service categories	■ Product Stewardship > Management System ■ Quality of Products and Services		6.3.9 6.6.6 6.7 6.7.4 6.7.5
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	■ ESG Performance Data > Society There were no instances of fines or penalties relating to any regulatory violation by Mitsui Chemicals, Inc.		6.3.9 6.6.6 6.7 6.7.4 6.7.5
GRI 417 :	Marketing and Labeling 2016			
417-1	Requirements for product and service information and labeling	■ Blue Value™ / Rose Value™ ■ Product Stewardship ■ Quality of Products and Services ■ Logistics		6.7 6.7.3 6.7.4 6.7.5 6.7.6 6.7.9
417-2	Incidents of non-compliance concerning product and service information and labeling	■ ESG Performance Data > Society There were no instances of fines or penalties relating to any regulatory violation by Mitsui Chemicals, Inc.		6.7 6.7.3 6.7.4 6.7.5 6.7.6 6.7.9
417-3	Incidents of non-compliance concerning	There were no applicable instances.		6.7 6.7.3 6.7.6 6.7.9
GRI 418 :	Customer Privacy 2016			
418-1	Substantiated complaints concerning breaches of customer privacy and	There were no applicable instances.		6.7 6.7.7

	losses of customer data			
GRI 419 :	Socioeconomic Compliance 2016	■ Key Issues and Initiatives		
419-1	Non-compliance with laws and regulations in the social and economic area	There were no applicable instances.	■ Quality of Products and Services	6.6 6.6.3 6.6.7 6.8.7

Guideline Cross-reference Tables

► GRI Content Index / ISO 26000 Cross-reference Table

▼ The 10 principles of the UN Global Compact Cross-reference Table

The 10 principles of the UN Global Compact Cross-reference Table

Support Initiatives Signatory to the UN Global Compact

The 10 principles of the UN Global Compact			Reference pages (website)
Human Rights	Principle 1	Businesses should support and respect the protection of internationally proclaimed human rights; and	Respect for Human Rights Sustainable Procurement Human Resources Management
	Principle 2	make sure that they are not complicit in human rights abuses.	Respect for Human Rights Sustainable Procurement Human Resources Management
Labour	Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	Respect for Human Rights Labor-management Relations Based on Frank Dialog and Mutual Understanding
	Principle 4	the elimination of all forms of forced and compulsory labour;	Respect for Human Rights Sustainable Procurement
	Principle 5	the effective abolition of child labour; and	Respect for Human Rights Sustainable Procurement
	Principle 6	the elimination of discrimination in respect of employment and occupation.	Respect for Human Rights Human Resources Management
Environment	Principle 7	Businesses should support a precautionary approach to environmental challenges;	Blue Value™ / Rose Value™ Responsible Care Policy and Management Environmental Protection
	Principle 8	undertake initiatives to promote greater environmental responsibility; and	Blue Value™ / Rose Value™ Responsible Care Policy and Management Environmental Protection Product Stewardship Sustainable Procurement
	Principle 9	encourage the development and diffusion of environmentally friendly technologies.	Blue Value™ / Rose Value™ Responsible Care Policy and Management Environmental Protection
Anti-Corruption	Principle 10	Businesses should work against corruption in all its forms, including extortion and bribery.	Action Guidelines Risk and Compliance

External Assessments

Socially Responsible Investment (SRI) Indices

The Mitsui Chemicals Group is listed as a constitute company in the following SRI indices based on evaluations of its initiatives aimed at the sustainable development of society and the Mitsui Chemicals Group.

	As of September 2016	As of September 2017	As of September 2018
DJSI Asia/Pacific	—	—	○
FTSE4Good Index Series	○	○	○
FTSE Blossom Japan Index	—	○	○
MSCI Japan ESG Select Leaders Index	—	○	○
MSCI Japan Empowering Women Index (WIN)	—	○	○
SNAM Sustainability Index	○	○	○

DJSI Asia/Pacific

DJSI, the index jointly developed by S&P Dow Jones Indices, United States and RobecoSAM, Switzerland., evaluates the corporate sustainability of the company from the economic, environmental, and social factors, and selects the leading sustainability-driven companies. DJSI Asia Pacific covers approximately 600 major companies in the Asia-Pacific region, and 150 companies has been selected in 2018.



► [Dow Jones Sustainability Index](#)

FTSE4Good Index Series

FTSE4Good Global Index was developed by FTSE Russell of the London Stock Exchange Group. This index selects companies based on evaluations of their initiatives in the areas of environmental management, climate change, human & labor rights, supply chain labor standards, and preventing bribery.



FTSE4Good

► [FTSE4Good](#)

FTSE Blossom Japan Index

The FTSE Blossom Japan Index is designed to provide market participants with a tool to identify and measure the performance of Japanese companies that demonstrate strong environmental, social and governance (ESG) practices. Using the globally established FTSE4Good Index Inclusion Rules, the FTSE Blossom Japan Index has adopted concerns regarding ESG as its core assessment criteria. The index has been constructed to be industry neutral. The FTSE Blossom Japan Index has been selected as an ESG index of the Government Pension Investment Fund (GPIF).



