

Mitsui Chemicals Group ESG Report 2021

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Mitsui Chemicals Group ESG Report 2021

Sustainability News

[See All](#)

- 2021.10.15 Annual update has been made to our Sustainability site.
- 2020.11.30 Mitsui Chemicals Included on Dow Jones Sustainability Asia Pacific Index for Third Straight Year
- 2020.10.15 Annual update has been made to our Sustainability site.



We aim to be a corporate group that continues to grow through solving social challenges and creating diverse value with the power of chemistry.

[Message from the CEO](#)



[Message from the Responsible Officer](#)



[Corporate Governance](#)



[Sustainability in the Mitsui Chemicals Group](#)

- Sustainability Management
- Long-Term Business Plan Environmental and Social Targets
- Our Material Topics
- Climate Change and Problems with Plastic
- Blue Value™ / Rose Value™



[Risk and Compliance](#)

- Risk and Compliance Management
- Bribery Prevention
- Tax
- Information Management



[Responsible Care](#)

- Responsible Care Management
- Safety and Prevention
- Environmental Protection
- Product Stewardship
- Quality of Products and Services
- Logistics
- Occupational Health



[Engagement with Society](#)

- Respect for Human Rights
- Sustainable Procurement
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- Social Activities

[List of Policies](#)

[ESG Performance Data](#)

[Guideline Cross-reference Tables](#)

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[Editorial Policy](#)

[ESG Information Archives](#)

Related Information



Clean-up Caravan



Diversity & Inclusion
CEO Message for Women's Empowerment



Annual Report



OSAKA BLUE OCEAN VISION Video
made by Osaka-city



Message from the CEO



We aim to be a corporate group that continues to grow through solving social challenges and creating diverse value with the power of chemistry.

HASHIMOTO Osamu

Representative Director,
President & CEO

Looking back over fiscal 2020

Overcoming the difficult business environment to put our business back on a growth path.

In fiscal 2020, which saw the spread of COVID-19, the Mitsui Chemicals Group's business was impacted by the decrease in automobile production and lockdowns in various countries and regions, particularly during the first quarter. However, demand from major industries gradually recovered from the second quarter onward, and we were able to secure an increase in operating income before special items compared to the previous year.

In responding to the COVID-19 pandemic, we promoted remote work and implemented thorough countermeasures to prevent infection in our plants, and responded rapidly to the heightened demand for our products, such as materials for medical gowns, masks, and other essential-use products.

In fiscal 2021, we expect to boost earnings mainly through sales growth driven by demand recovery from the effects of COVID-19 as well as by our past facility expansions. In fact, we aim to achieve our highest profits to date. At the same time, we will forge ahead with revising our strategy and steer our course toward active investment aimed at putting our company back on a path of growth by transforming our business model and expanding our three target domains.

Reflecting on our 2025 Long-Term Business Plan VISION 2025

A greatly altered external environment and the challenges that have become apparent.

In addition to COVID-19, we now face issues such as the rise of protectionist trade policies between countries. Moreover, amidst the rapid pace of digital transformation (DX), advancement of biotechnology, and crescendo of social issues such as the environment, new currents are emerging which call for businesses to work toward carbon neutrality and a circular economy, and which see sustainability management as increasingly important.

These kinds of changes in the business environment were not anticipated when VISION 2025 was formulated in 2016. So in 2020—

the midpoint year for VISION 2025—we began to review our long-term business plan.

Under VISION 2025, we have been pursuing a triple bottom line management approach based on the three axes of economy, environment, and society. And while our efforts toward the goals of VISION 2025, including the top priority issue of business portfolio transformation, have met with some success, they have not been satisfactory on the whole.

To begin with, on the economic axis, the plan was to try to reach an operating income of 200 billion yen by the final year of fiscal 2025. We planned to achieve this through active growth investment focusing on the three target domains of Health Care, Mobility, and Food & Packaging, and by securing profits in the Basic Materials segment through lowering its volatility and strengthening its competitiveness.

However, while we did find some success in expanding the profit share of our three target domains, the implementation of growth investments was insufficient to deliver the contribution to profits that we had hoped for. Consequently, profit levels peaked in fiscal 2017 and leveled off after that. In addition, there is still room for improving the volatility of the Basic Materials segment, and the creation of new products and businesses is not progressing according to plan.

Next, on the environmental and society axes, we have introduced Blue Value™ (environmental contribution value) and Rose Value™ (QOL improvement contribution value) as means to help visualize our Group's contributions to solving social challenges. This initiative has been a success as it has facilitated dialogue with stakeholders. However, we will need to further accelerate our efforts in order to increase sales revenue of Blue Value™ and Rose Value™ products.

Also, we are not meeting our targets for the key performance indicators (KPIs) we have set for safety and compliance. It is urgently necessary to strengthen Group-wide efforts in these areas, as the globalization of our business continues to drive diversification of people, equipment, and technology.

Direction of our 2030 Long-Term Business Plan VISION 2030

Evolving into a chemical company that leads change in an era of turbulence and helps realize a sustainable future society.

Based on our review of VISION 2025, we revisited the purpose of the Mitsui Chemicals Group and discussed the direction we aim to take.

Looking back over our history, it is evident that ours has been a company that has continued to solve the challenges of society through the power of chemistry since its beginnings over a hundred years ago. One example is how we supported the reconstruction of the Japanese economy by increasing chemical fertilizer production in response to the food crisis following the Second World War. The power of chemistry has enormous potential to help solve today's global challenges of climate change and food loss as well.

From this starting point, we have redefined our Corporate Target—which will provide direction for the next 15 to 20 years—as becoming a corporate group that continues to grow through solving social challenges and creating diverse value with the power of chemistry. And the next 10 years until the culmination of VISION 2030 will be the critical period that will determine the future of our Group in confronting the changing business environment. Recognizing this, we have defined the ideal vision for the Mitsui Chemicals Group in 2030 as a global solutions company that leads change and contributes to a sustainable future.

In addition to redefining our direction, we have outlined the ideal future society that we aim to bring about, taking into account internal and external environmental changes and demands from stakeholders, as "a circular society in harmony with the environment," "an inclusive society creating diverse value," and "a comfortable society in which people can enjoy healthy lives and well-being." This has allowed us to employ backcasting from this vision of future society to revise our material topics.

I believe that addressing the issues most material to our business is pivotal for the company to achieve sustainable growth.

However, while our previous material topics have been comprehensive, insufficient prioritization among those topics, unclear relationship to our long-term business plan, and lack of reflection in our business strategies have meant that they have not permeated the company well. In light of these reflections, we have formulated our new material topics through engagement with various stakeholders and deliberations by the Corporate Sustainability Committee including senior management, followed by

discussion by the Board of Directors. These discussions have focused on linking material topics to issues identified by individual divisions within the company, and ensuring consistency with our business strategy.

Our revised material topics position the categories "prerequisites for business continuity" and "abilities essential to business continuity" as in support of "contributing to a sustainable society," which is central to value creation. In the category "contributing to a sustainable society," we emphasize "product design based on full life-cycle considerations," and clearly express our commitment to expanding our Blue Value™ and Rose value™ products.

Based on these updated material topics, we have developed a Basic Strategy to realize our ideal vision for 2030. And the most important pillars of this strategy are to transform our business model and reform the business portfolio of our Group.

For detail, please refer to Long-term Business Plan Environmental and Social Targets.

For detail, please refer to Our Material Topics.

For detail, please refer to Blue Value™ / Rose Value™.



VISION 2030 Basic Strategy

Promoting a drastic transformation of our business model through business design capabilities and pursuit of a social issue perspective.

We have once again focused our attention on a social issue perspective in order to implement our business model transformation. Our historical business focus on materials supply involved capturing the needs of our customers and applying the assets of our Group to provide them with materials. Of course, this has also included offering added value through technical services and the like. But simply repeating this approach will naturally lead to a plateau in the value we can deliver.

What we need is the unique perspective of a chemical company toward identifying the social challenges that lie beyond our customers' needs. We should not stop at providing products according to customer specifications, but go beyond to consider new approaches in view of what challenges society may face in the future. In this way, we can work out possible ways to provide more sustainable products that deliver greater value.

This is close to the customer-driven business model we laid out in VISION 2025, but there were challenges with implementing that on an operational level. So, going forward, we will place greater emphasis on execution.

We will take this kind of social issue perspective and bolster our business design capabilities to shift our business models to those focused on solutions-based business and circular economy-based business. This will be the cornerstone of our new basic strategies.

As I mentioned, the solutions-based business model looks beyond the needs recognized by customers to find latent needs starting

from a social issue perspective. This means not stopping at merely providing materials, but to propose solutions as chemicals experts which combine products and services that help to solve their challenges. To accomplish this, it will be vital to combine and leverage assets from both inside and outside our Group, and design our business itself.

In contrast to the conventional, linear business approach, in which a product is created then delivered to the customer, the circular economy-based business calls for considering a product's entire life cycle through to collection and reuse after the customer and end consumer are finished using it when designing the product. This includes taking into account development of the ecosystem needed for this to take place. We are also considering combining services with product renewals that take place every few years, or providing technical services themselves.

Business design capabilities mean being able to implement such ideas and framework-building from the product development and business startup stages. By strengthening these capacities, we can expect to create new businesses.

So, we have decided to revamp our business portfolio in order to push forward with this kind of business model shift as well as expand our business domains and explore growth opportunities in these areas. Our new four-part portfolio will include ICT Solutions, which brings together the resources scattered throughout the Group, and Basic & Green Materials, which positions a circular economy as an opportunity for growth and seeks to add value to the current Basic Materials business.

We will also promote digital transformation (DX) as one of our basic strategies, which we see as an essential driver for our business model transformation. Our R&D and manufacturing divisions have already successfully leveraged DX for objectives such as accelerating research and development, and preventative maintenance in plants. Systematizing the vast amounts of tangible and intangible data that the Group has accumulated in relation to research and development and sales activities, then making this available through a database, will result in a useful tool that could lead to the creation of new businesses to meet customer needs and solve social challenges.

The new Digital Transformation Division that we set up in 2021 not only takes on efforts like these, but has begun launching initiatives that will impact the company's business plan and the very way our business operates, leading to so-called corporate transformation (CX). I want to raise DX literacy throughout our Group, and transform our very own organization in a way that will allow us to adapt to the new era and environment.

2050 Carbon Neutrality Declaration

Cooperating with all stakeholders to address global challenges.

In response to worsening environmental problems and growing calls for global decarbonization, the Mitsui Chemicals Group pledged in November 2020 to become carbon neutral by 2050. To achieve this goal, we have drawn up a roadmap in which we will pursue the two pillars of reducing our own greenhouse gas (GHG) emissions, and contributing to customers and society through the expansion of our Blue Value™ products.

As this will be an effort that spans our entire value chain, it will be essential to strengthen coordination not only across departments within our Group, but with various external partners as well. The agreement with Neste Corporation and Toyota Tsusho Corporation for procurement of bio-based hydrocarbons, which we announced in May of 2021, and the collaboration on chemical recycling with BASF Japan Ltd. that we announced in June, are among the experimental initiatives we are pursuing in order to implement this roadmap. This approach seems promising, as we have already received some inquiries.

One thing I would like to reiterate, is that we cannot just conduct business in line with customer needs as we have in the past. Instead, it is vital that we make proposals as experts that are looking further ahead, and contribute to our customers and society on a higher level. Parts of this may run counter to short-term economic rationale. However, making the most of our unique resources with these efforts will enable us to make a significant contribution toward solving the challenges of society. At the same time, they hold great potential to provide big opportunities for our business in the long run.

We have a distinct advantage as a chemicals manufacturer in that we own our own naphtha crackers, which reside high upstream in the manufacturing chain. Up until now, it has been said to be difficult to add value to products from these upstream operations. But initiatives like the introduction of bio-based hydrocarbons are realizing the potential to add new value through transition to

alternative raw materials and fuels. In this way, we intend to fully harness the resources our Group holds, and give birth to a variety of opportunities as we move forward.

For detail, please refer to [Climate Change and Problems with Plastic](#).



Fostering the organizational culture for achieving VISION 2030

Cultivating a challenge-oriented mindset toward solving social challenges by creating the necessary organizational culture through reforming employee evaluations.

In fiscal 2020 we enacted work style reforms in the interest of improving ways of working during and after the COVID-19 pandemic. These included setting up an environment conducive toward remote work, liberalizing our dress code, and developing regulations for side jobs. Our dress code liberalization initiative, in particular, came about after being put forward by employees. I want to emphasize the substance and results of work rather than its form, and hope that this will invigorate people within our company.

We also need to foment a challenge-oriented mindset for coming up with new ideas and seeing them through. Each and every employee on the frontlines of our business should continually ask themselves whether their current methods are really the best way to do things.

To this end, we are considering an evaluation system which would establish KPIs to enable accurate business evaluation and make it possible to see how far the business model transformation we are pursuing through VISION 2030 has progressed. These would then be consistently applied to individual employee performance evaluations, so that we can evaluate higher value-added proposals which are not merely an extension of what has come before. In addition, we are moving to establish a new commendation system that positively evaluates the act of taking on challenging goals itself—even if they fail.

Likewise, our carbon neutrality declaration is directed not merely for the public, but is also meant to express my commitment to those within the Group. More than 10 years ago, our Group was working on developing technologies to help the environment, including carrying out demonstration tests of carbon capture and utilization (CCU) technology at a pilot facility. However, due in

part to the fact that there was not yet a market for such products, it did not achieve significant results. I want to demonstrate once again my level of commitment to employees who have experience working on these projects, and encourage them to be willing to take on challenges with high motivation and a flexible mindset.

For detail, please refer to Human Resources Management.

Example of work style reform

Employee initiative bringing about dress code liberalization

In August 2020, we revised our dress code for employees at our head and branch offices with the goal of clarifying a location-independent dress code during work at places such as the office or when teleworking. The purpose of this revision is to ensure safety, suitability for work, and hygiene, and to allow employees themselves to determine the appropriate clothing to wear in accordance with time, place, and occasion. We aim to increase engagement and productivity by creating an environment in which each employee is empowered to work while more independently consider the way they work.



To our stakeholders

Continuing to transform our Group by leveraging its strengths while preserving the essence that has remained unchanged for 100 years.

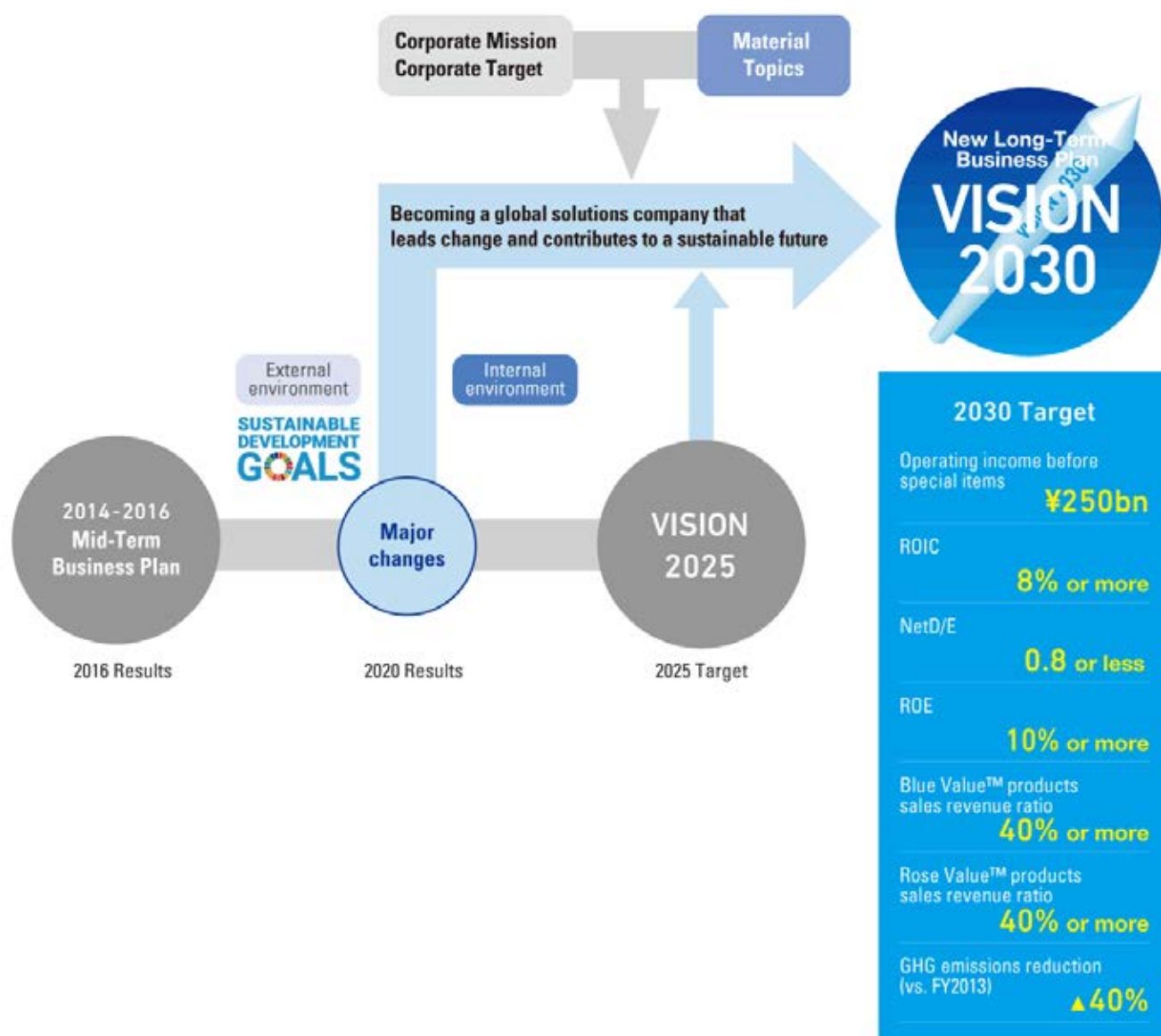
I believe that, fundamentally, the chief aim of the Mitsui Chemicals Group, both now and in the past, has been to solve the challenges faced by society. And the best way to meet stakeholder expectations and grow our company in a sustainable way, is by contributing to the realization of our ideal future society as a chemical company.

Right now, VISION 2030 has just been announced as a concept. The important thing will be how we are able to get it accomplished. At present, we are conducting detailed discussions on individual strategies for each business domain as well as functional strategies. We are also establishing medium-term KPIs toward achievement of VISION 2030, as well as reviewing a management system for tracking our progress, and we plan to make an announcement this fiscal year.

In VISION 2030, we have set a target of 250 billion yen in operating income before special items. But we have not forgotten the goal of 200 billion yen set in VISION 2025, and believe it is still achievable with the concerted efforts of the entire Group going forward.

I am confident that, under our VISION 2030 Basic Strategy, we will be able to greatly expand the business opportunities of the Mitsui Chemicals Group by utilizing the wealth of resources at our disposal, from upstream raw materials to diverse downstream products. I hope you will join me in looking forward to the great things that lie in store for our Group in 2030 and beyond.

Positioning of VISION 2030



Sustainability in the Mitsui Chemicals Group



Sustainability Management

- Management System
- Stakeholders
- Support Initiatives

Long-Term Business Plan Environmental and Social Targets

Our Material Topics

- Our materiality process
- Material Topics and Initiatives

Climate Change and Problems with Plastic

- Management System
- Climate Change Policy
- Carbon neutral strategy
- Plastics Strategies
- Initiatives to Build a Circular Economy
- Implementing the recommendations of the TCFD

Blue Value™ / Rose Value™

- Visualizing Contributions to the Environment and Society
- Blue Value™ – Environmental Contribution Value
- Rose Value™ – QOL Improvement Contribution Value
- Blue Value™ / Rose Value™ Products

Management System



Sustainability management requires companies to generate both social value and corporate value. The Mitsui Chemicals Group aims to create these two critical values through dialogue with our stakeholders, and by incorporating ESG elements into our management/strategies.

Managing Executive Officer

HIRAHARA Akio

The Mitsui Chemicals Group has steered its course toward sustainability management with ESG at its core. During discussions to formulate VISION 2030, we reviewed our ideal future society and material topics in an effort to synchronize our materiality within VISION 2030 and thus embed ESG elements within our management/strategies. It goes without saying that expansion of Blue Value™ and Rose Value™ products—which serves as a pillar of our strategy for climate change mitigation and adaptation—and our efforts toward reaching carbon neutrality are key to achieving the goals we outlined in VISION 2030. And we are taking a variety of measures in our management to help realize a circular economy. These kinds of initiatives are meant to strategically prepare ourselves for the future, and will ultimately lead to the transformation of our business portfolio.

Incorporation of ESG elements into management/strategies

- FY2019: Built a mechanism for reflecting social issue perspectives, such as SDGs, in our investment decisions
- FY2020: Adopted sales revenue of Blue Value™ and Rose Value™ products into budgeting as a management indicator for business divisions

The key performance indicators (KPIs) we set in VISION 2025 are carried over to VISION 2030 as well. Thus, we have set target sales revenue ratios for both Blue Value™ and Rose Value™ products—our non-financial indicators—at 30% or more in 2025, and 40% or more in 2030.

Incorporating these elements into our management system has boosted the awareness of all employees, allowing us to review product value from Blue Value™ and Rose Value™ perspectives. It has also fostered eagerness to develop new applications for Blue

Value™ and Rose Value™ certifications and pursue the development of new products and businesses. Moreover, it has deepened our discussions about what kind of contribution value we can provide to society.

Measures towards achieving carbon neutrality by 2050

- **FY2019: Utilized internal carbon pricing (ICP) of ¥3,000/tCO₂e when making decisions about large-scale investments**
- **FY2020: Required all divisions in their budgeting to identify short- and medium-to-long-term issues as well as consider and implement countermeasures based on our climate change policy**

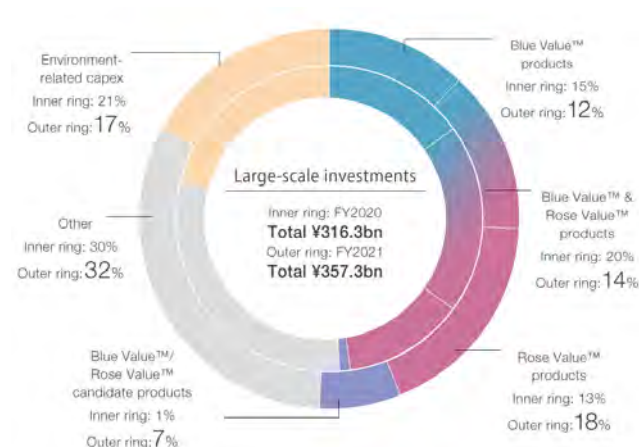
With regard to our ICP, we are engaging in ongoing discussions concerning its standards and management, including its revision. Also, the issues identified by individual divisions are reflected in our Carbon Neutral Strategy and scenario analysis according to the TCFD recommendations. In addition, we have launched a range of development projects based on the recognition that climate change response and solving the problems with plastics are inseparable from each other. To this end, we are carrying out Group-wide discussions from a medium- to long-term perspective regarding their implementation plans and resource allocation, and making management decisions.

We believe that contributions from chemistry are essential to reducing GHG emissions throughout the entire value chain. So, in November 2020, the Mitsui Chemicals Group announced to achieve carbon neutrality by 2050. Sustainability management requires timely understanding of the fast-changing environment and swiftly reflecting that awareness in management. In order to broadly implement our new initiatives throughout society, we must hypothesize, test, and aggressively take on challenges through trial and error. We will continue to promote sustainability management based on the fundamental belief that incorporation of ESG elements into management/strategies will lead to enhanced corporate value.

Investment planning form (Example)

Name of proposed project [] [] []		
Name of div. [] Applicant []		
Outline of investment plan		
Works []	Plant []	Products []
Purpose & details, total investment amount, execution plan [] [] []		
Economic viability evaluation IRR [] % PP [] years		
Competitor analysis; business & marketing strategies; sales, profit, production, & headcount plans [] [] []		
ESG elements		
◆ Related SDG Targets [] [] []		
◆ Blue Value™/Rose Value™ contributions		
[] Reducing CO ₂	[] Enriching life and society	
[] Conserving resources	[] Extending healthy life-span	
[] Coexisting with nature	[] Protecting food	
◆ Social challenges [] [] []		
◆ GHG emissions CO ₂ increase or decrease [] ton/year Estimated carbon price [] yen		

FY2021 large-scale investments*



* Not including alliances, M&A, financial assistance, etc. For FY2021-2023.

Policy and Basic Approach

The SDGs and other initiatives that aim to solve the challenges faced by society continue to gain momentum worldwide and companies are increasingly being asked to take action. For a sustainable society to be realized, it is essential that companies themselves must achieve growth, but at the same time create social value by providing solutions. To this end, it is now even more important that companies accurately identify opportunities and risks from an ESG perspective and reflect them into management.

In deepening our triple bottom line (economy, environment, and society) management approach and committing to a management that places ESG elements at its core, the Group established the Corporate Sustainability Division in April 2018. We are now working to incorporate ESG elements into management/strategies and improve how we disclose ESG information to our stakeholders.

Sustainability in the Mitsui Chemicals Group

In addressing global social challenges highlighted in the SDGs and other initiatives, we aim to achieve sustainable development in society and the Group by implementing the following:

- ▶ Seek business opportunities and strive to solve challenges through business activities
- ▶ Recognize future risks for the Group and uphold our corporate social responsibility

Challenges

Incorporation of ESG elements into management/strategies

- Reflect ESG considerations in management and strategy discussions at the Board of Directors, Company-wide Strategy Committee, and Corporate Sustainability Committee meetings
- Generate business involving business and R&D divisions and promote innovation

Improvement of ESG information disclosure

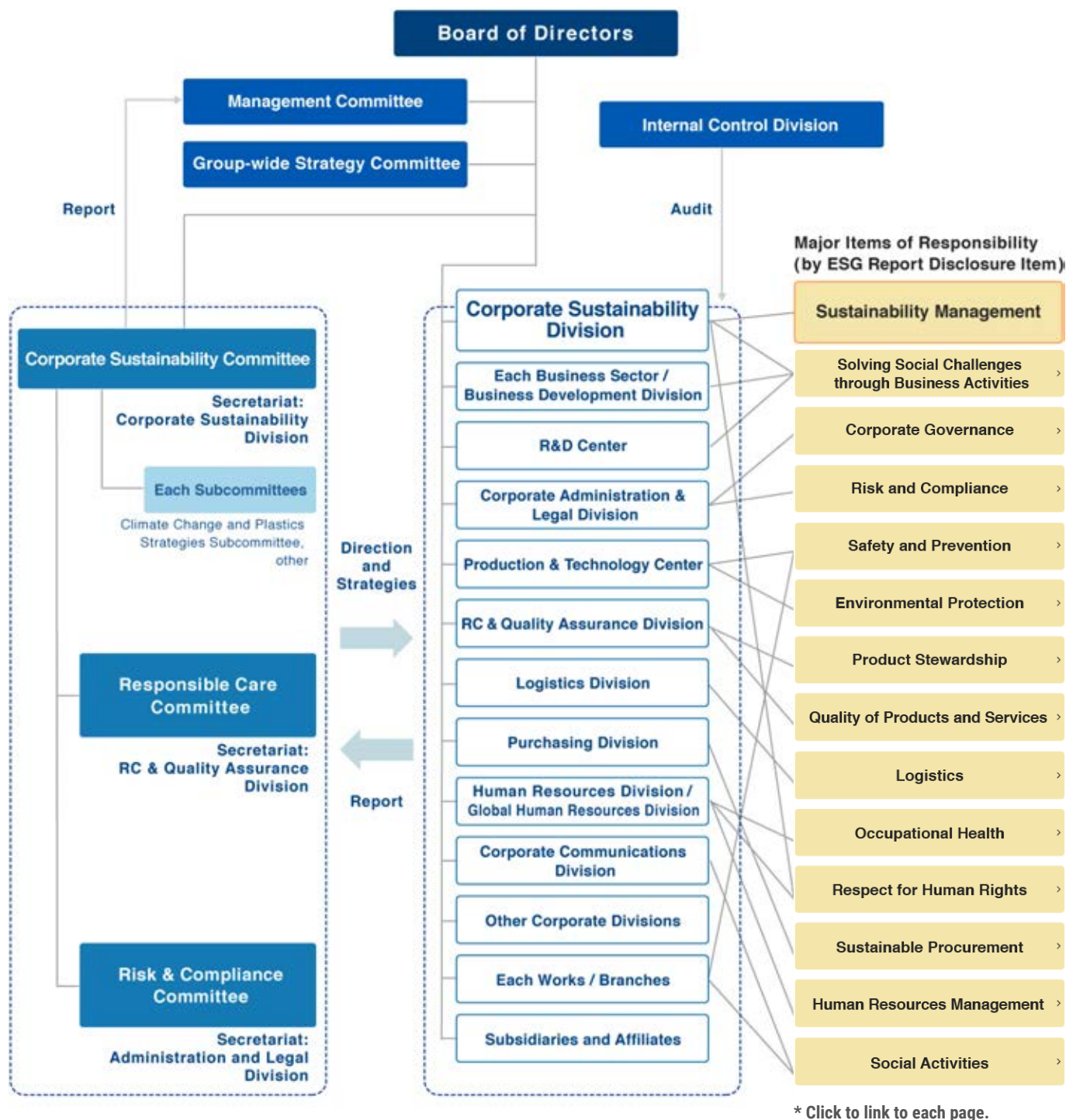
- Boost appeal to institutional investors, customers, and sustainability rating agencies
- Strengthen ESG dialogue

System and Responsible Officers

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

With ESG concerns as a central feature of the Group's sustainability management, steps are being taking to discuss the Group's overall direction at various organizations including the Board of Directors and Corporate Sustainability Committee. In addition, the progress of VISION 2030 non-financial metrics and reviewing material topics are also undertaken within this system.

Are also undertaken within this system.



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.

* Held 3 times in FY2020.

Composition of the Corporate Sustainability Committee

Chair	President
Vice Chair	Responsible officer 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.

Stakeholders

The Mitsui Chemicals Group states “Contribute broadly to society” as its Corporate Mission over the five social contribution areas. We believe that we have to remain sensitive to society’s demands and expectations in order to realize this mission and sustainably develop our business with society. In line with this mission, we deepen communications with our stakeholders, on whom our business activities have an impact.

Corporate Mission

Contribute broadly to society by providing high-quality products and services to customers through innovation and the creation of materials, while keeping in harmony with the global environment.



Shareholders and Investors

The Mitsui Chemicals Group fulfills accountability by holding constructive dialogs with our shareholders and investors and discloses appropriate information in a fair, transparent, and timely manner. We examine the comments we welcome from shareholders and investors to improve our business management and information disclosure. We aim to enhance our corporate value through these efforts.

Priority issues	Major approaches
<ul style="list-style-type: none"> • Constructive dialogs • Disclosing appropriate information in a fair, transparent, and timely manner • Reflecting opinions from shareholders and investors in our business management 	<ul style="list-style-type: none"> • Shareholders' meeting (once per year) • Financial results briefing (4 times per year) • CEO Explanation business Result & Outlook (twice per year) • Small meetings (twice per year) • Individual meetings (approx. 400 times per year) • Briefings per area, such as ESG • Plant tour* • Mitsui Chemicals Report & Mitsui Chemicals Group ESG Report (each once per year) • Website (updated as required) • Contact point

* Not held in fiscal 2020 due to the COVID-19 pandemic.

Customers

Making the best use of the Group's comprehensive resources, we aim to offer optimum solutions to our customers through our technologies, products, and services. The quality management of our products and services ensures that we can meet our customers' expectations.

Priority issues	Major approaches
<ul style="list-style-type: none"> • Providing optimum solutions • Providing high-quality products and services • Providing appropriate information of products and services 	<ul style="list-style-type: none"> • Website (updated as required) • Product and technological presentations • Participating in exhibitions • Contact point

Suppliers

It is important to fulfill our environmental and social responsibilities across the entire supply chain from a global perspective. To achieve this, we need to form strong partnerships with our suppliers. Our collaborations should contribute to the sustainable development of both suppliers and the Mitsui Chemicals Group.

Priority issues	Major approaches
<ul style="list-style-type: none"> • Fair and honest transactions • Partnerships that aim at mutual sustainable development 	<ul style="list-style-type: none"> • Supplier sustainability evaluation and support for improvement

Local Communities

We would like to contribute to the sustainable development of local communities by operating our business in each site stably and safely. This cannot be attained without the trust of the community, and as part of this approach we create a number of opportunities to communicate with local residents.

Priority issues	Major approaches
<ul style="list-style-type: none">• Fulfilling social responsibilities• Gaining trust of local communities• Collaboration with NGOs and NPOs	<ul style="list-style-type: none">• Opinion exchange meetings• Business site tours• Local newsletters• Laboratory Classes on the Wonders of Chemistry program• Disaster relief• Website (updated as required)

Industry, Government and Academia

We operate our business globally, adhering to the laws and regulations in each region.

We also endeavor to take the initiative in collaborations among industry, government, and academia, aiming at the sustainable development of both society and the Mitsui Chemicals Group.

Priority issues	Major approaches
<ul style="list-style-type: none">• Appropriate payment of taxes• Compliance with laws and regulations• Understanding the latest regulation trends• Suggestions toward developing industrial organizations or governmental policies• Open innovation under collaborations among industry, government, and academia	<ul style="list-style-type: none">• Reports to industry, government, and academia• Participating in industry-government- academia projects• Participating in industrial and academic organizations• Joint research

Employees

The Mitsui Chemicals Group aims to attain both the “happiness and self-fulfillment of employees” and the “sustainable growth of the company.” To realize these aims, we are committed to creating working environments where diverse human resources can perform their roles dynamically, exerting their full capabilities.

Priority issues	Major approaches
<ul style="list-style-type: none">• Human resources development• Appropriate evaluation and compensation• Employee-friendly working environment	<ul style="list-style-type: none">• Intranet (updated as required)• Company newsletter (4 times per year)• Training sessions

- Diversity
- Safety and prevention
- Occupational health

- Employee Engagement Survey (once every 2 to 3 years)
- Labor-management discussion
- Health and Safety Committee meetings

Support Initiatives

UN Global Compact

Mitsui Chemicals, Inc. 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.

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.



The 10 Principles of the UN Global Compact and Major Initiatives in the Mitsui Chemicals Group

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.	
Labour		
Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	Respect for Human Rights Sustainable Procurement Human Resources Management
Principle 4	the elimination of all forms of forced and compulsory labour;	
Principle 5	the effective abolition of child labour; and	
Principle 6	the elimination of discrimination in respect of employment and occupation.	
Environment		
Principle 7	Businesses should support a precautionary approach to environmental challenges;	Blue Value™ / Rose Value™ Responsible Care Management Environmental Protection Product Stewardship
Principle 8	undertake initiatives to promote greater environmental responsibility; and	

Principle 9

encourage the development and diffusion of environmentally friendly technologies.

[Sustainable Procurement](#)

Anti-Corruption

Principle 10

Businesses should work against corruption in all its forms, including extortion and bribery.

[Action Guidelines](#)

[Risk and Compliance](#)

Task Force on Climate-related Financial Disclosures (TCFD)

Mitsui Chemicals, Inc. announced that its support of recommendations from [the Task Force on Climate-related Financial Disclosures \(TCFD\)](#). We state that Mitsui Chemicals continues to deepen its understanding of climate-related risks and opportunities, discloses its efforts.

[Mitsui Chemicals announced that it would endorse the recommendations issued by the Task Force on Climate-related Financial Disclosures \(TCFD\).](#)

[Implementing the recommendations of the TCFD](#)



Alliance to End Plastic Waste (AEPW)

As the founding member, Mitsui Chemicals Inc. joined [the Alliance to End Plastic Waste \(AEPW\)](#), established in January 2019. The Alliance is committed to the goal of investing \$1.5 billion over the next five years from its foundation to help end plastic waste and contribute to a sustainable society.

[Mitsui Chemicals Joins New Global Alliance Formed to Take on Plastic Waste in the Environment](#)

[Plastics Strategies](#)



ZERO by 40: Agriculture Industry Unites to Help Eradicate Malaria by 2040

At the London Commonwealth Heads of Government Meeting, the Mitsui Chemicals Group and the world's leading Crop Protection companies jointly announce their commitment to support the research, development and supply of innovative products to save lives and help eradicate malaria by 2040.

[AGRICULTURE INDUSTRY UNITES TO DELIVER A PIPELINE OF INNOVATIVE VECTOR CONTROL TOOLS TO HELP ERADICATE MALARIA BY 2040](#)



The World Economic Forum (WEF)

Mitsui Chemicals joined [the World Economic Forum \(WEF\)](#) in September 2020. The World Economic Forum is an international organization (not-for-profit foundation) for public-private cooperation to improve global issues. Through participation in the WEF, we are striving “to realize a sustainable corporate group with a global presence” by working to address critical global issues together with global leaders.

International Council of Chemical Associations (ICCA) and Chemical Industry Associations in Each Country

The Mitsui Chemicals Group is taking leadership in [the International Council of Chemical Associations \(ICCA\)](#) and Chemical Industry Association in each country*.

Our membership of the International Council of Chemical Associations (ICCA) includes the then Company president, who has continued as a director for the six years since 2014. Since 2016, the Company’s councilor has included the vice-chairperson of the Responsible Care Leadership Group (RC-LG) for four years and the chairman of the Asia-Pacific Responsible Care Organization (APRO). Our employees have also chaired the Joint Capacity Building Task Forces of each Leadership Group for the five years since 2015 and the Energy and Climate Change Leadership Group for the two years since 2018.

Our membership of the Japan Chemical Industry Association (JCIA) includes the general manager of the RC & Quality Assurance Division, who has been a JCIA board member since the 2010 establishment of a Responsible Care Committee and who has also worked as a member of the Chemical Management Committee since 2010.

Moreover, the Japan Initiative for Marine Environment (JaIME) was established by five chemical industry organizations such as JCIA in September 2018. We have been participated in JaIME since then.

* Chemical Industry Association in each country and region:

The Japan Chemical Industry Association (JCIA), the Association of International Chemical Manufacturers (AICM, China), the Taiwan Responsible Care Association (TRCA), the Singapore Chemical Industry Council (SCIC), the Federation of Thai Industries (FTI), the American Chemistry Council (ACC), and the European Chemical Industry Council (CEFIC)

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

[Japan Business Federation \(Keidanren\)](#)

[Japan Petrochemical Industry Association \(JPCA\)](#)

Long-Term Business Plan

Environmental and Social Targets

The Mitsui Chemicals Group aims to constantly grow and develop together with society by addressing social challenges through our business. In managing our business, we take a long-term viewpoint based on the deepened triple bottom line management approach, which is founded on the three axes of economy, environment, and society. VISION 2025, established in 2016, was a long-term business plan to outline our business direction overlooking the following ten years. In fiscal 2021, the midway point of VISION 2025, we created a new long-term business plan, VISION 2030, to set out a new path for business growth taking account of the business environment surrounding us, which has changed dramatically since the original formulation of VISION 2025.



In VISION 2030, we redefined our Corporate Target (Direction for the next 15 to 20 years) as “a corporate group that continues to grow through solving social challenges and creating diverse value with the power of chemistry.” Returning to our fundamental business purpose of “solving social challenges,” the Mitsui Chemicals Group aims to continue providing solutions to various social challenges generated by accelerating environmental changes through our “power of chemistry,” which is capable of creating diverse value. We also redefined the “Ideal Future Society” that we aim to create through our solutions to environmental and social challenges in the light of the shifting internal and external company environment, as well as mega trends. At the same time, we revised [our material topics](#) in building such a society, and incorporated them into the basic strategy of VISION 2030. In addition to the basic strategy, VISION 2030 defines three non-financial metrics (environmental and social targets) as business targets. We plan to take concrete action based on VISION 2030 and incorporate such action into the management plan system that covers both financial and non-financial metrics.



VISION 2030 Non-financial metrics (Environmental and Social Targets)

Non-financial metrics	FY2025	FY2030	Related pages
Blue Value™ products sales revenue ratios	30% or more	40% or more	Blue Value™
Rose Value™ products sales revenue ratios	30% or more	40% or more	Rose Value™
GHG emissions reduction rate	25.4% or more compared with FY2005	40% or more compared with FY2013	Carbon Neutral Strategy

KPIs for environmental and social targets in VISION 2030 are currently being considered.

KPIs for environmental and social targets under VISION 2025

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

Expand sales revenue of environmentally oriented products and services

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

Long-Term Business Plan	2025 Targets Blue Value™ products sales revenue ratios : 30% or more Blue Value™ – Environmental Contribution Value
FY2020 Results	15%
FY2021 Targets	New Blue Value™ and Rose Value™ products certifications: 15 or more Pre-launch Blue Value™ and Rose Value™ products candidate: Identify 15 or more

Reduce environmental impact in production and logistics

Reduce Greenhouse Gas (GHG) and environmentally harmful substance emissions and efficiently utilize resources throughout the Group as a whole.

Long-Term Business Plan	2025 Targets GHG emissions reduction rate* ¹ : 25.4% or more compared with FY2005 (FY2030) Environmental Protection
FY2020 Results	29.0%
FY2021 Targets	GHG emissions reduction: 20 thousand tons or more compared with the previous fiscal year

Long-Term Business Plan	2025 Targets Energy intensity reduction* ² : Continue at 1% or above (5-year annual reduction rate) Environmental Protection
FY2020 Results	▲ 0.7%
FY2021 Targets	Energy intensity reduction: 1% or more (5-year annual reduction rate), or 1% or more (annual reduction rate with FY2009 as base year)

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

*² Mitsui Chemicals, Inc. only

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

Expand sales of products and services that contribute to a healthy and well-being society

Expand products and services that can improve QOL by addressing such issues as the declining birth-rate and aging population, extending healthy life expectancy, and the food problem.

Long-Term Business Plan	2025 Targets Rose Value™ products sales revenue ratios: 30% or more Rose Value™ – QOL Improvement Contribution Value
FY2020 Results	19%
FY2021 Targets	New Blue Value™ and Rose Value™ products certifications: 15 or more Pre-launch Blue Value™ and Rose Value™ products candidate : Identify 15 or more

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

Ensure safety

Maintain high levels of safety even in the face of diversifying human resources, facilities, and technologies associated with ongoing global growth and business portfolio transformation.

Long-Term Business Plan	2025 Targets Incidence of major accidents: Continue at zero Safety and Prevention
FY2020 Results	0
FY2021 Targets	0

Long-Term Business Plan	2025 Targets Significant occupational injury frequency: Continue at or below 0.15 Safety and Prevention
FY2020 Results	0.22
FY2021 Targets	0.15 or less

Provide high-quality products and services

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

Long-Term Business Plan	2025 Targets Incidence of customer non-conformance: 10 ppm or less Quality of Products and Services
FY2020 Results	24% decreased (compared with FY2017)
FY2021 Targets	Number of complaints (Company-responsible)* : Reduce by 10% or more (compared with the previous fiscal year)

* Mitsui Chemicals, Inc. only

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.

Long-Term Business Plan	2025 Targets Product risk assessment implementation rate : 99% or more; formulate new assessment indicators (FY2021) Product Stewardship
FY2020 Results	99% or more
FY2021 Targets	99% or more; formulate new assessment indicators

Long-Term Business Plan	2025 Targets Provision of latest product safety information : Continue at 100% Product Stewardship
FY2020 Results	100%
FY2021 Targets	100%

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

Long-Term Business Plan	2025 Targets Incidence of major legal and regulatory violations: Continue at zero Risk and Compliance
FY2020 Results	1
FY2021 Targets	0

Encourage sustainability initiatives of business partners.

Long-Term Business Plan	2025 Targets Supplier sustainability assessments and improvement support (sustainable procurement ratio of 70% or more) Sustainable Procurement
FY2020 Results	45%*
FY2021 Targets	Implement the sustainable procurement survey in FY2021, analysis and feed back

* Mitsui Chemicals, Inc. only

Enable Group employees to thrive at work and make the most of their potential.

Long-Term Business Plan	2025 Targets Ratio of women in management positions (manager-level or above) *: 10% or more Human Resources Management
FY2020 Results	4%
FY2021 Targets	5%

* Mitsui Chemicals, Inc. registered employees

Long-Term Business Plan	2025 Targets Increase employee engagement Human Resources Management
FY2020 Results	Action plan registration rate 96%
FY2021 Targets	Engagement score: 36% or more (FY2018: 31%)

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

Our materiality process

Policy and Basic Approach

Material topics are identified through understanding requests and expectations from stakeholders, and analyzing and verifying the scale of social influence from our business activities. We regard this process as significant for the Mitsui Chemicals Group to recognize issues we need to address to help build a sustainable society. The Mitsui Chemicals Group keeps track of any changes in the importance of issues we are addressing by regularly conducting this process.

Our Material topics in VISION 2030

The Mitsui Chemicals Group has reviewed its material topics in the course of formulating VISION 2030. In VISION 2030, we redefined our ideal future society from the standpoints of transitioning to a circular economy, pursuing diverse value chains, and a flexible and resilient society. And in order to achieve this, we identified the topics material to our business. The identified material topics are the premise of our Basic Strategy for VISION 2030. In addition, we use key performance indicators (KPIs) derived from our material topics as non-financial metrics of VISION 2030. These include our Blue Value™ and Rose Value™ products sales revenue ratios, and greenhouse gas (GHG) emissions reduction rate.