FTSE Blossom
Japan

► [FTSE Blossom Japan Index](#)

MSCI Japan ESG Select Leaders Index

The MSCI Japan ESG Select Leaders Index was established on the basis of MSCI ESG Research. This Index is a comprehensive measure that comprehensively reflects ESG risks in the market portfolio. The Index is also made up of companies with a relatively high ESG performance from a variety of industries.

The MSCI Japan ESG Select Leaders Index has been selected as an ESG index of the Government Pension Investment Fund (GPIF).



► [MSCI Japan ESG Select Leaders Index](#)

MSCI Japan Empowering Women Index (WIN)

The MSCI Japan Empowering Women Index (WIN) is made up of companies that actively promote the empowerment of women. These companies are selected from a variety of industries and exhibit high scores for gender diversity based on data regarding the employment of women disclosed in accordance with Japan's Act on Promotion of Women's Participation and Advancement in the Workplace.

The MSCI Japan Empowering Women Index (WIN) has been selected as an ESG index of the Government Pension Investment Fund (GPIF).



▶ [MSCI Japan Empowering Women Index \(WIN\)](#)

SNAM Sustainability Index

Launched in 2012, the SNAM Sustainability Index is an investment index managed by Sompo Japan Nipponkoa Asset Management Co., Ltd. (SNAM). Sustainable investments are socially responsible investment (SRI) funds for pension trusts and institutional investors that invest broadly in firms that have strong positive evaluation ratings in each of the environment, society, and governance fields. Considerable weight is placed on ESG evaluation ratings undertaken by research companies when selecting stocks for inclusion in the index which forms the basis for determining long-term investments.



▶ [SNAM Sustainability Index](#)

Other Key External Assessments

Mitsui Chemicals Receives the Top Gold Rank in Eco Vadis Supplier Survey

EcoVadis operates shared platforms that enable companies to monitor the sustainability of their suppliers. Covering 150 commodities and 110 countries, EcoVadis assesses the sustainability of suppliers based on their activities across four themes: environment, fair labor practices, ethics/fair business practices, and supply chain, with numerous global companies applying survey results to their supplier screening activities. The Mitsui Chemicals Group received the highest survey rank of Gold from EcoVadis. The Gold rank is given to companies with overall scores in the top fifth percentile. (Certification period to May 2018.)



▶ [EcoVadis](#)

Mitsui Chemicals Received a Special Award from the Development Bank of Japan (DBJ) under the DBJ Health Management Rating Scheme

In March 2013, Mitsui Chemicals received a special award from the Development Bank of Japan (DBJ) under the DBJ Health Management Rating scheme. Mitsui Chemicals was given the highest ranking and was recognized as a model company for health management, with attention drawn to the excellence of its initiatives for caring for the health of employees. One of the conditions of this financing scheme is that the company receiving the loan has excellent measures in place to manage the health of its employees, as evaluated by the Development Bank of Japan.



▶ [DBJ Employees' Health Management Rated Loan Program](#)

Mitsui Chemicals Selected as an Excellent Enterprise of Health and Productivity Management — White 500 Company

Mitsui Chemicals was selected under Excellent Enterprise of Health and Productivity Management—White 500, a program operated jointly by the Ministry of Economy, Trade and Industry (METI) and Nippon Kenko Kaigi for a second consecutive year.

Excellent Enterprises of Health and Productivity Management—White 500 program honors large companies that practice excellent health-oriented management in conjunction with their health insurance providers. Launched in 2017, this certification program is operated jointly with METI and Nippon Kenko Kaigi (which is comprised financial/medical organizations and local government leaders) with the aim of expanding healthy management practices.



Editorial Policy

Through its online Sustainability site, Mitsui Chemicals' goal is to provide stakeholders with a deeper understanding of the Group's efforts to realize sustainable growth in concert with society. The site shines a light on the Group's three-axis management (economy, environment and society), with a focus on environmental and social initiatives.

Taking advantage of the unique features of online media, we have made every effort to post comprehensive details encompassing a wide range of areas including the Group's policies, structure and systems, activities, and numerical data. In addition, plans are in place to issue the Mitsui Chemicals Group ESG Report 2018 by October 2018. This report will contain details posted on the Company's Sustainability site. Users of the site are advised that the Sustainability site may also be frequently updated from October 2018.

 Please refer here for the Mitsui Chemicals Group ESG Report 2018 (PDF format).

To understand more about our activities related to creating new value over the medium to long term, which is the Group's aim, please also refer to the annual reports (Mitsui Chemicals Reports) that we have published with the aim of reporting comprehensively on the strategies of three-axis management and its achievements.

 Mitsui Chemicals Report

About the Mitsui Chemicals Group ESG Report 2018

Scope of Compilation Data

Taking the Mitsui Chemicals Group as its basis, any references in this report that fall outside that basis are stated in the text.

Period Covered

Fiscal 2017 (April 1, 2017 to March 31, 2018). However, certain data that falls outside this coverage period has been included.

Reporting Cycle

Annually

Referenced Guidelines

- Global Reporting Initiative (GRI) Sustainability Reporting Standards

 GRI Content Index / ISO 26000 Cross-reference Table