Our materiality process

Step 1: Identify issues

Identify issues comprehensively with reference to the following:

- ✓ Dialog with stakeholders ^{*1}
- ✓ Information gathering regarding global social challenges ^{*2}
- ✓ Guidelines for sustainability information disclosure and evaluation criteria used by sustainability rating agencies
- ✓ Group policies such as our Corporate Mission and Action Guidelines
- ✓ Content of discussions during the formulation of VISION 2030

***1 Dialogue with Stakeholders:**

Through open and constructive opinion exchange with stakeholders, we aim to build trust among them and encourage mutual understanding, while identifying their expectations and needs. For example, we established a system to reflect the environmental and social challenges in our businesses by seeking advice from experts [in the screening and certification process](#) of Blue Value™ and Rose Value™ products.

***2 Gathering Information on Global Social Challenges:**

Mitsui Chemicals is gathering information on the latest global issues by joining [the World Economic Forum](#). With forum members, we aim to resolve social challenges working together with international institutions and governments.

Step 2: Classify issues by topic

Classify the identified issues by topic mainly with reference to guidelines for sustainability information disclosure and evaluation criteria used by sustainability rating agencies.

Step 3: Prioritize and organize topics

Prioritize topics by mapping them along the two dimensions of the importance to stakeholders and the importance to the Mitsui Chemicals Group, and narrow them down to candidate material topics.



Step 4: Confirm validity

Confirm the validity of the identified material topics with the Corporate Sustainability Committee, Management Committee, and Board of Directors. Then acquire final approval from the Board of Directors.

To ensure our material topics take into account changes in the importance of issues and the appearance of new ones, hereafter the Corporate Sustainability Committee plans to discuss the necessity of review on an annual basis.

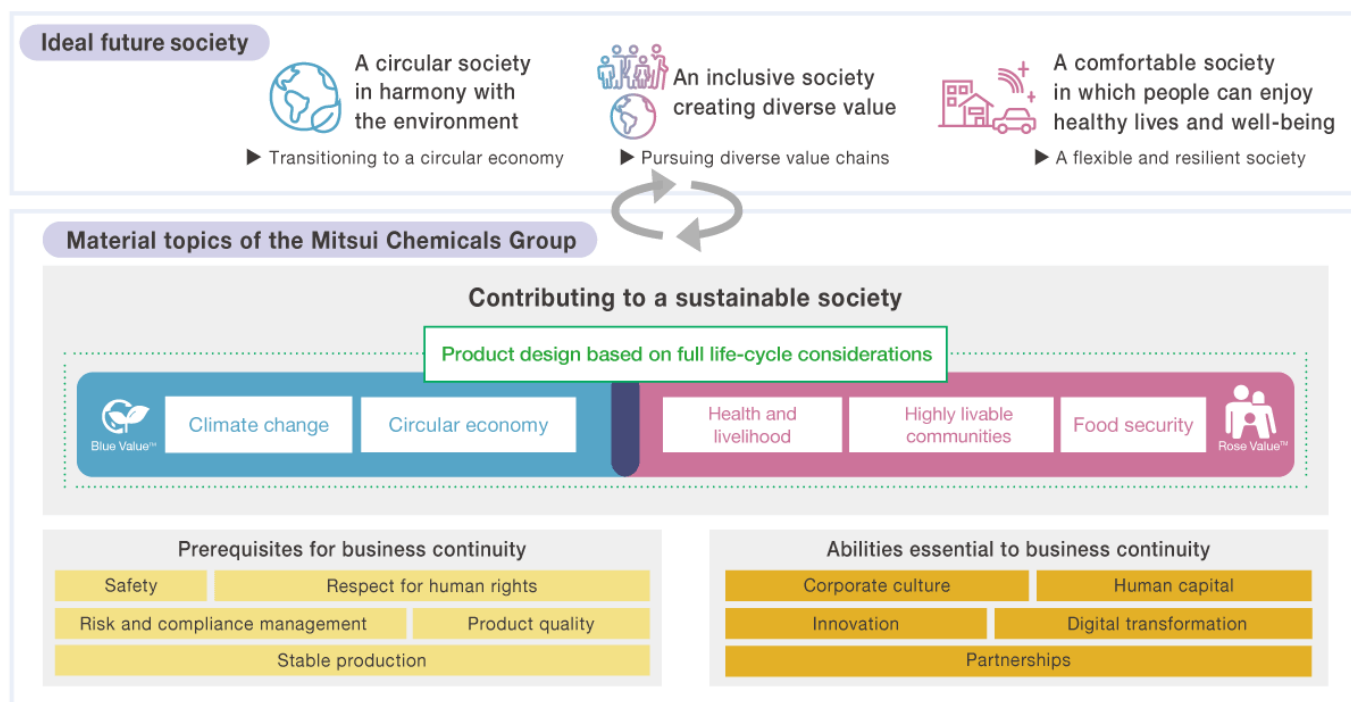
Our Material Topics

Our materiality process

Material Topics and Initiatives

Material Topics and Initiatives

Our material topics are structured such that topics that are directly connected to the creation of both social value and corporate value are grouped under the category of "contributing to a sustainable society," which in turn is underpinned by the categories of "prerequisites for business continuity" and "abilities essential to business continuity."



Contributing to a sustainable society

Product design based on full life-cycle considerations



Contributing to a sustainable society through our Group's business activities

The intricately intertwined nature of social challenges requires a big-picture approach in tackling them. That is why business activities need to take into account the environment and society throughout the entire product life cycle. Amid advances in digitalization and the growing calls for a circular economy, new business opportunities will arise by taking on these perspectives.

Related pages:

- [Long-Term Business Plan, Environmental and Social Targets](#)
- [Blue Value™ / Rose Value™](#)

Climate Change



Recognition of the social issue

The aim of the Paris Agreement is to hold the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to further limit the temperature increase to 1.5°C. Through this agreement, we are now all required to build a carbon neutrality in society. To build this society, we need to adopt low-carbonization (mitigation) and construct a resilient society (adaptation).

Opportunities● and risks● for the Mitsui Chemicals Group (Example)

● Shift to EVs, renewable energies becoming mainstream	● Tightening regulations such as restrictions on GHG emissions and carbon taxes
● Transition to renewable raw materials	● Decreasing demand for petrochemical products
● Increasing demand for non-petrochemical products and technologies	● Damage to production sites from storms and flooding
● Increased demand for products that support disaster prevention/mitigation, and infection control	● Supply chain interruptions

Mitsui Chemicals Group's initiatives

The Mitsui Chemicals Group aims to achieve carbon neutrality by 2050 as a part of our contribution to the Paris Agreement. We continue reducing GHG emissions from our business and lowering carbons emissions throughout the value chain with our products and services.

Related pages:

- [Long-Term Business Plan, Environmental and Social Targets](#)
- [Climate Change and Problems with Plastic](#)
- [Blue Value™—Environmental Contribution Value](#)
- [Rose Value™—QOL Improvement Contribution Value](#)
- [GHG and Energy](#)
- [Water](#)



Recognition of the social issue

Along with the rise in the world's population and pushing forward of global economic activities, including those in developing and emerging countries, conventional economic activities that assume mass consumption and disposal of resources are now exceeding our planetary boundaries (the limits of the Earth) posing a significant threat to the entire world. Against this backdrop, we need to convert to a circular economy to support the sustainability of the environment and society through decoupling economic growth from resource use.

Opportunities and risks for the Mitsui Chemicals Group (Example)

<ul style="list-style-type: none"> Increasing opportunities for solutions business from an ecosystem perspective 	<ul style="list-style-type: none"> Reduced demand for plastics due to the problem of plastic pollution
<ul style="list-style-type: none"> Heightened demand for environmentally compliant design 	<ul style="list-style-type: none"> Tightening of regulations such as extended producer responsibility
<ul style="list-style-type: none"> Increased importance of traceability through digital transformation 	<ul style="list-style-type: none"> Diminished standing of plastic products derived from fossil resources due to the rise of recycling platformers

Mitsui Chemicals Group's initiatives

The Mitsui Chemicals Group develops and acquires environmental infrastructure technologies, as well as promoting recycling and utilization of renewable energy resources, through industrial-governmental-academic collaboration. We will contribute to building a circular economy by creating constituting materials and services, as well as providing solutions utilizing such materials and services.

Related pages:

- [Long-Term Business Plan, Environmental and Social Targets](#)
- [Climate Change and Problems with Plastic](#)
- [Blue Value™—Environmental Contribution Value](#)
- [Environmental Protection](#)



Recognition of the social issue

The increasing world population, the aging society, and issues around social diversity and social inclusion have brought about big changes in people's lives, raising various new demands on different aspects of our existence. As economic and social globalization advances, the scope of impact from social problems is growing, one example being the paralysis of socioeconomic functions due to the rapid spread of the global pandemic caused by a new infectious disease. We now need some effective countermeasures.

Opportunities● and risks● for the Mitsui Chemicals Group (Example)

<ul style="list-style-type: none"> ● Increased demand for products in mobility, medical equipment, pharmaceutical packaging materials, and ICT fields, in line with societal efforts to ensure that everyone can receive high-quality medical care and nursing care when they need it 	<ul style="list-style-type: none"> ● Increased demand for products that improve hygiene and prevent the occurrence and spread of infectious disease
<ul style="list-style-type: none"> ● Increased demand for products and services that help elderly and disabled individuals to participate in society 	<ul style="list-style-type: none"> ● Uncertainty about future lifestyles
<ul style="list-style-type: none"> ● Growing need for comfortable and safe lifestyles and support for pre-symptomatic illness in addition to measures concerning illness and health 	<ul style="list-style-type: none"> ● Product liability claims and lack of regulatory compliance by healthcare-related products and services

Mitsui Chemicals Group's initiatives

The Mitsui Chemicals Group is contributing to building an inclusive society in which people can enjoy healthy lives and well-being regardless of their age, physical condition—including illness or disability, as well as their geographical location—whether in a city or a remote area. We are working on this through creating medical and hygiene products, including vision care products to support or protect people's eyesight, and dental care products, as well as universal design products and services.

Related pages:

- [Long-Term Business Plan, Environmental and Social Targets](#)
- [Rose Value™—QOL Improvement Contribution Value](#)



Recognition of the social issue

In response to the increasing number of natural disasters caused by climate change, the need to develop disaster-resilient social infrastructures is rising. Such communities are equipped with measures to prevent or mitigate the disruption to the social infrastructure or supply chain caused by such disasters. Also, the increasing demand for conversion to smart cities and technological innovation—such as digital transformation (DX)—highlights the necessity to optimize the entire infrastructure and administration services.

Opportunities● and risks● for the Mitsui Chemicals Group (Example)

<ul style="list-style-type: none"> ● Increased demand for smart and resilient community development in accordance with population size (municipal ICT / infrastructure improvements) 	<ul style="list-style-type: none"> ● Securing and training advanced ICT personnel
<ul style="list-style-type: none"> ● Increased demand for products that support disaster prevention/mitigation 	<ul style="list-style-type: none"> ● Increased cost of information security countermeasures

Mitsui Chemicals Group's initiatives

In order to increase a sustainability in communities, the Mitsui Chemicals Group will expand its lineup of products and services that contribute to disaster prevention and mitigation, as well as those that contribute to prolonging the life of infrastructures and strengthening networks. We continue creating new values through global data utilization and exploitation of digital technologies, utilizing our new Digital Transformation Division, established in fiscal 2021.

Related pages:

- [Long-Term Business Plan, Environmental and Social Targets](#)
- [Rose Value™—QOL Improvement Contribution Value](#)



Food Security

Recognition of the social issue

As the world's population grows, food supplies are becoming increasingly scarce, pushing up the number of people facing starvation across the world. Also, food security must be reinforced to prevent the negative influences on food production from drought and flooding induced by climate change, and agricultural damage caused by insects, which has also been aggravated through ecological disruption. At the same time, food loss must be reduced not only to preserve resources but also to reduce CO₂ emissions and the ensuing environmental impact.

Opportunities ● and risks ● for the Mitsui Chemicals Group (Example)

● Stable food production and supply	● Tightening restrictions on agrochemicals and food packaging materials
● Increase in cooperative industry platforms with other types of business toward the goal of safe and secure food distribution	● Improvement of other food preservation/distribution technologies (cold supply chains, etc.)
● Reduced food loss and food waste	

Mitsui Chemicals Group's initiatives

To secure food supply for people across the globe, the Mitsui Chemicals Group aims to improve food productivity through innovations in the agrochemical and agricultural technology fields. We will reduce food loss and waste food from the viewpoint of resource preservation and climate change prevention by improving our food packaging functionality, which helps to maintain the safety and stability of food distribution.

Related pages:

- [Long-Term Business Plan, Environmental and Social Targets](#)
- [Rose Value™—QOL Improvement Contribution Value](#)



Prerequisites for business continuity

Safety



The Mitsui Chemicals Group's Vision

We pledge safety as our top priority and maintain high levels of safety even in the face of diversifying human resources, facilities, and technologies associated with ongoing global growth and business portfolio transformation, preserving people's health and the environment.

Related pages:

- [Long-Term Business Plan, Environmental and Social Targets](#)
- [Responsible Care Management](#)
- [Safety and Prevention](#)
- [Environmental Protection](#)

- [Occupational Health](#)
- [Product Stewardship](#)
- [Logistics](#)

Respect for Human Rights



The Mitsui Chemicals Group's Vision

We recognize respect for human rights in business activities as a foundation of our development and pursue fair business throughout the supply chain from the viewpoint of “maintaining a high regard for people.”

Related pages:

- [Respect for Human Rights](#)

Risk and Compliance Management



The Mitsui Chemicals Group's Vision

To fulfill the corporate social responsibility and retain trust among stakeholders, we conduct sound and appropriate business activities while observing the laws and regulations, as well as managing risks that could potentially threaten our business activities.

Related pages:

- [Long-Term Business Plan, Environmental and Social Targets](#)
- [Risk and Compliance Management](#)
- [Bribery Prevention](#)

Product Quality



The Mitsui Chemicals Group's Vision

We respond to the trust placed in us by our customers by increasing customer satisfaction through taking a two-pronged quality management approach based on quality control and quality assurance, in order to bring quality management to a level higher than ever across the supply chain.

Related pages:

- [Long-Term Business Plan, Environmental and Social Targets](#)
- [Responsible Care Management](#)
- [Quality of Products and Services](#)

Stable Production



The Mitsui Chemicals Group's Vision

We maintain stable production and supplies, and production safety and security through production optimization, technological reinforcement, sustainable procurement, and reforming production operations and maintenance utilizing inherited traditional techniques as well as the latest ever-evolving technologies.

Related pages:

- [Safety and Prevention](#)
- [Environmental Protection](#)
- [Sustainable Procurement](#)
- [Logistics](#)

Abilities essential to business continuity

Corporate Culture



The Mitsui Chemicals Group's Vision

We form a resilient corporate group through the "power of chemistry," an integration of the capabilities of individuals who flexibly and promptly grasp changes in society, boldly try out new initiatives and repeat trials and errors toward resolving social challenges, working dynamically to exert their skills to the fullest.

Related pages:

- [Action Guidelines](#)
- [Human Resources Management](#)

Human Capital



The Mitsui Chemicals Group's Vision

Human resources, an important source of diverse value creation, are the most critical asset for a constantly growing corporate group. We aim to achieve both "sustainable growth of the Mitsui Chemicals Group" and "happiness and self-fulfillment of our employees."

Related pages:

- [Long-Term Business Plan, Environmental and Social Targets](#)
- [Human Resources Management](#)

Innovation



The Mitsui Chemicals Group's Vision

Beyond the business of providing materials, we set out a solution-based business model by uniting our organizational strength, aiming to contribute to solving various social challenges. Through this business model, we continue to offer diverse values through active utilization of open innovation, reform of conventional practices, and new businesses and products.

Related pages:

- [Climate Change and Problems with Plastic](#)
- [Blue Value™/Rose Value™](#)
- [Diversity](#)
- [Open innovation information](#)

Digital Transformation



The Mitsui Chemicals Group's Vision

Through corporate transformation (CX) via DX, we are forming a corporate platform that can adapt to accelerating environmental changes.

Related pages:

- [R&D and Technology](#)
- [Information Management](#)
- [Climate Change and Problems with Plastic](#)
- [Initiatives to Prevent Major Accidents](#)
- [Stable Transportation](#)

Partnerships



The Mitsui Chemicals Group's Vision

Collaborating with internal and external partners throughout the value chain, we realize economic activities while caring for the environment and society throughout our products lifecycle. We pursue improvements to the quality of our business management by reinforcing engagement with all stakeholders.

Related pages:

- [Stakeholders](#)
- [Support Initiatives](#)
- [Climate Change and Problems with Plastic](#)
- [Logistics](#)
- [Sustainable Procurement](#)
- [Social Activities](#)

Climate Change and Problems with Plastic

Management System

Climate Change Policy

Carbon neutral strategy

Plastics Strategies

Initiatives to Build a Circular Economy

Implementing the recommendations of the TCFD

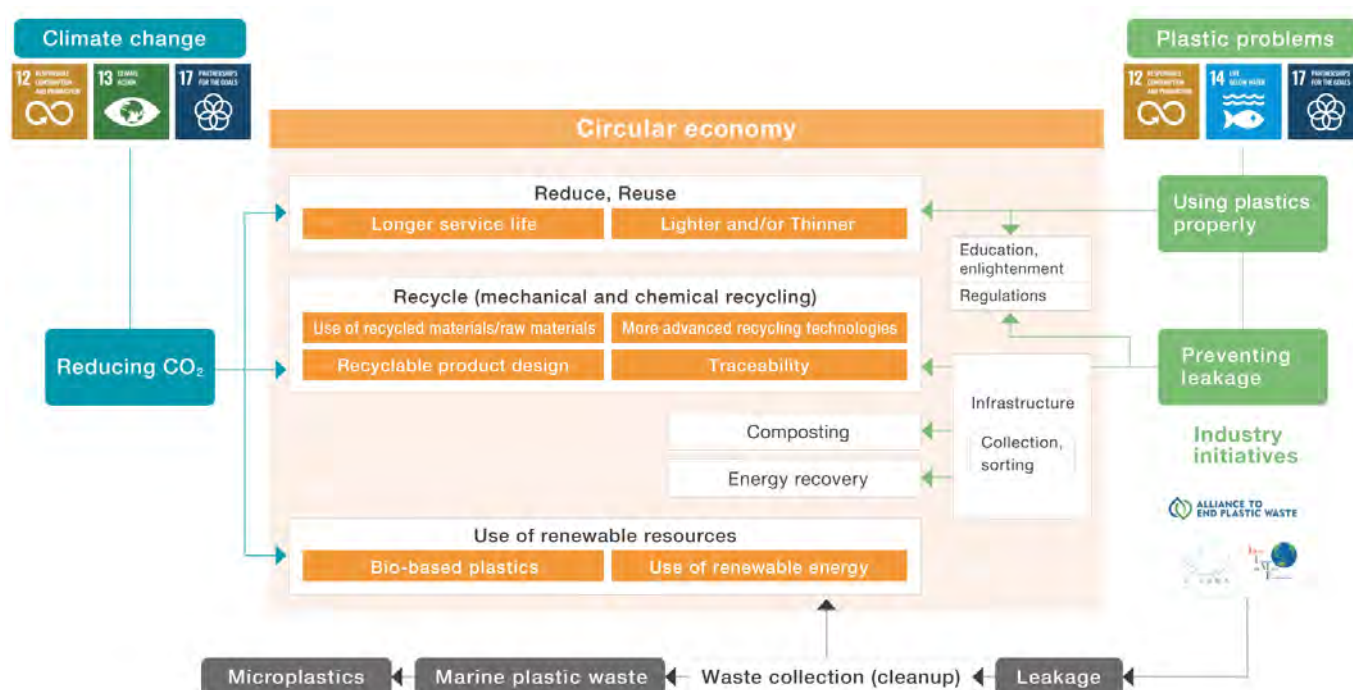
Management System

Basic Approach

Through its supply of chemicals and highly functional plastic products, the Mitsui Chemicals Group has contributed to improving convenience in people's lives and helped to solve challenges in society by, for example, improving energy efficiency and reducing food loss. At the same time, our business activities require the substantial use of fossil resources and energy, which emits large volumes of GHGs. Also, in recent years there is growing concern over environmental pollution caused by plastic waste that has leaked into the oceans. We see these problems pertaining to climate change and plastics as serious challenges for society that must be earnestly addressed. As these two issues are inseparable, we established the Climate Change/Plastics Strategy Department within the Corporate Sustainability Division to strengthen our response in June 2020.

To resolve these challenges, we believe that a transition is needed from a so-called linear economy of consuming resources and disposing of products, to a circular economy in which renewable resources are used and other resources are utilized efficiently as well as collected for reuse to prevent waste.

Adopting a life cycle assessment (LCA) approach, we are striving to bring about a circular economy through efforts focused on both climate change and problems with plastic.



The responsible officer in charge of the Corporate Sustainability Committee is the responsible officer.

The Corporate Sustainability Committee is responsible for deliberation on policy, strategy, planning, and countermeasures concerning climate change and plastic problems. The deliberation results are then reported to the Management Committee. The agendas are then, as necessary, discussed by the Group-wide Strategy Committee meetings and deliberated by the Management Committee. The Board of Directors then finalizes the agendas and monitors them.

We have formed a sub-committee within the Corporate Sustainability Committee to discuss plastics strategies and climate change measures in detail. This sub-committee has a Group-wide structure comprised of a working group and a steering committee. Under this structure, the working group gathers candidate projects that align with our policies and strategies from across the Group, and works on firming up the details and proposes them to the steering committee. If some of the candidate projects would be difficult for one division to implement alone, the working group handles internal coordination between related divisions. The steering committee reaches swift decisions by selecting projects from among those proposed by the working group, deciding on resource allocation, and approving the projects.

Sustainability Management > System and Responsible Officers



Climate Change and Problems with Plastic

Management System

Climate Change Policy

Carbon neutral strategy

Plastics Strategies

Initiatives to Build a Circular Economy

Implementing the recommendations of the TCFD

Climate Change Policy

The Mitsui Chemicals Group takes into account foreseeable opportunities and risks from a long-term perspective with a view to the year 2050 and tackles climate change issues with two approaches: mitigation and adaptation.

With this in mind, we have formulated a policy on addressing climate change that covers the entire global value chain.

Mitsui Chemicals Group Climate Change Policy

Taking climate change as a top priority issue, the Mitsui Chemicals Group will undertake initiatives for collaboration and co-creation in the global value chain.

Mitigation

Realizing a low-carbon society by
reducing GHG emissions

Opportunities and risks

Low-carbon manufacturing

- Energy conservation and renewable energy
- Switching to alternative raw materials and fuels

Product-driven GHG reductions

- Blue Value™ products

Improved recycling technology

- Innovation in materials and design

Maximization of value chain contributions

Adaptation

Realizing a society resistant to climate
change risks that ensures health and
well-being

Opportunities and risks

Improving water security

- Risk management at production sites
- Effective use of water resources

Expanding lineup of adaptable products

- Rose Value™ products

Strengthening of value chain resilience

Climate change

Mitigation Measures: Realizing a low-carbon society by reducing GHG emissions

The Mitsui Chemicals Group focuses on reducing GHG emissions as one means of mitigating climate change. We are vigorously reducing GHG emissions throughout the value chain by improving production processes, products, and recycling technologies, aiming to build a low-carbon society. GHG emissions reduction is incorporated in [our Carbon Neutral Strategy](#), established in fiscal 2020, and we are now working on the further implementation of concrete measures.

Low-carbon manufacturing

Chemical products use raw materials derived from fossil resources. And they are manufactured through a number of processes in which fossil fuels are converted to steam or electricity. For these reasons, the chemical industry emits far more GHGs than other industries. We believe we can contribute to greatly reducing GHG emissions in the manufacturing of our chemical products up ahead by implementing various measures. For example, cutting down on energy used in manufacturing by mainly using high-performance catalysts and installing energy-efficient equipment, making active use of renewable energy, and switching to low-carbon raw materials and fuels.

Product-driven GHG reductions

Chemical products are used in a broad range of end products and can contribute to reducing GHGs at each stage of the product lifecycle. Within the Mitsui Chemicals Group, we certify those products that are environmentally friendly as [Blue Value™ products](#). One of the contribution categories used in our certification assessment is CO₂ reduction—we therefore evaluate how much a product reduces GHGs at each stage of its lifecycle. Through the expansion of Blue Value™ products, we will contribute to reducing GHG emissions in society as a whole.

Improving recycling technology

Resource recycling not only helps to reduce usage of fossil materials and fuels by maximizing usage efficiency, but also decreases waste plastic and GHG emissions throughout the value chain. Under [the Plastic Strategy](#), the Mitsui Chemicals Group is refining its chemical and mechanical recycling technologies for waste plastic, as well as mono-material production of packaging, and aims to commercialize such technologies.

Climate change

Adaptation Measures: Realizing a society resistant to climate change risks that ensures health and well-being

As a means of adapting to the environmental abnormalities derived from climate change, the Mitsui Chemicals Group is carefully assessing risks and expanding its range of suitable products.

Improved water security

Damage from wind, floods, and drought are expected to increase as unrelenting global warming causes major changes in climate phenomena. Population increase and economic development are also expected to trigger large-scale water shortages. Owing to the fact that a lot of water is required in the manufacturing of chemical products—for example, for heating/cooling and product purification—changes in the available water supply or its quality could have a negative impact on our business activities. Given

that the Mitsui Chemicals Group maintains production sites in multiple regions around the world, we evaluate risks according to the region and take measures to minimize physical and human risks.

Water Risk Assessment

Expanding lineup of adaptable products

Global warming is having a profound impact on people's health and lives, as well as on agriculture and the ecosystem. The Mitsui Chemicals Group certifies products that help improve QOL in the areas of "enriching life and society," "extending healthy life-span," and "protecting food," as **Rose Value™ products**. By enhancing the number of Rose Value™ products that can contribute to infectious disease prevention, and disaster prevention and mitigation, we aim to realize a health and well-being society that is resilient to climate change risks and environmental changes.

Management System	Climate Change Policy	Carbon neutral strategy
Plastics Strategies	Initiatives to Build a Circular Economy	Implementing the recommendations of the TCFD

Carbon neutral strategy

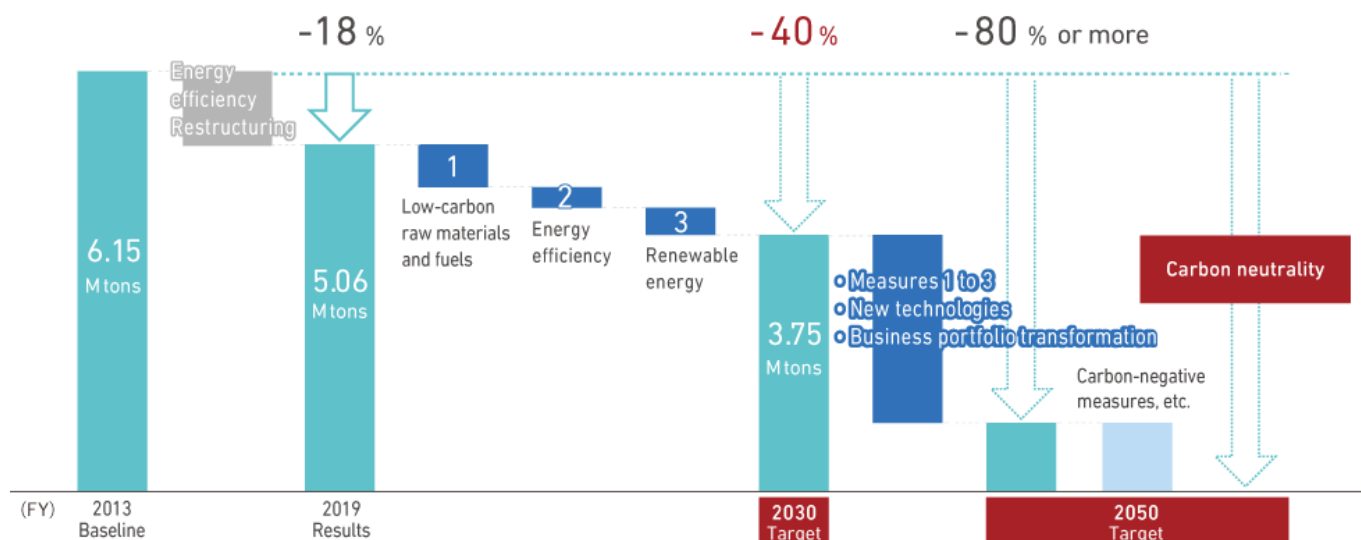
The Mitsui Chemicals Group's carbon neutrality by 2050

The Mitsui Chemicals Group believes that as a chemicals company we have an important role to play in helping to build a sustainable society that can limit the average global temperature rise to 1.5 degrees Celsius. Therefore, in November 2020, we declared our commitment to become carbon neutral by 2050. Our carbon neutral strategy is centered around the two pillars of (1) reducing our own greenhouse gas (GHG) emissions (Scopes 1 and 2), and (2) maximizing the avoided emissions of our products over their entire life cycle. We are starting off with the purpose of contributing greatly to the transformation of society.

1. Reducing GHG emissions of the Mitsui Chemicals Group (Scopes 1 and 2)

We plan to focus our efforts to reduce GHG emissions (Scopes 1 and 2) on production sites with greater emissions volumes. Specifically, we aim to reduce our GHG emissions by 40% by fiscal 2030 compared to fiscal 2013 through transitioning to low-carbon raw materials and fuels, conserving energy by installing highly energy-efficient equipment and the like, and adopting renewable energy. We have set this as one of our non-financial targets in VISION 2030.

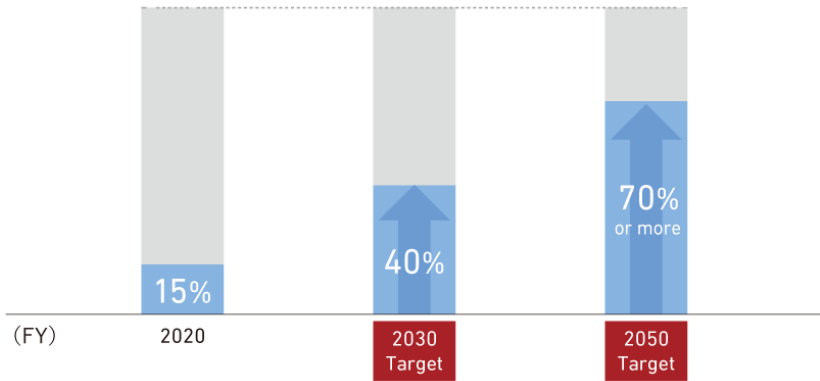
In order to reach carbon neutrality by 2050, in addition to the aforementioned measures, we intend to achieve 80% or more of these reductions mainly through development of new technologies and the transition of our business portfolio—though this presupposes external factors concerning markets and customers falling into place. We also plan to pursue policies which include the development and implementation of carbon-negative technologies, such as carbon capture, utilization, and storage (CCUS), to handle the remaining 20%.



2. Maximizing avoided GHG emissions through provision of our products

Many of the chemical products we provide go through various life stages in the hands of our customers, including processing, use, and disposal. Through our supply of **Blue Value™ products** with environmental contribution value, we aim to maximize avoided GHG emissions over the entire product life cycle. In this way, we intend to help all of society achieve carbon neutrality. In order to reach carbon neutrality by 2050, we have set a 40% or greater Blue Value™ products sales revenue ratio as one of our non-financial metrics in VISION 2030. As part of our carbon neutral strategy, hereafter, we plan to incorporate measures to expand the lineup of and increase sales revenue ratio of Blue Value™ products into the individual strategies of each business domain.

Blue Value™ products sales revenue ratio

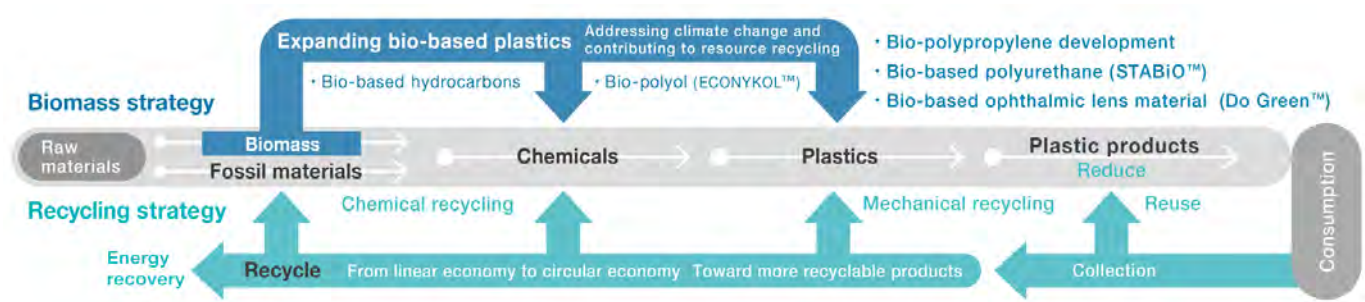


Management System	Climate Change Policy	Carbon neutral strategy
Plastics Strategies	Initiatives to Build a Circular Economy	Implementing the recommendations of the TCFD

Plastics Strategies

On the issue of plastics—which are mainstay products of the Mitsui Chemicals Group—we are focusing on the following two strategies that cover the entire supply chain.

By implementing these strategies and addressing the problem of marine plastic waste, we aim to close the plastic loop and help achieve a circular economy.



Biomass strategy: Expanding lineup of bio-based plastic products

Bio-based plastics made from plants—which grow by absorbing carbon dioxide—are attracting much attention as a possible substitute for conventional petroleum-derived plastics. As we believe that a shift to biomass feedstock encourages the recycling of resources, curbs the use of new fossil fuels, and therefore helps mitigate climate change, we aim to expand our lineup of bio-based plastic products.

Recycling strategy: Promoting plastic recycling

In the near future, policy incentives for products that contain recycled plastic and changing consumer attitudes may reduce demand for virgin plastic.

To adapt to these changes in social needs, we will incorporate recycled materials as well as recycled raw materials into our business. We are exploring a broad range of possibilities, including chemical and mechanical recycling of waste plastic, development of mono-material packaging, and support for startup businesses.

Problem of marine plastic waste

The problem of marine plastic waste owes to plastics that have escaped from the process for recycling resources and ended up in marine environments due to inappropriate waste management. Preventing plastic waste from leaking into rivers and the sea is of utmost importance, and requires a united effort by companies in the entire plastics supply chain. We are tackling this problem by participating in global alliances such as the Alliance to End Plastic Waste (AEPW) as well as domestic alliances such as the Japan Clean Ocean Material Alliance (CLOMA) and the Japan Initiative for Marine Environment (JaIME).

Alliance to End Plastic Waste (AEPW)

Established in 2019. Signatories to the AEPW include global companies involved in the plastic value chain, such as chemical and plastic manufacturers, retailers, and waste management companies across the world. The Alliance is committed to the goal of investing \$1.5 billion until 2024 to help end plastic waste and contribute to a sustainable society by driving progress in four key areas: infrastructure development to manage waste, innovation, education & engagement activities and clean-up activities. (As of June 2021, the AEPW has 58 corporations actively participating.)



Mitsui Chemicals Joins New Global Alliance Formed to Take on Plastic Waste in the Environment

Clean Ocean Material Alliance (CLOMA)

The Alliance was established in January, 2019 as a platform for strengthening coordination among a broad range of interested parties across various industries. To date, the organization has engaged in technical information sharing among members and organized partner matching opportunities. In May 2020, the CLOMA Action Plan was released with the aim of achieving a package recycling rate of 60% by 2030 and a plastic product recycling rate of 100% by 2050. The activities it specifies include studying concrete measures and plans for demonstration tests. (As of June 2021, 430 corporations are participating.)



Japan Initiative for the Marine Environment (JaIME)

In September 2018, the Initiative is established by Japanese five chemical industry associations such as the Japan Chemical Industry Association. With the participation of Japanese corporations and organizations in the chemical industry, it communicates the findings on lifecycle assessments (LCA) of the environmental impacts of various recycling and energy recovery methods. In February 2020, the activities it organized to support developing Asian countries in upgrading their plastic waste management capabilities included a training seminar that presented the knowledge and experience of the Japanese participants.



Climate Change and Problems with Plastic

Management System	Climate Change Policy	Carbon neutral strategy
Plastics Strategies	Initiatives to Build a Circular Economy	Implementing the recommendations of the TCFD

Initiatives to Build a Circular Economy

The Mitsui Chemicals Group regards conversion to a circular economy as of prime importance to resolving social challenges such as climate change and plastic waste. We established a Carbon Neutral Strategy and a Plastic Strategy (recycling and biomass) and are now undertaking concrete actions.

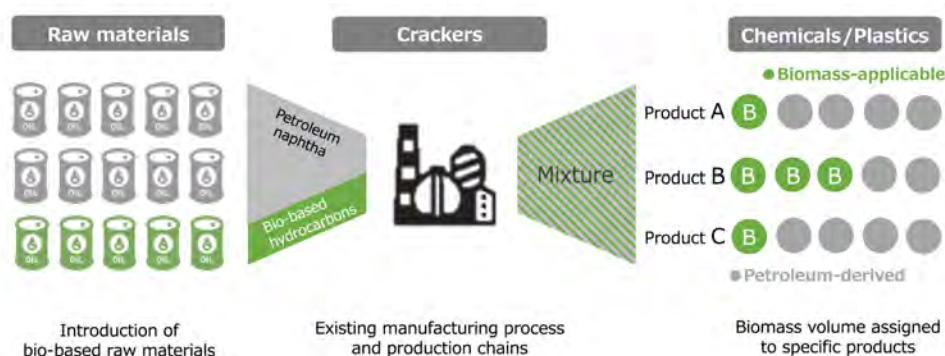
Circular economy initiatives by the Mitsui Chemicals Group

 : Carbon neutral strategy  : Recycling strategy  : Biomass strategy

Starting production of Japan's first renewable plastics from 100% bio-based hydrocarbons

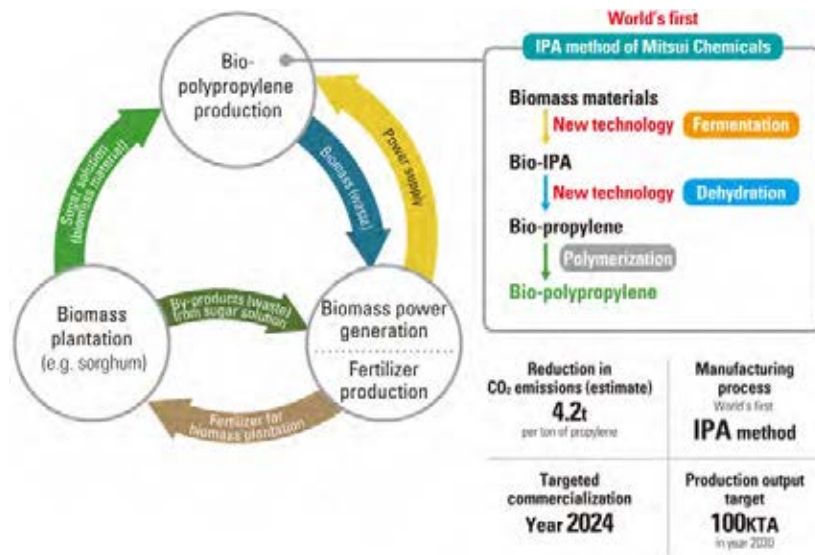
Starting in 2021, we will introduce bio-based hydrocarbons produced by Finland-based Neste Corporation from renewable raw materials, such as bio-based waste and residue oils, as feedstock for our crackers at Osaka Works.

We will start producing and marketing renewable chemicals (such as phenol) and renewable plastics (such as polyolefin) under the mass balance approach, which allows for the allocation of bio-based content to specific products.



Sights set on world's first bio-polypropylene commercial application

There are significant hurdles associated with manufacturing polypropylene from biomass materials and the technology has yet to be demonstrated on an industrial level. We are taking on the challenge of conducting world-first bio-polypropylene manufacturing trials by harnessing our new proprietary technology in which fermentation is a key reaction. By mainly using non-edible plants as the biomass raw material and converting the raw material residue to electricity, we aim to establish a sustainable technology that can be put to effective use.



Study launched with BASF to support chemical recycling in Japan

Chemicals borne out of chemical recycling can be used in the production of new materials such as plastics, without compromising on quality in even the most sensitive applications. This fact makes it a promising complementary solution for recycling plastic waste that is not suitable for mechanical recycling.

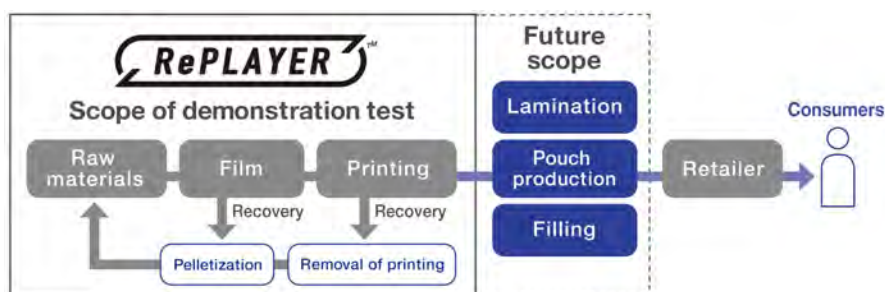
To address the plastic waste issue in Japan, we have partnered with BASF with a view to commercializing chemical recycling in Japan through cooperation across the value chain. The collaboration will combine BASF's technologies and know-how accumulated through its ChemCycling™ project with our assets such as technologies and ethylene crackers. Together, the Mitsui Chemicals Group and BASF will evaluate collaborative business models and various options.

Joint Research with Nagaoka University of Technology to Propel Plastic Waste Recycling

Plastic waste often includes varying states of the material. This results in regenerated plastic obtained from mechanical recycling being unable to maintain a consistent level of fluidity or quality, which limits its range of possible applications. In a joint development project with Nagaoka University of Technology, we are working to develop technology that will facilitate in-line measurement and control for melted plastic's fluidity, which will in turn help to stabilize the quality of the regenerated plastic.

Launching demonstration facilities for mechanical recycling of flexible packaging materials in fiscal 2021

The Mitsui Chemicals Group is working to cut down on the amount of plastic waste generated in the flexible packaging materials sector, which is the largest application for our strong business in polyolefin resins and films. We have been running demonstration tests aimed at recycling waste plastics, which were created from film production and printing processes, into new film to be used as a flexible packaging material. As part of our project, we have also introduced new facilities that facilitate the removal of printing from printed film. We plan to start demonstration testing using these facilities before the end of fiscal 2021. Going forward, we will consider expanding the scope of our project to also include waste plastics from lamination through to pouch production, filling, and consumption.



Collaboration with IBM Japan to Build a Blockchain-Based Recycling Platform

Securing traceability with clear identification of ingredients is a key issue in using recycled materials and parts. This joint project aims to establish traceability across the lifecycle of a material, from its stage as an ingredient—such as a monomer or polymer; the stage as a product—covering manufacturing, sales, and usage; and on to the stage of recycling—covering collection, disassembling, chipping, and reuse in new products.

Utilizing CHEMIPEARL™ as a Heat Sealant for Environmentally Friendly Paper Packaging

In TOKYO PACK 2021, a packaging exhibition held in February 2021, a new environmentally friendly paper package, Flepack ONE, was announced. We participated in developing Flepack ONE jointly with Nippon Paper Industries Co., Ltd. and Yoshimoto Printing Inc. utilizing the materials, technologies, and facilities possessed by each company. This joint development opened an opportunity for us to introduce our CHEMIPEARL™ waterborne polyolefin dispersion as a heat sealant for environmentally friendly packages to both domestic and overseas packaging markets.

STABio™ Won Incentive Award Under the 19th GSC Awards

Mitsui Chemicals' PDI-based polyisocyanurate, STABio™, won the Incentive Award under the GSC Awards presented by the Japan Association for Chemical Innovation. This award was given in recognition of our development of 1,5-Pentamethylene diisocyanate (STABio™ PDI™)—the world's first bio-based isocyanate—and its derivative polyisocyanate hardener.

* GSC Awards:

Awards to acknowledge individuals and organizations who have made excellent contributions to the pursuit of green and sustainable chemistry (GSC).

ADMER™ EF Series, Environmentally Friendly Lineup of Adhesive Resin

ADMER™ is a polyolefin-based adhesive resin that Mitsui Chemicals developed as a world-first. ADMER™ is used in multilayered bottles, tubes, films, and sheets. Now the product lineup includes the eco-friendly ADMER™ EF Series that has been long awaited by customers to contribute to building a circular economy. The series comprises the following two grades: (1) biomass grade (Biomass ADMER), which contains at least 50 percent biomass, and (2) recycling agent grade, which improves the physical properties of plastics such as shock resistance and strength retention when recycling.

Gas Turbine Power Generation System

A highly efficient gas turbine power generation system was installed in Mitsui Chemicals Osaka Works (Takaishi City, Osaka Prefecture) and operations commenced on December 1, 2020.

The system increases the Works' self-sufficiency in power. It also reduces fuel usage by the naphtha cracking furnaces in the ethylene plant by using the high-temperature exhaust generated by the power plant as the burning air used in the furnaces. This is reducing CO₂ emissions from Osaka Works by 70,000 tons per year. We continue to employ various CO₂ emissions reduction schemes toward carbon neutrality by 2050.

Climate Change and Problems with Plastic

Management System	Climate Change Policy	Carbon neutral strategy
Plastics Strategies	Initiatives to Build a Circular Economy	Implementing the recommendations of the TCFD

Implementing the recommendations of the TCFD

In January 2019, the Mitsui Chemicals Group announced its support of the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD^{*}). As a chemical company, we intend to earnestly tackle climate change, deepen our understanding of the opportunities and risks that affect our businesses, and endeavor to actively disclose our initiatives.



*** TCFD:**

The TCFD was set up by the Financial Stability Board. In June 2017 it announced recommendations calling for financial institutions, corporations, and governments to disclose the business impacts of climate change in their financial reports. According to the TCFD, 1,027 institutions worldwide have expressed their support for the recommendations (as of February 2020).

The recommendations of the TCFD urge companies to disclose information about climate change-related governance, business strategy, risk management, and metrics and targets. In line with the TCFD's recommendations, the Group will take the following approach.

1. Assessing materiality of climate-related risks

Qualitatively analyze risks and opportunities concerning climate change in our key businesses

2. Identifying and defining range of scenarios

Forecast the changes in our business environment concerning climate change (scenarios) and examine their impacts

3. Quantifying business impacts

Quantify impacts on future business strategies and financials based on our scenarios and reflect them in strategies

4. Identifying potential responses

Determine the measures for climate change strategy and select management control indicators



1. Assessing materiality of climate-related risks

As a first step, we assessed the impacts of climate change on the Group's businesses.

1) Assessment scope

Selected key business areas in the Group susceptible to the impacts of climate change.

(1) Mobility, (2) Petrochemical feedstocks, (3) Agriculture, (4) Health Care, (5) Electricals and electronics, (6) Packaging, (7) Energy solutions

2) Assessment method

1. Identification of climate change risks and opportunities

Identify risks (both physical and those pertaining to the transition to a low-carbon society) and opportunities based on the information disclosure framework presented in the TCFD's Final Report.

2. Picking out major risks and opportunities

Pick out the particularly major risks and opportunities from those identified above in light of their potential occurrence and impact on business (human loss, financial impacts, etc.). When doing so, take into account factors such as trends in international discussions, the Group's business regions, and case examples at other companies.

3) Assessment results (● denotes risks; ● denotes opportunities)

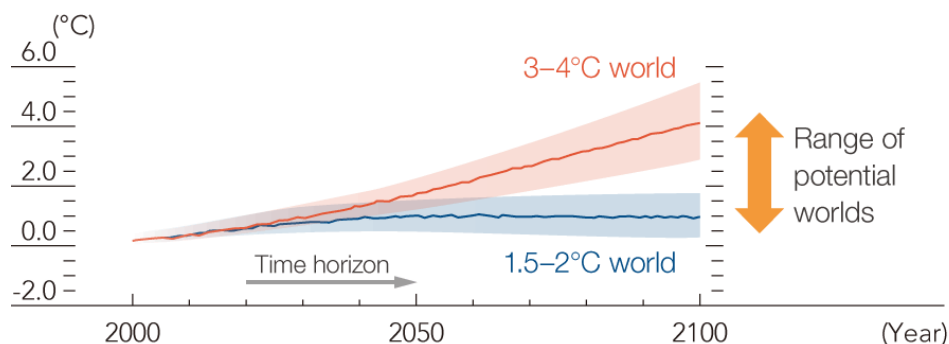
Assessment items		Group-wide	Specific business areas
Physical risks/ opportunities	Acute	● Heightened risk of wind or rain damage (floods/storms)	
	Chronic	<ul style="list-style-type: none"> ● Heightened risk of rising sea levels (high tides) ● Heightened risk of freshwater scarcity 	<ul style="list-style-type: none"> ● Changes in arable land and development of new agricultural technology (3) ● Wider distribution of pests, weeds, and bacteria (3) ● Wider prevalence of infectious diseases caused by climate change (4)
Risks/opportunities related to transition to low- carbon economy	Policy and legal	<ul style="list-style-type: none"> ● Risks from introduction of, and increases in, carbon pricing ● Increase in litigation risks 	<ul style="list-style-type: none"> ● Impacts on business from shift to EVs (1)(5) ● Restrictions on use of synthetic chemical fertilizers (3)
	Technology	<ul style="list-style-type: none"> ● Uptake of renewable energies ● Accelerated development of CCU technology and advanced recycling technology 	<ul style="list-style-type: none"> ● Uptake of biomass plastics (1)(2)(6) ● Faster transition to low-GHG emissions technology (2)(5)(6)
	Market	<ul style="list-style-type: none"> ● Spread of circular economy ● Transition to renewable raw materials ● Calls for manufacturers to use renewable energy ● Higher prices for scarce resources due to shift to EVs and transition to a hydrogen-fueled low-carbon society 	<ul style="list-style-type: none"> ● Decrease in auto manufacturing and sales volume owing mainly to increase in ridesharing and carsharing (1) ● Shortage of naphtha due to decline in oil production output (2) ● Increased demand for renewable energy (7)
	Reputation	● Increased investor approaches	

* External data used include IPCC RCP2.6, RCP8.5, IEA B2DS, and SDS.

2. Identifying and defining range of scenarios

Based on our materiality assessment, we selected a "3–4°C world" scenario and a "1.5–2°C world" scenario. We amended our previous scenarios when we made our Carbon Neutral Declaration in November 2020.

Global Average Surface Temperature Change



Source: IPCC AR5 SYR Fig. SPM.6

Scope of scenario analysis

Business areas

All business areas (priority on the following areas due to significant impact on finances and GHG emissions)

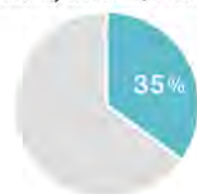
Mobility business

- ✓ Mobility business sales revenue ratio
- ✓ Mobility business operating income before special items ratio

Sales revenue ratio (Mobility business, FY2020)



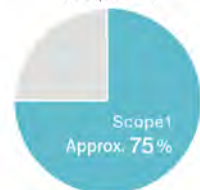
Operating income before special items ratio (Mobility business, FY2020)



Petrochemicals business

- ✓ Related to fossil fuel and energy (electric power) which is essential for manufacturing products
- ✓ In-house energy production and product manufacturing account for approximately 75% of our GHG emissions

GHG emissions ratio (Scope1, 2)



Time horizon

Present day to 2050 (references data through 2100 on physical risks and opportunities)

* External data used

Data on transition to low-carbon economy: IEA SDS, 2DS, B2DS, NZE2050, The Future of Petrochemicals

Data on physical aspects: IPCC RCP2.6, RCP8.5

Potential worlds

3–4°C world	1.5–2°C world
<p>Negative on decarbonization due to prioritizing of economic activity</p> <ul style="list-style-type: none"> ◆ Implementation of current climate change policies only <ul style="list-style-type: none"> ● Introduction of carbon tax ◆ Catastrophic worsening of natural disasters caused by abnormal weather ◆ Expansion in demand for fossil energy and raw materials <ul style="list-style-type: none"> ● Rise in prices of coal, gas, and oil ● Rise in the price of fossil-fuel generated electric power ◆ GHG emissions to rise around 1.3 times (2050) 	<p>Realization of carbon-free society being the top priority</p> <ul style="list-style-type: none"> ◆ Implementation of ambitious climate change policies <ul style="list-style-type: none"> ● Large increase in carbon tax ● ICE sales suspended, switch to EVs ◆ Gradual worsening of natural disasters ◆ Shift to carbon-free energy and raw materials <ul style="list-style-type: none"> ● Renewable energies become mainstream ● Cut backs on chemical usage due to recycling ● Production of chemicals from bio-based and CO₂ raw materials ◆ Carbon neutrality achieved (2050)

3. Quantifying business impacts

We conducted an impact assessment on events related to risks and opportunities under the selected scenarios (the "3–4°C world" and "1.5–2°C world" scenarios), and identified large business impacts for the Group.

Identified business impacts

Scenarios	Events	Business impacts (● denotes risks; ● denotes opportunities)
3–4°C world	Catastrophic worsening of natural disasters	● Increased damage to production sites due to flooding along coasts and rivers (property damage, decreased operating rate, supply chain disruptions)
	Increased demand for products to adapt to global warming	● Increased sales revenue of Rose Value™ products (contribute to disaster prevention/mitigation measures and prevention of infectious disease)
1.5–2°C world	Strengthened regulations to stimulate transition to a carbon-free society	● Increased manufacturing costs and deteriorating profits due to taxes placed on fossil fuels by the introduction of a carbon tax
		● Avoiding deterioration in earnings by taking steps to prepare for a possible carbon tax and other regulations, and increasing sales revenue of products that comply with regulations

1.5–2°C world	Market changes brought about by decarbonization	<ul style="list-style-type: none"> Increased raw materials costs due to decreased naphtha production volume driven by decreased consumption of fossil fuels
		<ul style="list-style-type: none"> Increased sales revenue of Blue Value™ products, which contribute to GHG emissions reduction across the value chain, arising from the use of biomass materials, non-fossil fuels, and renewable energy
	Accelerating growth of the circular economy	<ul style="list-style-type: none"> Creation of new business opportunities by introducing the recycling (mechanical and chemical recycling) and CCUS technology that stakeholders are calling for
	Responding to demands from stakeholders	<ul style="list-style-type: none"> Declining valuation and reduced opportunities to secure investment due to insufficient response to demands by customers and investors to reduce GHG emissions
		<ul style="list-style-type: none"> Increasing corporate value and growing opportunities to secure investment due to proactive disclosure of information about how we are addressing climate change (strategy/progress)

4. Identifying potential responses

Considering the results of impact assessments under the selected scenarios, we have incorporated our carbon neutral strategy into VISION 2030. In our carbon neutral strategy, we have formulated a roadmap for reducing our Group's Scope 1 and Scope 2 GHG emissions to achieve carbon neutrality by 2050. We have also set GHG emissions reduction targets for 2030. Going forward, we plan to incorporate our carbon neutral strategy into the individual strategies of each business domain, and consider concrete action plans, key performance indicators, and the like.

Visualizing Contributions to the Environment and Society Blue Value™ — Environmental Contribution Value Rose Value™ — QOL Improvement Contribution Value

Blue Value™ / Rose Value™ Products

Visualizing Contributions to the Environment and Society



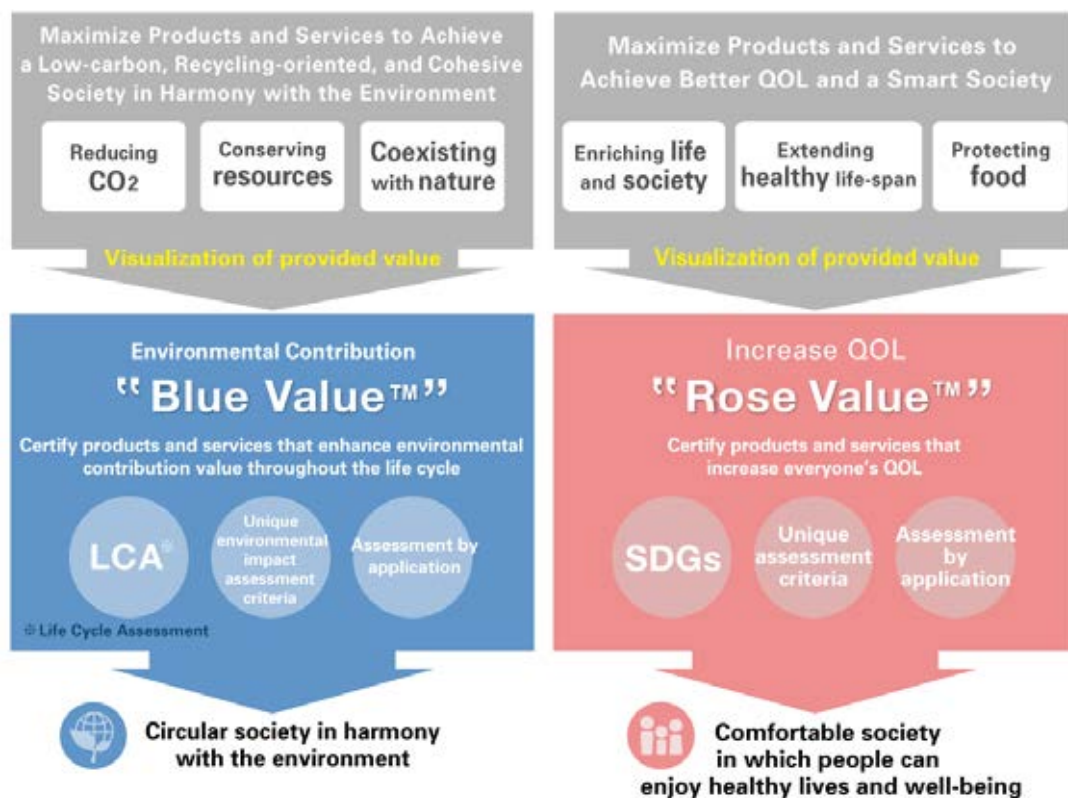
Our Blue Value™ and Rose Value™ help visualize the contributions our products and services make to the environment and society and enable us to share those values with stakeholders so we can realize our ideal future society—a circular society in harmony with the environment and a comfortable society in which people can enjoy healthy lives and well-being.

We evaluate our products and services according to application using our own distinctive yardsticks: the Blue Value™ Index for assessing environmental impacts and the Rose Value™ Index for assessing improvement in quality of life (QOL). Those that make significant contributions to the environment or improvements to QOL are certified as Blue Value™ and Rose Value™ products respectively. At the same time, we need to make sure that one type of contribution does not hinder the other.

We are contributing to our stakeholders and society and aiming to realize our ideal future society by providing and developing the Blue Value™ and Rose Value™ products.

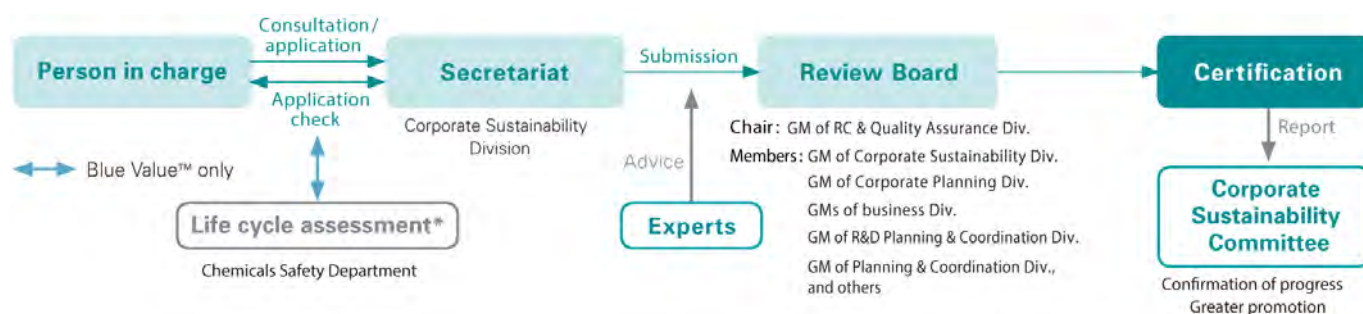
Features

- Visualizing contributions to the environment and society through our business activities and communicating those values to our stakeholders
- Checking application-specific contributions at each stage of the product lifecycle
- Further developing and providing products and services with high contribution value and aiming to realize of our ideal future society



Screening and Certification Process

The person in charge of sales and marketing first assesses the potential Blue Value™ or Rose Value™ product or service using the aforementioned indices and then consults with and submits an application to the secretariat. The review board deliberates on the supporting evidence and certifies the product or service if it satisfies the criteria. The deliberations focus on whether the product's concept and selling point are consistent with the area in which it offers contributions, as well as to check the level of those contributions. In order to certify products and services with an emphasis on appropriateness and objectivity, our assessment methods and screening criteria have been designed based on the advice of external experts. We also ask these experts to present their opinions prior to the review board regarding the candidate product's level of contribution.



* Life cycle assessment:

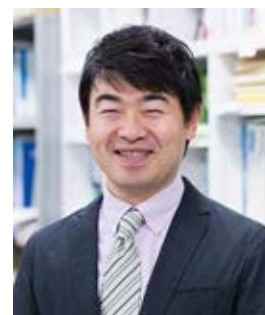
A technique to quantitatively assess environmental impacts associated with all the stages of a product's life, from raw materials, to manufacture, processing, use, and disposal.

Expectations from external expert (Blue Value™ advisor)

Decarbonization and a circular economy are central to solving the world's problems, as well as to corporate growth strategies, and businesses need to promote cross-industry eco-innovation.

Blue Value™ helps visualize the reduction in environmental impact of products from a product life cycle perspective. This is extremely important information for quickly achieving a carbon neutral and recycling-oriented society.

Mitsui Chemicals has adopted the sales revenue ratio of Blue Value™ products as a key performance indicator for its long-term business plan targets, which contributes to the rapid spread of eco-products. So, I strongly support its activities.



Dr. ITSUBO Norihiro

Professor, Faculty of Environmental Studies

Dean, Graduate School of Environmental and Information Studies

Tokyo City University

Expectations from external expert (Rose Value™ advisor)

Since fiscal 2019, "Ensuring the sustainability of communities" has been added as a new evaluation category in the Rose Value™ Index. It includes perspectives such as disaster prevention/mitigation measures, longer service life of infrastructure, and shift to ICT in communities. This agrees with the Mitsui Chemicals Group's pledge under VISION 2030 to roll out a social issue perspective across all of its companies and businesses, and to move away from its historical business focus on materials supply to those based on a social issue perspective. It has also set a Rose Value™ products sales revenue ratio of 40% or more as a key performance indicator in its long-term business plan targets. This is an era in which employees having excellent sensitivity to the needs and challenges of society deliver a competitive edge to a business. I believe that the Rose Value™ Index is a potent opportunity to gain such a perspective.



Mr. ADACHI Eiichiro

Senior Counselor, Japan Research Institute, Limited

* each affiliation is from the time when the article was created.

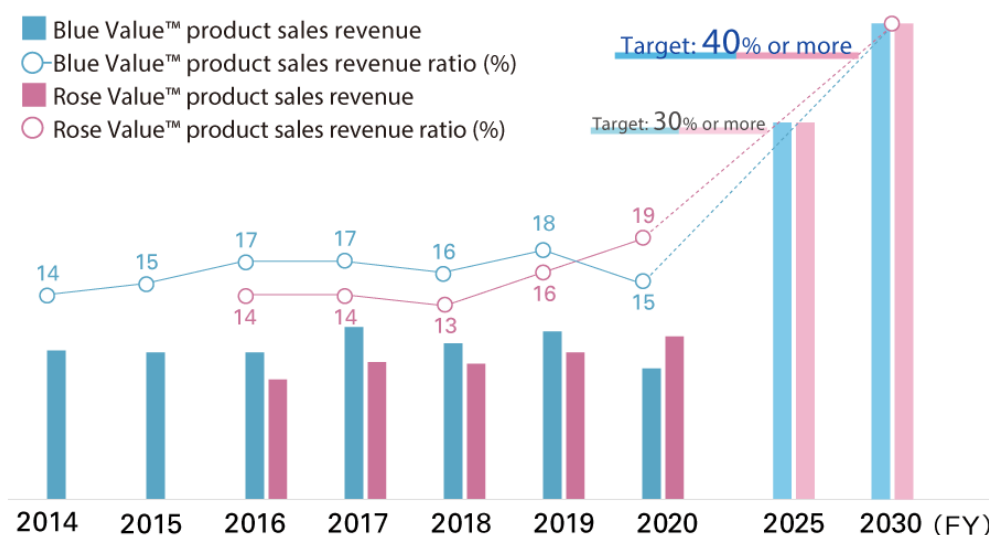
Incorporating Blue Value™ and Rose Value™ Into Business Management

The Mitsui Chemicals Group believes that the increase in the sales revenue ratio of Blue Value™ and Rose Value™ products demonstrates that the Group is progressing toward realization of the ideal future society. This is the reason we have adopted the sales revenue ratio of Blue Value™ and Rose Value™ products as KPIs for our environmental and social targets.

We have incorporated the efforts surrounding Blue Value™ and Rose Value™ products more deeply into our business management

in fiscal 2021. Our Carbon Neutral Strategy states, “Working with customers to achieve widespread implementation of GHG-reducing products, allowing us to maximize our avoided emissions,” and at the same time, setting out the sales revenue ratio target for Blue Value™ products. Also, the VISION 2030 long-term business plan outlines our transition to a business model that adopts a social challenge viewpoint along with reform of our business portfolio. At the same time, it set a sales revenue ratio target of 40% for each of the Blue Value™ and Rose Value™ products by fiscal 2030 as a non-financial metrics to contribute to society through expansion of sales of these products.

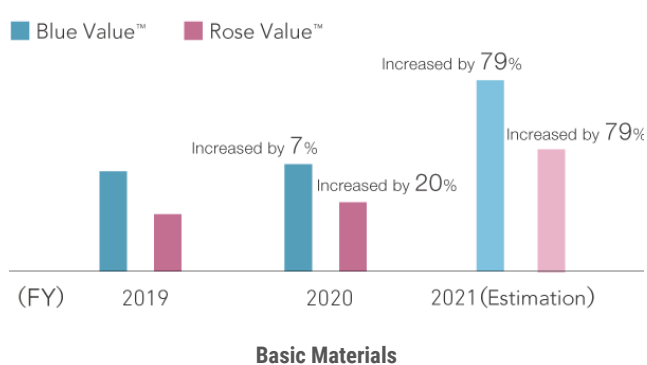
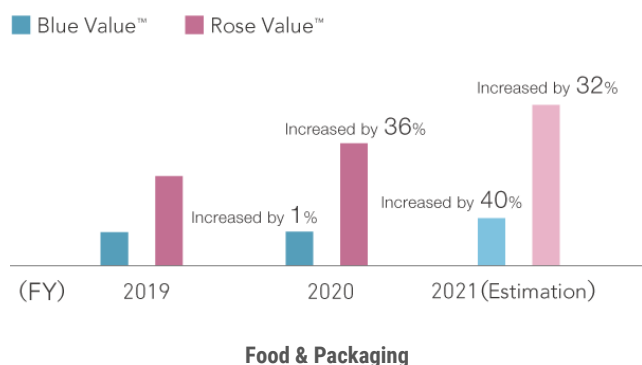
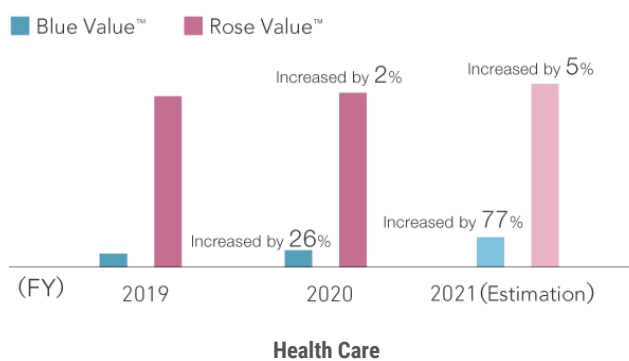
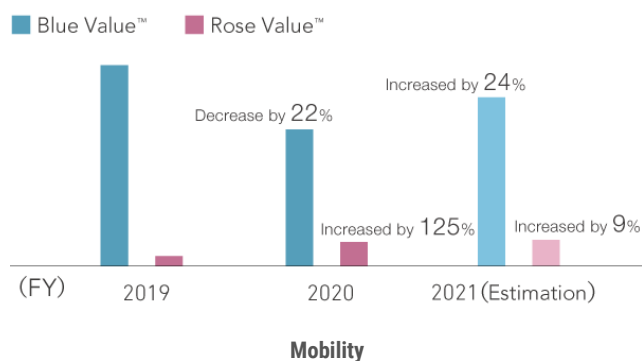
Blue Value™ Products / Rose Value™ Products sales revenue ratio



Initiatives to Expand Sales of Blue Value™ and Rose Value™ Products

To expand sales of our Blue Value™ and Rose Value™ products, the Mitsui Chemicals Group has been monitoring their sales ratio and has introduced Blue Value™ and Rose Value™ indices when assessing possible large-scale investments—in other words, the investment decision is made after due evaluation of opportunities and risks from the social challenge viewpoint in addition to the conventional financial viewpoint. In fiscal 2020, we newly set out annual targets for sales expansion of Blue Value™ and Rose Value™ products, specifying the actual sales figures as a management indicator. These targets will then be incorporated into the business strategies of each business division.

Sales Revenue of Blue Value™ Products / Rose Value™ in Different Business Segments



* The percentage increase or decrease compared to the previous fiscal year for our Blue Value™ and Rose Value™ products are shown.

Moreover, we believe that the incorporation of life cycle assessment/life cycle thinking, environmentally compliant design of products and services, and the management of chemical substances, are important for sustainably producing products and services that address climate change and help to achieve carbon neutrality and a circular economy.

Therefore, starting from the initial stages of research and development, we perform simple checks from the points of view of Blue Value™ and Rose Value™.

We also conduct preliminary examinations of Blue Value™ and Rose Value™ product candidates before they go to market, to make clear the performance and value requirements for contributing to the environment and society. And we use the results of these preliminary examinations to forecast the progress of sales revenue ratio targets and to consider and execute expansion measures. Hereafter, we will build a framework for incorporating the Blue Value™ and Rose Value™ viewpoints into product design and application development from the research and development stage. We will continue to strengthen our sustainability assessment efforts, including life cycle assessment.

By incorporating the Blue Value™ and Rose Value™ viewpoints into the research and development stage of the “seeds” of products and services, we can ensure the sales expansion of Blue Value™ and Rose Value™ products over the medium- to long-term. In turn this helps us to achieve the sales revenue ratio targets stated in VISION 2030 toward building the future society at which we are aiming.

Visualizing Contributions to the Environment and Society **Blue Value™ — Environmental Contribution Value** Rose Value™ — QOL Improvement Contribution Value

Blue Value™ / Rose Value™ Products

Blue Value™ — Environmental Contribution Value



Instead of green, which is associated with nature and ecology, blue represents something much bigger—the earth. It is also our corporate color and signifies harmony with the global environment and our contributions to society.

Many chemical products pass through various stages; for example, they are manufactured and processed into end products and then disposed of after use. We assess how we can reduce a product's impact on the environment at each stage of its lifecycle. By sharing this information with various stakeholders, we believe we can further contribute to environmental protection. With [this idea](#) in mind, we devised the Blue Value™ standard for environmentally friendly products in 2015 with the aim of achieving a circular society in harmony with the environment.

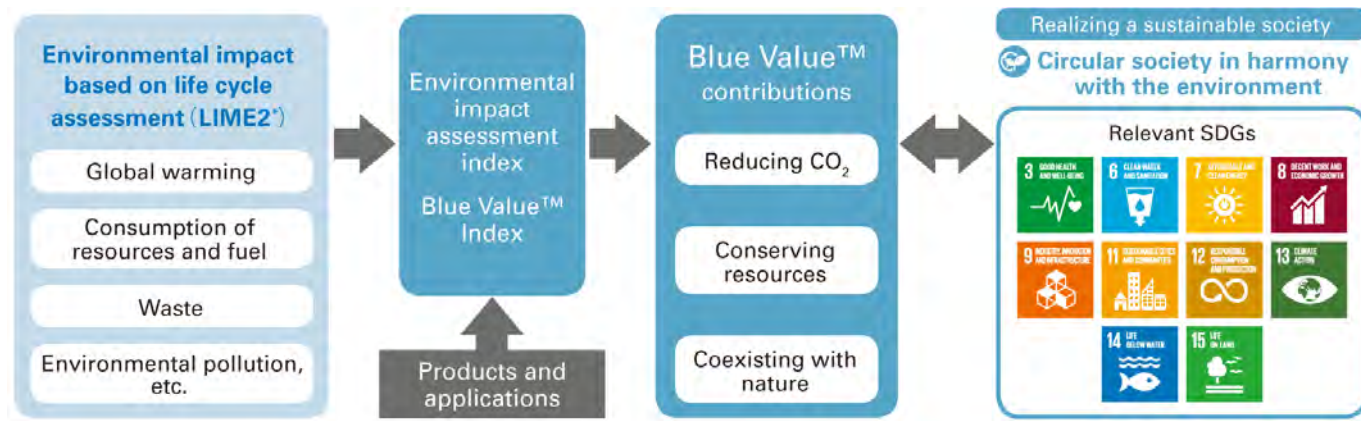
We use the Blue Value™ Index—our own LCA-based environmental impact assessment index—to evaluate products and services depending on their application and certify them as Blue Value™ if they significantly contribute to protecting the environment in the following three categories: (1) reducing CO₂ ; (2) conserving resources; and (3) coexisting with nature.

We carry out comparative assessments against market-standard products and our existing product lineup because a requirement for Blue Value™ certification is that not only must the product have a higher score in either of the evaluation categories, it must not be inferior in all categories for each stage of its lifecycle. Moreover, the use of qualitative and semi-quantitative assessments means products can be easily evaluated, but whenever required, the department responsible for LCAs can technically and quantitatively assess the superiority of a product's environmental contributions.

Blue Value™ products play an important role in the Mitsui Chemicals Group's efforts towards [material topics](#). We visualize the progress of our efforts in the areas of Climate Change and Circular Economy by utilizing the sales revenue ratio of Blue Value™ products as a KPI. Also, the life cycle assessment as a part of the Blue Value™ screening process examines the design of products and services from an environmentally conscious viewpoint to ensure designs that take account of the product's impact throughout its life. We are sure that this achieves the comprehensive life-cycle considerations in our product designs.



The Mitsui Chemicals Group aims to realize a circular society in harmony with the environment through utilization of Blue Value™ criteria and increasing the number of Blue Value™ products and services.

[Examples of Blue Value™ Product Contributions across Product Life Cycle Stages](#)



- * LIME2 (Lifecycle Impact assessment Method based on Endpoint modeling):
Damage assessment-type lifecycle environmental impact assessment method based on environmental conditions in Japan.

Environmental Impact Assessment Index – Blue Value™ Index

Contributions	Blue Value™ Index	
	Evaluation categories	Related assessment items
Reducing CO₂ 	<ul style="list-style-type: none"> ● Reduction of GHG emissions Reduce GHG emissions at the raw materials acquisition, manufacturing/processing, and end products use/disposal stages. ● Saving of energy, electricity, fuel Reduce energy such as electricity and fuel at the raw materials acquisition, manufacturing/processing, and end products use/disposal stages. Use of end products in the energy conservation field. 	
Conserving resources 	<ul style="list-style-type: none"> ● 3Rs, ease of sorting, conservation of resources 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. 	
	<ul style="list-style-type: none"> ● 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. 	<ul style="list-style-type: none"> ● Weight and volume reduction ● Long service life ● Natural energy sources ● Non-fossil raw materials ● Environmental cleanup

Coexisting with nature



- **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 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.

- * Related assessment criteria are evaluated on contributions to any one of the evaluation criteria.
- * GHG emission-related global warming substances, chemical substances harmful to ecosystems, and environmental pollutants are all substances for which characterization factors have been calculated in LIME2.

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

Mobility

Product	Application(s)	Life Cycle Stage	Reasons for Blue Value™ Certification	Contributions		
				CO ₂	Resources	Nature
TAFMER™	Bumper and instrument panels	Manufacturing, Processing	Reduces energy consumption during polymer manufacturing with the use of high-productivity catalysts.	○		
Mitsui EPT™	Weather-strip sponge	Manufacturing	Reduces energy consumption during polymer manufacturing with the use of high-productivity catalysts.	○		
LUCANT™	Lubricant additive for automobiles	Use	Improves fuel efficiency by reducing temperature dependence of lubricant's viscosity and maintaining appropriate viscosity.	○		
Polypropylene (PP) compounds	Bumper and instrument panels	Processing	Reduce GHG emissions by roughly 13% by not requiring painting process.	○	○	
ADMER™	Adhesive polyolefin for plastic fuel tanks	Use	Lightens fuel tanks by 10-30% with the use of plastic instead of metal	○		
ARLEN™	ABS pistons	Use	Reduces weight by 60% through use of alternatives to metal.	○		
AURUM™	Turbo seals	Use	Increase the fuel economy through use of alternatives to metals.	○		
MILASTOMER™	Oil-resistant automotive parts	Use	Reduces weight by 10-15% comparing to market-standard products, and fuel saving.	○		

Food & Packaging

Product	Application(s)	Life Cycle Stage	Reasons for Blue Value™ Certification	Contributions		
				CO ₂	Resources	Nature
STABIO™	Hardener for coatings	Materials, Processing	Reduces fossil resource consumption with use of bio-based raw materials and the use of solvents during paintings.	○	○	
T.U.X™	Sealant films	Processing	Saves energy by using a lower heat seal temperature, while its improved film strength means less resin is used.	○	○	
ECONEIGE™	Food packaging materials	Processing	Delivers a white finish by diffusing light on layers of air created inside films. Reduces the amount of resin used by 20-30% without the 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 Material	Use	Contributes to improved safety during construction and prevention of environmental pollution because does not contain solvents.			○
SPASH™, Pal Fresh™	Food packaging materials	Use	Reduces GHG emissions by reducing the amount of food wastes.	○		
IGROS™ Tape	Electronic components manufacturing process films	Processing	Emits no air pollutants and ecotoxic substances in tape manufacturing process because does not contain solvents.	○	○	○
SOLAR ASCE™	Encapsulant sheets for solar cells	Use	Reduces power generation loss by improving ability to withstand high humidity and insulation durability.	○	○	

Health Care

Product	Application(s)	Life Cycle Stage	Reasons for Blue Value™ Certification	Contributions		
				CO ₂	Resources	Nature
Do Green™ MR-174™	Ophthalmic lens materials	Materials	Reduces fossil resource consumption with 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™	Nonwoven fabric for disposable diapers	Use	Reduces amount of waste by using a fiber structure that offers both softness and strength.	○	○	

Basic Materials

Product	Application(s)	Life Cycle Stage	Reasons for Blue Value™ Certification	Contributions		
				CO ₂	Resources	Nature
ECONYKOL™	Seat material	Materials	Reduces fossil resource consumption with use of bio-based raw materials.	○	○	
MOSDIO™	Rear doors	Processing	High rigidity enables replacement of metal parts. Realizes 30% reduction in weight.	○		
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 reduction agent	Use	Reduces NOx emissions. Contributes to fuel efficiency	○		○

Next Generation Business

Product	Application(s)	Life Cycle Stage	Reasons for Blue Value™ Certification	Contributions		
				CO ₂	Resources	Nature
Diagnostics and Consulting Services for Solar Power Generation Plants	—	Use	Reduce GHG emissions, which in turn assists clients in preventing yield reduction of solar power generation plants.	○		

Visualizing Contributions to the Environment and Blue Value™ — Environmental Contribution Value
Society

Rose Value™ — QOL Improvement Contribution
Value

Blue Value™ / Rose Value™ Products

Rose Value™ — QOL Improvement Contribution Value



La Vie en rose

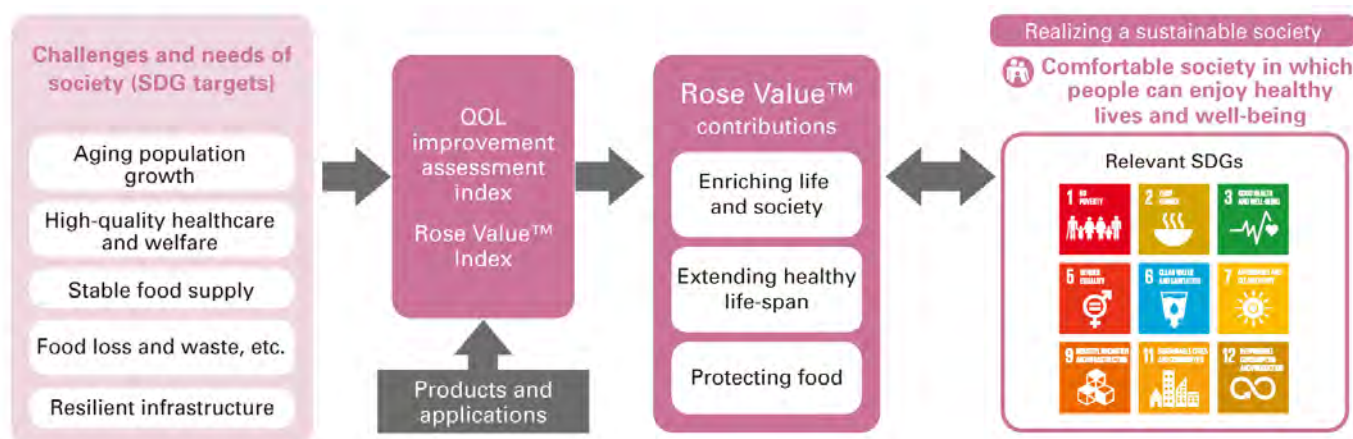
Days brimming with happiness and hope for people from all walks of life.



In 2016 we devised the Rose Value™ for products and services that help improve QOL in order to demonstrate the kind of value our Group can provide in aiming to realize a comfortable society in which people can enjoy healthy lives and well-being.

We use the Rose Value™ Index—our own QOL improvement assessment index developed in accordance with the targets of the SDGs and other needs of society—to evaluate products and services in consideration of sustainable procurement and certify them as Rose Value™ if they significantly contribute to improving QOL in the following three categories: (1) enriching life and society; (2) extending healthy life-span; and (3) protecting food. We use qualitative and easy-to-understand evaluation criteria incorporating mainly universal design and amenity, resilient and smart city, universal health coverage, and food security perspectives to carefully examine whether the value of the functions and concept of a potential Rose Value™ product or service contributes to improving QOL in the evaluation categories. In response to the changing challenges and needs of society, in 2019 we added to and amended the categories to contribute to sustainable communities, including disaster prevention/mitigation and longer infrastructure life.

Rose Value™ plays an important role in the Mitsui Chemicals Group's efforts towards material topics. We visualize the progress of our efforts in the areas of Health and Livelihood, Highly Livable Communities, and Food Security by utilizing the sales revenue ratio of Rose Value™ products as a KPI. Also, the QOL improvement viewpoint in the Rose Value™ screening process ensures product design based on full life-cycle considerations.

The Mitsui Chemicals Group aims to realize a comfortable society in which people can enjoy healthy lives and well-being through utilization of Rose Value™ criteria and increasing the number of Rose Value™ products and services.



Contributions	Rose Value™ Index evaluation categories
<p>Enriching life and society</p> 	<ul style="list-style-type: none"> ● Improving comfort in people's lives Provide products, buildings and spaces that take into consideration the needs of a variety of people. ● Enhancing nursing care Specialized nursing and caregiving is a component of “improving comfort in people's lives”. ● Ensuring the sustainability of communities Promote disaster prevention/mitigation measures, longer service life of infrastructure, shift to ICT in communities.
<p>Extending healthy life-span</p> 	<ul style="list-style-type: none"> ● Supporting physical well-being Assist, improve, and heighten functions throughout the body, either directly or indirectly. ● Advancing medical care and pharmaceuticals 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. ● Preventing and taking action against 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.
<p>Protecting food</p> 	<ul style="list-style-type: none"> ● Improving food productivity Raise food yields as well as work efficiency; improve related equipment capabilities. ● Guaranteeing safe and stable food distribution Secure and raise the level of safety and stability in food distribution. ● Reducing food loss and food 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.

Visualizing Contributions to the Environment and Blue Value™ – Environmental Contribution Value Rose Value™ – QOL Improvement Contribution Value

Society

Blue Value™ / Rose Value™ Products

Blue Value™ / Rose Value™ Products


Some of our Blue Value™ and Rose Value™ products are shown below.

 Blue Value™

Reduces CO₂

Conserves resources


Coexists with nature

 Rose Value™

Enriches life and society

Extends healthy life-span

Protects food




Reduces CO₂

Conserves resources

Bumper and instrument panel materials

PP compounds

Reduce GHG emissions by roughly 13% by not requiring painting process.



Reduces CO₂

Adhesive polyolefin for plastic fuel tanks

ADMER™

Lightens fuel tanks by 10-30% with the use of plastics instead of metal.

Reduces CO₂


Coexists with nature

Exhaust gas reduction agent

AdBlue™

Reduces NOx emissions.

Contributes to fuel efficiency.



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


Reduces CO₂

Conserves resources

Seat cushion material

ECONYKOL™

Reduces fossil resource consumption with use of bio-based raw materials.





Reduces CO₂

Conserves resources

Milky-white food packaging film

ECONEIGE™

Delivers a white finish by diffusing light on layers of air created inside films.

Reduces the amount of resin used by 20-30% without the need for white printing.



Reduces CO₂

Conserves resources

Protects food

Sealant film

T.U.X™

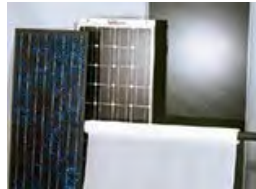
Saves energy by using a lower heat seal temperature, while its improved film strength means less resin is used. Its excellent sealing performance and impact resistance reduces the amount of food wasted in food production and distribution.

Reduces CO₂

Encapsulant sheets for solar cells

SOLAR ASCE™

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



Reduces CO₂

Diagnostics and Consulting Services for Solar Power Generation Plants

Reduce GHG emissions, which in turn assists clients in preventing yield reduction of solar power generation plants.



Extends healthy life-span

Ophthalmic lens materials

MR™

Contributes to vision correction, eye health, and comfort.



Enriches life and society

Nonwoven fabric for disposable diapers

SYNTEX™

Pursues the basics of being leakproof, breathable, and unlikely to cause diaper rash, as well as a higher level of functionality, such as comfort and a snug fit.

Reduces CO₂

Conserves resources

Enriches life and society

Nonwoven fabric for disposable diapers

AIRYFA™

Reduces amount of waste by using a fiber structure that offers both softness and strength. Disposable diapers support comfortable living for babies and their carers.



Enriches life and society

Food packaging materials

CMPS™

Easy-open film that even children and the elderly can manage.



Protects food

Insecticide

TREBON™

Contributes to stable crop production and helps boost food production.



Protects food

Hybrid rice

Mitsuhikari

F1 hybrid rice cultivar with superior high yield and taste. Mitsuhikari's delayed harvesting has the advantage of dispersing the concentration of harvesting resources, and results in the improvement of food productivity.

Extends healthy life-span

Insecticide

VECTRON™

Controls mosquitos, a carrier of infectious diseases like malaria. Contributes to the eradication of malaria.



Protect food

Reduce CO₂

Keep-fresh film

SPASH™, PALFRESH™

Suppress wilting and discoloration of fruits and vegetables and contribute to a reduction in food loss. Reduce GHG emissions by reducing the amount of food wastes.



Reduces CO₂

Conserves resources

Extends healthy life-span



Extends healthy life-span

Pre-filled Syringe

APEL™

Ophthalmic lens materials

Do Green™ MR-174™

Reduces fossil resource consumption with use of bio-based raw materials.

Minimum drug alteration thanks to lower elution compared to glass. Chip-proof structure ensures safe use. Contributes to advancement of medical care and pharmaceuticals.

Extends healthy life-span

Medical packaging material

APEL™

Low moisture permeability protects soluble medicines and maintains medicinal quality.

Contributes to advancement of pharmaceuticals.



Extends healthy life-span

Artificial limb material

HI-ZEX MILLION™

High impact resistance and flexible shaping enable creation of exceptionally well-fitting artificial limbs suitable to different body parts. Contributes to support physical well-being.



Enriches life and society

Cooking equipment

TPX™

Highly non-stick surface keeps dirt away and ensures easy cleaning. Contributes to improve enhancing comfort in people's lives.



Enriches life and society

Heat-resistant food container

TPX™

Material provides transparency equivalent to glass and heat resistance as high as to be microwavable. Contributes to improve enhancing comfort in people's lives.



Enriches life and society

Various Handle Parts

MILASTOMER™

Good plasticity and nonslip surface enables good hold with minimum effort.

Contributes to improve enhancing comfort in people's lives.



Reduces CO₂

Coexists with nature

Enriches life and society

Extends healthy life-span

Seat cushion materials

Nextyol™

Improved automotive fuel economy delivered from lighter weight and drastic reduction in VOCs and odor contribute to mitigating climate change and to



creating a comfortable living environment.



Extends healthy life-span

Synthetic pulp for water purifier filter

SWP™

Capture and removal of heavy metals and other impurities makes water safe to drink.



Enriches life and society

Synthetic pulp used in fiber cement construction materials

SWP™

Results in fiber cement construction materials that are resistant to brittleness and cracks, extending the life of infrastructure and contributing to sustainable urban development.

Protects food

Synthetic pulp for teabags

SWP™

Enables teabags to be heat-sealable, eliminating the need for metal staples.

Contributes to food safety in production and in consumption, as well as the safety of the product itself.



Enriches life and society

Concrete surface reinforcement agent

Toughness Coat™

Resin film formed on the surface of concrete structures gives greater durability and impact resistance, extending the life of infrastructural systems and preventing and reducing the effects of disasters.



Enriches life and society

Mitsui Gas Pipe System

Pliable polyethylene pipes bend as needed to prevent gas leaks even after ground deformation. Helps prevent and reduce the effect of disasters.



Enriches life and society

Rainwater storage tank permeation layer

Geopool

Installed under parking areas, etc., it controls surface water flow by storing rainwater temporarily and gives a slow release, preventing flooding after rainstorms, etc.

Enriches life and society

Foundation reinforcement injection materials

Ground Ace™

Foundation of structures can be reinforced without removing the structure, even for liquefied soil. Contributes to swift restoration after a disaster.

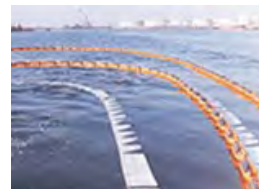


Enriches life and society

Hazardous substance adsorbent materials

Tufnel™, Oil Blotter™

Adsorbs oil without absorbing water and without sinking in the water. Prevents oil dispersion in oceans or rivers after an oil tanker grounding resulting in leakage.



Enriches life and society

Sanitation wipe

FASTAID™ Virus Sweeper Towel

Towel soaked in sodium hypochlorite solution can be produced easily. Easy to store and useful in emergencies or during evacuation to a shelter.



Risk and Compliance Management

- Management System
- Risk Prevention Measures
- Compliance Training

Bribery Prevention

Tax

Information Management

Risk and Compliance Management

Management System

Risk Prevention Measures

Compliance Training

Management System

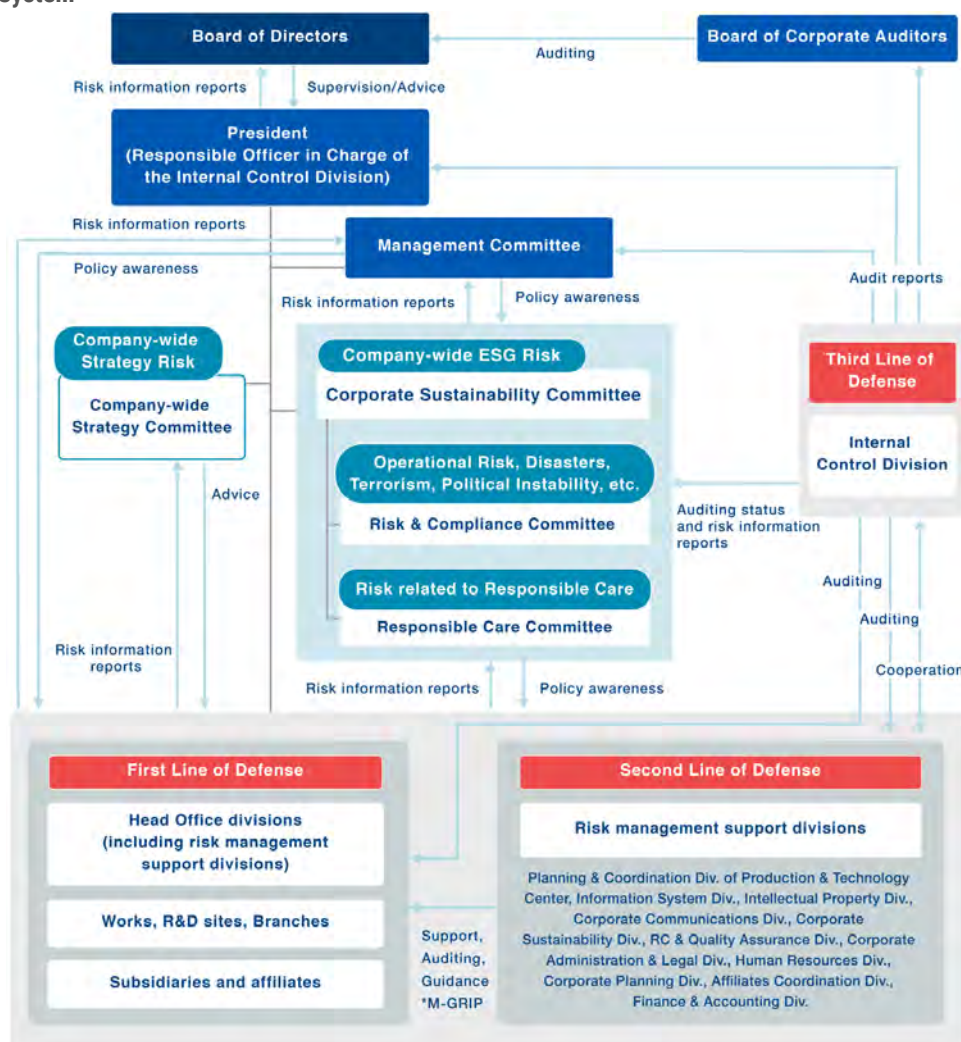
Policy and Basic Approach

To earn the trust of our shareholders, customers, the local community and all our other stakeholders, and to fulfill our corporate social responsibilities, it is crucial to effectively engage in risk management and compliance promotion structure. We will endeavor to uncover new risks that arise in response to changes in our business portfolio, expansion of business and changes in the external environment, and also prevent those risks from materializing.

In February 2006, the Mitsui Chemicals Group formulated its [Action Guidelines](#), which provide the basis for the actions of all its personnel, and introduced the two maxims, “always act in good faith” and “have a high regard for people and society.” Acting in accordance with these action guidelines and risk management rules (company regulations) allows us to remain in control of all risks that could potentially threaten our business activities, thus retaining the trust of our stakeholders and fulfilling our corporate social responsibility.

System and Responsible Officers

Risk Management System



The Board of Directors is responsible for risk management across the entire Mitsui Chemicals Group.

* M-GRIP: The abbreviation of “Mitsui Chemicals – Global Risk Management & Business Support Improvement Platform”.

First and second lines of defense

All our divisions (Head Office, Works, laboratories, branch offices and affiliates) conduct risk assessments in accordance with [the risk model](#) and [procedures](#) within the annual budget. Having identified the risks, they design and implement a management system to address the risks within the organization. The responsible officer in charge of each division is responsible for identifying and managing the risks. (First line of defense)

To ensure that risk management is fully implemented in each division, the risk management support divisions with specialized knowledge provide support to each division and may conduct audits or give guidance when necessary. (Second line of defense)

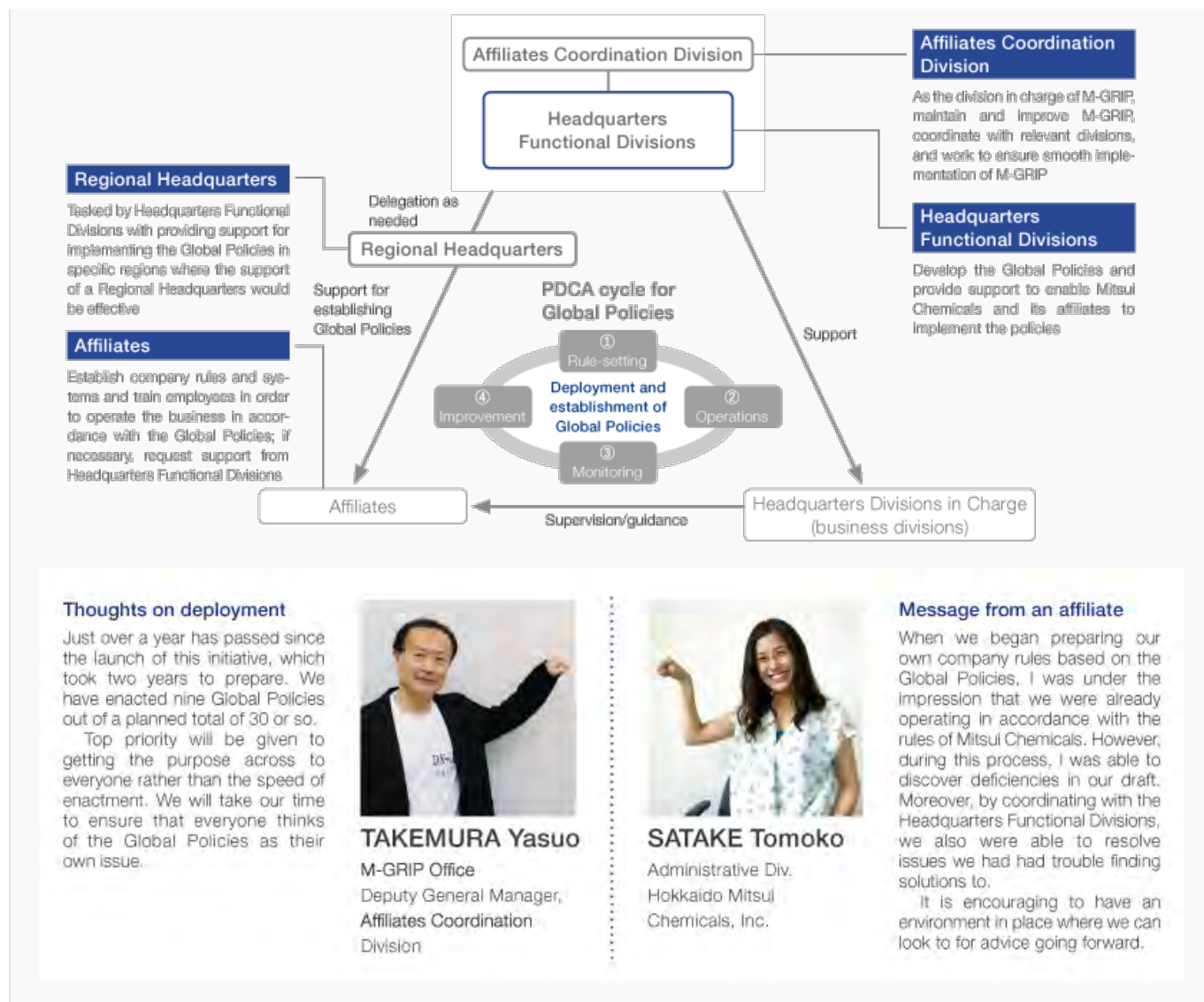
Each division reports information according to the type and severity of the risks to [the Company-wide Strategy Committee](#), [Corporate Sustainability Committee](#), Risk & Compliance Committee and [Responsible Care Committee](#). Each of these committees deliberates on how to address the risks and either issues their decision as the policy of the division or provides advice. [The Management Committee](#) collects information on the risks identified in the whole of the Mitsui Chemicals Group and uses it as material for management decision-making and decides on what action to take.

M-GRIP: Strengthening the Group's global business governance

With the goals of reducing the risks that have grown as globalization accelerates and of further transforming and expanding its business, since fiscal 2020, the Mitsui Chemicals Group has begun deploying the “Mitsui Chemicals Global Policy Platform” (M-GRIP), which is a shared indirect operations platform for the Group. M-GRIP is the mechanism that lays out a “Global Policy” comprising measures that are common to the entire Group regarding indirect operations such as human resources, accounting, and logistics. By ensuring that each company within the Group implements those measures, it allows the execution of proper business operations and ongoing improvements. In fiscal 2020, amid the ongoing COVID-19 pandemic, we explained the details of this mechanism to all Group companies via individual online meetings. Through dialogue, we sought to promote understanding of M-GRIP and firmly establish it within the Group. In addition, we established a total of nine Global Policies on matters such as anti-monopoly laws and information security, and they are beginning to be implemented worldwide. Over the next several years, we will prepare and deploy the necessary Global Policies. By fostering a common awareness throughout the Group and promoting sustainability management and thorough compliance, which helps improve corporate value, we are working to reduce and avoid risk and improve business efficiency, thereby supporting the realization of a corporate group that enjoys sustainable growth.

M-GRIP Deployment Chart

The Headquarters Functional Divisions, the Regional Headquarters, the affiliates, and the Affiliates Coordination Division are working together, each playing its respective role.



Third line of defense

The Internal Control Division independently audits operations in both the first and second lines of defense and provides assurance to top management and the Board of Directors. The Internal Control Division conducts business audits and responsible care audits to maintain and strengthen the level of internal control in the Mitsui Chemicals Group and works to keep existing business risks at an acceptable level. At the same time, the Division conducts continual inspections and assessments of the design and operation of internal controls relating to financial reporting for the entire Mitsui Chemicals Group, as required under the Financial Instruments and Exchange Act, as the J-SOX assessment as a part of the statutory audit and directs its efforts to ensuring the correct and efficient execution of operations.

The business audit includes an internal audit process based on self-assessment of internal controls utilizing the compliance checklist. The compliance checklist includes items related to compliance with the competition law, prevention of bribery and corruption, insider trading and harassment, compliance with the securities export control regulations, appropriate handling of corporate and personal information, human rights, information systems security, risk management, credit management, fair accounting and tax administration, and organization and operation of appropriate internal controls. The checklist is revised every year. As process owners for each of the above items, the risk management support divisions are audited on the state of their operations. Additionally, audits are conducted based on a theme selected each fiscal year from the risk status both in and outside the organization.

From among the responsible care audits (environment & safety audit, occupational health audit, quality audit, and chemical safety audit), the Internal Control Division is responsible for executing the environment & safety audit and the occupational health audit.

The Internal Control Division also audits quality audit and chemical safety audit conducted by the risk management support divisions have been executed appropriately. In addition to on-site audits, we have established a remote audit system that can be conducted even when it is difficult to visit our sites because of the COVID-19 pandemic.

Risk & Compliance Committee and the roles of responsible officer on the committee

The Risk & Compliance Committee has been created to develop and execute specific policies, strategies and plans to address concerns related to risk management and compliance.

External risks such as natural disasters, terrorism, riots and political insecurity, and in the category of internal risks, operational risks represented by violation of laws and rules, loss of credibility of financial reports, environmental pollution, plant accidents, major occupational incidents, product liability litigation, loss of supplier credibility, mental health issues, deterioration of labor-management relations, information leaks and destruction of information communication systems, etc. are covered by the Committee's activities. The committee implements measures including information gathering and evaluation, issuing instructions to relevant divisions, development of the group-wide risk management policy, and reviewing countermeasures to specific risks. It also manages the whistleblowing (Risk Hotline) system. Important policies, strategies and plans decided by the Committee are approved by the Management Committee.

Composition of the Risk & Compliance Committee

Chair	The responsible officer in charge of the Risk & Compliance Committee
Members	Responsible officer in charge of the Corporate Sustainability Committee, Responsible officer in charge of the Corporate Administration & Legal Division, General Manager of the Internal Control Division, General Managers of the Planning & Coordination Divisions in each Business Sector, General Manager of the Planning & Coordination Division, General Manager of the Corporate Communications Division, General Manager of the Corporate Sustainability Division, General Manager of the RC & Quality Assurance Division, General Manager of the Corporate Administration & Legal Division, General Manager of the Human Resources Division, General Manager of the Finance and Accounting Division, General Manager of Corporate Planning Division, General Manager of the Affiliates Coordination Division, General Manager of the Information System Division, other members appointed by the Chairperson
Observer	Corporate Auditor
Secretariat	Corporate Administration & Legal Division, Human Resources Division, Finance and Accounting Division

Should there be an emergency* that seriously impacts or is likely to impact our Group or society at large and conducted action becomes necessary, The responsible officer in charge of the Risk & Compliance Committee coordinates action with the relevant directors and they jointly assess conditions. Based on the findings, a report is submitted to the President, who decides whether action should be taken by the company or whether a headquarters for corrective action should be formed. When a headquarters for corrective action is formed by a decision of the President, it will issue guidance and advice on the corrective action needed to resolve the situation.

The most recent case involves the formation of the COVID-19 Action Headquarters. The responsible officer in charge of the Risk & Compliance Committee is in charge of the headquarters, which makes decisions and gives instruction on measures to ensure employee safety and related matters.

* Examples of emergencies:

- Accidents or incidents in the Mitsui Chemicals Group that cause damage to the lives, health, property and living conditions of people or that are likely to have an impact on the environment in the surrounding area.
- An event causing grave losses of human and tangible assets or damage to the credibility of the Group and resulting in a significant decline in business performance or in serious claims for damages.

Goals and Results

KPI	Scope	FY2020			FY2021	FY2025 (Medium to Long-term)
		Goals	Results	Level Achieved	Goals	Goals
Incidence of major legal and regulatory violations	Mitsui Chemicals Group	0	1	×	0	0

Having decided on KPIs for social and environmental targets under the Long-Term Business Plan, VISION 2025, we state the figures for major legal and regulatory violations, including those that affect the Group's social standing, business operations, earnings and other key parameters. In fiscal 2020, there was one incidence of major legal and regulatory violation in our domestic subsidiaries. We are treating this incident very seriously. We will endeavor thoroughly to strengthen group-wide legal compliance, review internal control and prevent any further incidents of this sort from recurrence in Mitsui Chemicals Group.

Risk models (examples of possible risks)

Categories	Risk examples
Business	<ul style="list-style-type: none"> • Collapse of share in the materials market through entrance of competitors • Shortfall in meeting operating profit target due to rise in material prices and/or fluctuations in exchange rates • Poor spread and revenue declining due to slow recovery of the market • Sales decrease and decline in the market due to increase of imports, and increase of stock caused by falling sales • Significant deterioration in business due to reduced demand caused by changes in social climate • Influence on the business continuity by infectious diseases, etc.
Sales	<ul style="list-style-type: none"> • Violations of antitrust regulations
Product safety	<ul style="list-style-type: none"> • Inappropriate management of products to be exported
Compliance	<ul style="list-style-type: none"> • Contract-related problems and complaints • Non-compliance with intellectual property regulations • Violation of laws • Violation of tax laws regarding accounting procedures, or inadequate procedures
Health and safety	<ul style="list-style-type: none"> • Occurrence of serious accidents • Occurrence of serious occupational accidents • Non-compliance with laws related to the environment and occupational health and safety • Loss of social credibility through accidents or problems
Quality	<ul style="list-style-type: none"> • Inadequate management of high risk goods • Occurrence and increase in complaints • Occurrence of serious quality problems • Loss of social credibility through quality falsification
Production and facilities	<ul style="list-style-type: none"> • Production volume reduction due to problems in plants etc. • Production problems accompanying increase in operating efficiency • Occurrence of serious problems in using external facilities
Capital	<ul style="list-style-type: none"> • Occurrence of uncollectible debts
Human resources	<ul style="list-style-type: none"> • Increase in mental health problems • Occurrence and unsettled harassment issues
Information management	<ul style="list-style-type: none"> • Inadequate management of M&A-related internal information • Leakage of confidential information and/or private information • Leakage of customer information • Unaddressed information system security risks • Leakage of insider information

Examples of ESG risks in the supply chain

Environmental risks

Supply chain	
Issue	Risk example
Upstream-Downstream Environmental laws and regulations	<ul style="list-style-type: none"> • Cessation of plants that are not compliant with environmental laws and regulations • Cessation of material procurement and loss of customers accompanied by tightening of environmental laws and regulations • Increase in subcontract expenses to comply with environmental laws and regulations
Upstream-Downstream Climate change	<ul style="list-style-type: none"> • Cessation of plant operation caused by natural disasters (heavy rain, flooding, powerful typhoons, etc.) • General price rise due to energy shift as an anti-climate change measure and cost increase due to tax reforms in the subcontractors' countries
Upstream Destruction of nature	<ul style="list-style-type: none"> • Severe criticism from NGOs etc. due to participation in deforestation for oil palm plantations through palm oil usage • Backlash from communities due to inadequate control over air, water, and soil pollution, as well as waste emissions (possibly including violation of laws), which may lead to inability to continue plant operations
Upstream-Downstream Natural disasters	<ul style="list-style-type: none"> • Cessation of plant operation caused by natural disasters (earthquakes, tsunamis, etc.)
Upstream Material and energy procurement	<ul style="list-style-type: none"> • Purchase of high-priced materials as a result of environmental procurement based on customers' policies • Inability to procure materials due to decrease in by-product materials through suppliers shift to green production • Cessation of plant operations due to outages of electricity, water, etc. through physical or political reasons
Downstream Development of recycling	<ul style="list-style-type: none"> • Market shrinkage due to rapid increase in product recycling • Pressure on profits through requests from customers to share recycling costs • Difficulty in continuing business due to disuse of additives unsuitable for recycling

Social risks

Supply chain Issue	Risk examples
Upstream-Downstream Human rights violations	<ul style="list-style-type: none"> • Boycott of customers' products due to forced and/or child labor problems in subcontractors, followed by associated compensation • Boycott of products due to racial discrimination and/or human rights issues concerning workers in partner companies • Labor-management disputes and/or severe criticism from NGOs etc. due to unclear and/or discriminatory employment conditions for foreign workers • Severe criticism from NGOs etc. due to being regarded playing a role in local subcontractors' invasion of residential area for the indigenous population • Strikes or plant operation cessation following labor union formation and/or refusal of collective bargaining in local country
Upstream-Downstream Poor working conditions	<ul style="list-style-type: none"> • Health damage from worsened labor conditions in production sites etc. • Accidents or death from overworking of employees in subcontractors due to excessive long-hour working • Labor disputes and/or severe criticism from NGOs etc. due to failure to pay minimum wage or living wage
Upstream Conflict minerals	<ul style="list-style-type: none"> • Severe criticism from NGOs etc. for taking a part in inhuman acts through purchasing conflict minerals
Upstream-Downstream Severe criticism	<ul style="list-style-type: none"> • Severe criticism from NGOs etc. of a specific material or chemicals and plastics in general • Influence on business from tightening or changes to laws and regulations in response to rise in critical public opinion • Customers pulling out from business due to rise in critical public opinion and/or severe criticism

Governance risks

Supply chain Issue	Risk example
Upstream-Downstream Regional and geopolitical issues	<ul style="list-style-type: none"> • Plant operation cessation due to territorial disputes or terrorism • Stagnation or uncertainty of Mexican economy due to lack of progress in NAFTA negotiations • Steep rise in raw oil prices or procurement difficulties due to worsened Middle East situation • Difficulty in business continuation through withdrawal of investment due to trading with sanctioned countries
Upstream Bribery and corruption	<ul style="list-style-type: none"> • Loss of social credibility through bribery of local civil servant by local consultant

End

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 Prevention Measures

Risk Hotline

Our Risk Hotline enables any Group's 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.

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

Reporting and Consultation Desk

[Report and Consultation to the Company's Risk & Compliance Committee]

For the attention of:

The Secretariat, Risk & Compliance Committee

Corporate Administration & Legal Division

Mitsui Chemicals, Inc.,

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

E-mail : Risk@mitsuichemicals.com

[Report and consultation to external contact [attorney]]

For the attention of:

Mitsui Chemicals, Inc. Hotline

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

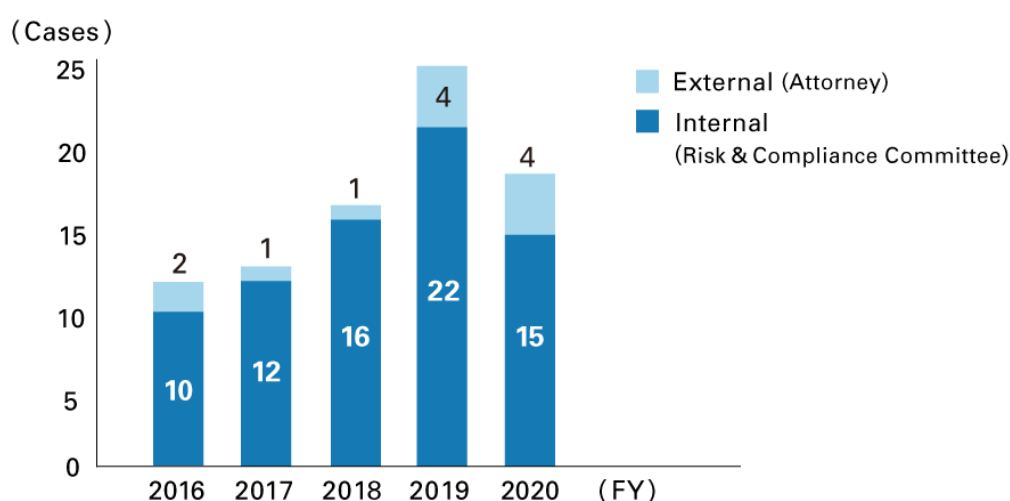
E-mail : risk-MCI@daiichifuyo.gr.jp

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

Operation of the risk hotlines

- 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 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



Business Continuity Plans (BCPs)

Due to the ever-present risks, such as large-scale disasters, an outbreak of a critical infectious diseases and large-scale accident at a production site, the Company prepares for crises that may have serious consequences for the 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. Additionally 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 a critical infectious diseases and for a large-scale accident at a production site.

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.

For COVID-19 pandemic, which is still sweeping the world, we have created a BCP per division assuming all possible situations in order to ensure employee safety and our swift action for business continuity while implementing appropriate prevention measures against COVID-19.

Compliance Training

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 [the 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.

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. We updated the guidebook regularly, and recently added points to bear in mind with regard to company and personal information when using social networking services (SNS).

We have compiled a guidebook on the theme of antitrust laws and corruption laws for the Asia-Pacific region and added a Chinese version containing information on Chinese laws and regulations and risks to the Japanese and English versions.

[Compliance Guidebook \(Excerpt\)](#) (PDF : 66KB)

Example-based Workplace Discussions on Legal and Regulatory Violations

Mitsui Chemicals 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 2020, we conducted discussions at 58 company departments and 22 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. In fiscal 2020, compliance awareness training was conducted as part of the new employee training, midcareer employee training and line manager training programs to foster awareness of compliance with laws and regulations, based on case studies and discussions of violations in the Group and other companies.

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.

Key Achievements of Stratified 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.

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.

e-Learning and Group 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 rules

Overseas compliance training

A guidebook on the theme of antitrust laws and corruption laws has been published and distributed throughout the Mitsui Chemicals Group. The Group's regional headquarters for China and the Asia-Pacific region have published their own handbooks on antitrust laws, corruption and bribery that are generally regarded as high risks and has distributed copies to affiliated companies in their respective regions. Training courses on these themes organized by legal professionals are being planned every two years. Since fiscal 2016, seminars on bribery regulations, antitrust laws and contracts have been held in China, Singapore, Thailand, Malaysia, India and Indonesia, and regular discussion training on cases of compliance violations around the world have been organized.



~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.

April, 2020



Osamu Hashimoto, President

~For compliance with laws and rules~

Compliance Guidebook

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Policy

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.

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.

Compliance training

The Mitsui Chemicals Group Policy on Bribery Prevention

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:

- (i) A person engaged in public duties for the national or local governments of his or her own or a foreign country ("Governments");
- (ii) 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;
- (iii) A member of staff of any of the following public companies or entities ("companies, etc.") granted special privilege by a Government:
 - (a) A company, etc. in which a Government directly or indirectly holds a majority of the voting shares or paid-in capital;
 - (b) A company, etc. the majority of whose officers are appointed or nominated by a Government;
 - (c) A company, etc. otherwise substantively controlled by a Government;
- (iv) A political party or a staff member thereof;
- (v) A candidate for public office;
- (vi) A person engaged in public duties for a public body;
- (vii) A person engaged in the affairs of Government or public body as authorized thereby; or
- (viii) Any other person similar to any of (i) through (vii) above

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

Established in December 2016

Policy and Basic Approach

The Mitsui Chemicals Group is constantly engaged in business activities to realize **our Corporate Vision**, which comprises our Corporate Mission and Corporate Target. Our Group recognizes efforts to achieve effective corporate governance as part of the process will allow us to achieve sustainable growth and increased corporate value over the medium to long term.

The tax regulations of countries and regions across the globe affect the business activities carried out by our Group in various ways, and complying with such regulations is one of the important responsibilities companies must fulfill. To adequately fulfill this responsibility, our Group will formulate a tax policy in order to achieve our Corporate Mission and as a result we will avoid not only tax litigation, additional taxes and penalties, but also prevent our Group and its various stakeholders from facing the negative repercussions which arise from such events.

The Mitsui Chemicals Group Tax Policy

1. Compliance

Our Group will comply with the tax laws and regulations of each relevant country and region, utilize in an appropriate manner the benefits available under the preferential tax regimes provided in their tax regulations, and file tax returns and make appropriate tax payments (i.e. using values neither excessive nor insufficient).

Furthermore, to ensure accurate tax processing, our Group will apply proper accounting procedures in accordance with the relevant laws and regulations.

2. Tax planning

Our Group manages tax planning in a fair and appropriate manner commensurate with our business activities. Furthermore, we comply with international tax rules and the laws and regulations of each country in which we conduct business activities, and make an effort to minimize tax risks.

Our Group does not arrange tax avoidance through the utilization of tax havens and does not conduct tax planning in a manner not commensurate with our actual business conditions.

3. Initiatives to minimize tax risks

Although our Group strives to deal with taxes in accordance with the tax regulations of each relevant country, there is a certain degree of probability that the tax implications our Group has determined to be appropriate may not be agreed by the tax authorities of the respective country.

Our Group will seek tax advice from third-party tax professionals as necessary researching, evaluating and considering enough multiple options, and make appropriate decisions. We believe that this minimizes the risk of tax litigation, additional taxes and penalties.

4. International taxation

(1) Transfer pricing

Our Group believes that tax payment will be made appropriately in each respective country and region by allocating income internationally to each group company in accordance with their degree of contribution. Based on this understanding, our Group complies with international regulations such as the OECD Transfer Pricing Guidelines, applies

transfer pricing methods based on the results of function and risk analyses and determines prices for transactions conducted with foreign related parties.

In order to reduce tax risk pertaining to transfer prices, our Group receives advice from third-party professionals and utilizes the advance pricing agreement (APA) program and other systems offered by tax authorities.

(2) Elimination of double taxation

If double taxation occurs whereby taxes are levied by multiple countries and regions on the same economic benefits, our Group will strive to eliminate double taxation by taking advantage of the tax treaties and mutual agreement procedures provided by the relevant countries.

5. Relations with tax authorities

Our Group will respond as necessary to inquiries or requests to provide information from tax authorities and maintain good relations with tax authorities.

In order to reduce uncertainty surrounding tax operations and to ensure tax transparency, our Group will apply tax implications in a manner for which rational explanations can be provided and will strive to immediately resolve matters of opinion between our company and tax authorities.

Furthermore, with regard to guidance received from tax authorities, we will take measures to prevent its recurrence.

System and Responsible Officers

The CFO of Mitsui Chemicals Inc. has responsibility for building our Group's tax governance structure.

To ensure the proper functioning of the foregoing structure, our Finance and Accounting Division carries out the following practical tasks and operational management in cooperation with the Finance and Accounting Divisions of each company of our Group.

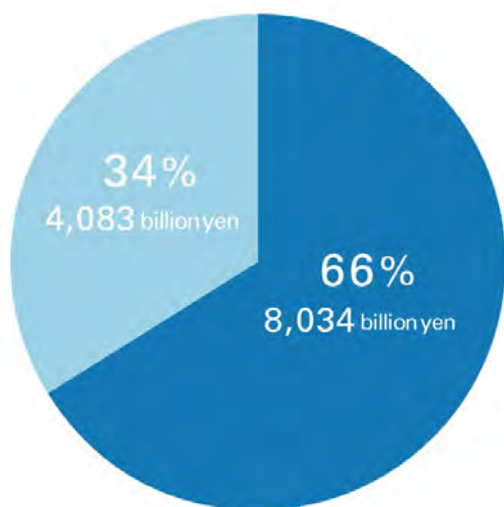
- Concerning matters that need to be dealt with on a global basis, such as tax audits and transfer pricing regulations, we continuously strive to improve group-level management in cooperation with the Finance and Accounting Divisions of each company of our Group.
- Concerning matters that can be handled to a certain degree within the Finance and Accounting Divisions of each company of our Group, we provide the assistance to each company as necessary to handle tax matters appropriately.

Our Finance and Accounting Division uses the information received from each company of our Group to monitor the tax governance of each group company and each tax item from a group perspective, and implements corrective measures when necessary and reports the status of management to our CFO as needed.

TAX Data (As of the end of FY2020)

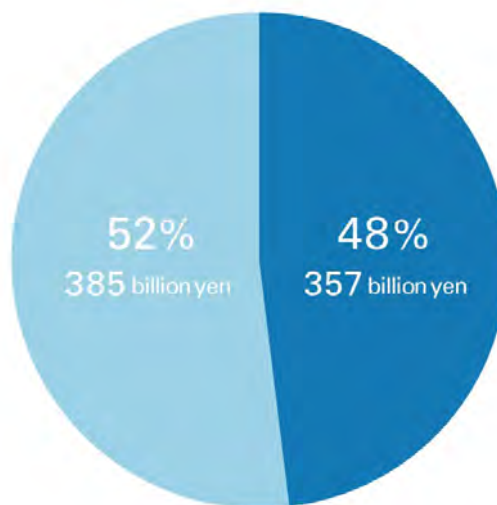
Domestic (Japan) Overseas

Sales Revenue ratio*



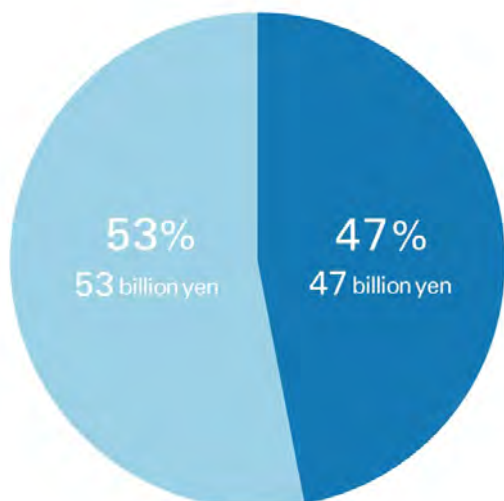
Total : 12,117 billion yen

Income before income taxes ratio



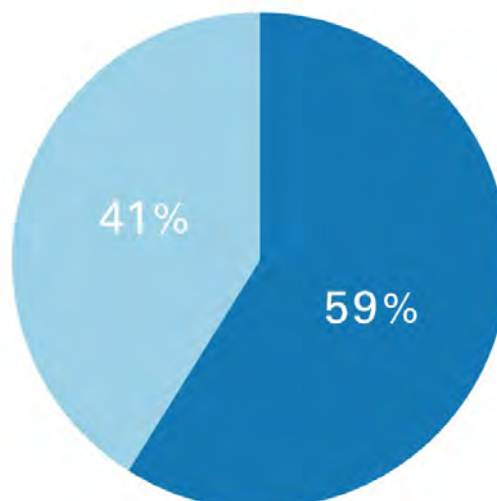
Total : 742 billion yen

Income tax expense ratio



Total : 100 billion yen

Ratio of employee



Total : 18,051

* Since the sales revenue ratio disclosed in the tax data is aggregated based on the country of origin, the numerical value may differ from other data shown on this site.

Policy and Basic Approach

In its business activities, the Mitsui Chemicals Group complies with laws and regulations on company and customer information and shares with its employees the importance of and responsibilities involved in information management so that information-related operations are carried out properly. In particular, organizational reinforcement of information systems security is recognized as an important issue in protecting the information assets of the Group against all threats, to avoid any loss of trust or disruption to our business operations that would result from information leaks or data falsification.

System and Responsible Officers

We are controlling information risks through our [risk and compliance management](#) system. The Information System Division is responsible for information system security, while the Corporate Administration & Legal Division oversees compliance with information management laws, including unauthorized information leaks, protection of personal information, etc. The two divisions coordinate their actions, combining their expertise to give comprehensive control. The responsible officer in charge of each business division is responsible for identifying and managing risks.

Initiatives in Information System Security

The Group is constantly implementing measures to ensure information system security.

We will reinforce our efforts to address the important issue of managing the growing risk from cyberattacks.

Initiatives based on technology and systems

Prevention of unauthorized access to confidential information in our business systems through controlled access, building the system to restrict the data take out, development of rules on information security at domestic and overseas subsidiaries and affiliates of the Group and regular security level inspections based on the rules.

Initiatives based on training

Training and education on security risks among Group employees and monitoring of their security levels (with mandatory e-learning on information security for all employees conducted once a year) and targeted email attacks training.

Personal Information Protection

The Mitsui Chemicals Group recognized that it is an important social responsibility to handle and protect personal information appropriately. We stipulate the Privacy Policy and Personal Information Protection and Management Regulations, and at the same time we provide corporate training programs to employees and undertake regular audits. In addition, we have developed a global personal information protection framework that complies with the laws and regulations of each country such as General Data Protection Regulation (GDPR) and appropriately manage the personal information we hold.

[Privacy Policy](#)

Responsible Care



Responsible Care Management

- Management System
- Roll Out Globally

Safety and Prevention

- Management System
- Initiatives to Prevent Major Accidents
- Accidents and Occupational Injuries
- Safety Education
- Plant Operation Technology Training Center

Environmental Protection

- Management System
- GHG and Energy
- Industrial Waste
- Environmentally Hazardous Substances
- Water
- Biodiversity
- Environmental Accounting/Compliance

Product Stewardship

- Management System
- Regulatory Compliance and Distributing the Safety Use Information
- Providing Safe Products
- Training

Quality of Products and Services

- Management System
- Initiatives

Logistics

- Management System
- Safety and Quality
- Stable Transportation

Occupational Health

- **Management System**
- **Health and Productivity Management**
- **Preventing Exposure to Harmful Substances**

Management System

Policy and Basic Approach

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.



The Mitsui Chemicals Group formulated the Responsible Care Policy as the Group's approach to ensuring safety, based on the philosophy of [the Responsible Care® Global Charter](#) drawn up by the International Council of Chemical Associations (ICCA).

Guided by this Policy, we engage in various Responsible Care activities in areas such as [safety and prevention](#), [environmental protection](#), [occupational health](#), [product stewardship](#), [quality of products and services](#), and [logistics](#). Through its Responsible Care activities, we 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.

[The Responsible Care® Global Charter: Company Signatorie](#)

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.

Effective October 1, 1997.

Revised 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 throughout the Group as a whole.

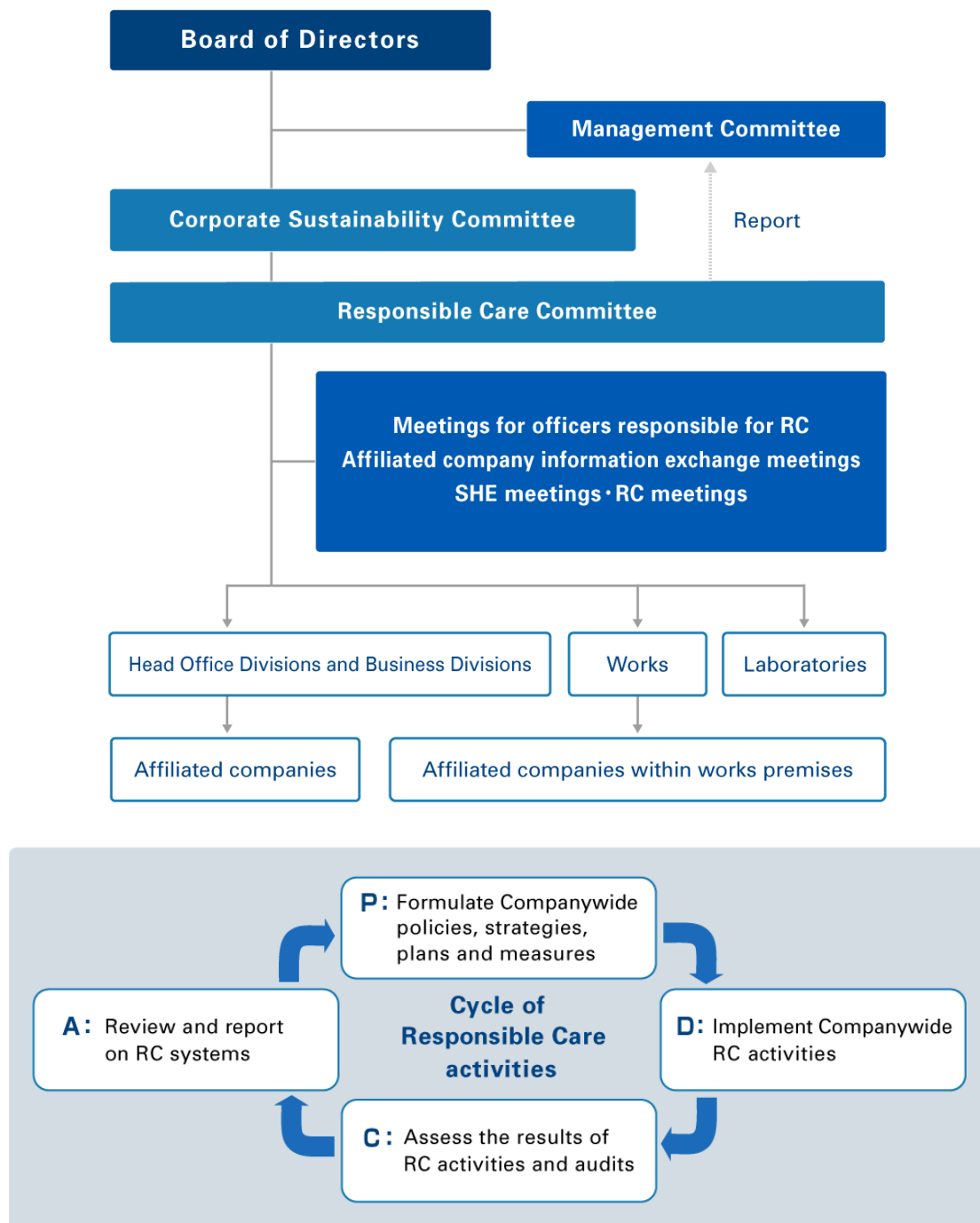
In addition, to further expand Responsible Care activities at subsidiaries and affiliates, Mitsui Chemicals drew up (in Japanese, English, and Chinese editions) [the Shiodome Manifesto](#). Based on the articles of the Responsible Care® Global Charter, the Manifesto serves as a declaration that promotes the Group's Responsible Care policy and frameworks for subsidiaries and affiliates. The presidents of Group subsidiaries and affiliates that manufacture and market chemical substances, (excluding subsidiaries and affiliated companies situated within the premises of the works sites of Mitsui Chemicals, Inc.) signed off in acknowledgement of their commitment.

System and Responsible Officers

The person in charge is the responsible officer in charge of the Responsible Care Committee.

Chaired by the responsible officer 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 officer 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.

Responsible Care Management System



Role of the Responsible Care Committee

- Formulated Responsible Care -related policies, strategies, plans and measures on a companywide basis
- Assess the results of Companywide Responsible Care activities on a yearly and quarterly basis
- Publicize and raise awareness of Responsible Care within the Company
- Assess the results of Responsible Care audits
- Review Responsible Care systems and examine other important issues

Composition of the Responsible Care Committee

Chair	Responsible Officer in charge of the Responsible Care Committee

Permanent members	Center Executive of the Production & Technology Center, General Manager of the Planning & Coordination Division of Each Business Sector, General Manager of R&D Planning & Coordination Division, Planning & Coordination Division of the Production & Technology Center, Safety & Environment Technology Division, the RC & Quality Assurance Division, Purchasing Division, Logistics Division, Human Resources Division, Corporate Planning Division, Affiliates Coordination Division, Corporate Sustainability Division, and Internal Control Division, other members appointed by the Chairperson
Observers	Corporate Auditor, President of the Mitsui Chemicals Labor Union, other members appointed by the Chairperson
Secretariat	RC & Quality Assurance Division

We hold regular meetings by the representatives from each department on a monthly basis and constantly exchange information between divisions in charge of Responsible Care and engage in Responsible Care activities that involve the Company as a whole. 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 (Safety, Health, and Environment) 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.

Internal Audits

We conduct environment & safety ([environmental protection](#), [safety and prevention](#)), [occupational health](#), [quality](#), and [chemical safety audits](#), 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. The Internal Control Division is responsible for environment & safety audits and occupational health audits. Quality audits and chemical safety audits are managed by RC & Quality Assurance Division, in order to verify the practice from a more professional perspective, And the suitability of these audits is itself inspected by the Internal Control Division. The audit results are then reported to the Management Committee and the Responsible Care Committee.

Risk Management System

External Certification

The Mitsui Chemicals Group obtains external certification on our environment management system, occupational health and safety management system, and quality management system in each site.

Status of External Certification

Participating in Chemical Industry Associations in Each Country and Region

The Mitsui Chemicals Group reports the results of our Responsible Care activities to each association and are working to maintain the transparency of the chemical industry in the eyes of society.

Report recipients: The Japan Chemical Industry Association (JCIA), the Association of International Chemical Manufacturers (AICM, China), the Taiwan Responsible Care Association (TRCA), the Singapore Chemical Industry Council (SCIC), the Federation of Thai Industries (FTI), the American Chemistry Council (ACC), and the European Chemical Industry Council (CEFIC).

Topics that are likely to become management issues are gathered from information obtained in the course of the activities at these associations and reported to top management.

Support Initiatives

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 Word 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: _____

Status of External Certification (As of June 2021)

Country Region	Company	Business Sites	Certification		
			Environment	Occupational Health & Safety	Quality
Japan	Mitsui Chemicals, Inc.	Ichihara Works	ISO14001	OHSAS18001	ISO9001
		Mobara Branch Factory	ISO14001	OHSAS18001	ISO9001
		Nagoya Works	ISO14001		ISO9001 IATF16949 (electrolyte solution business)
		Osaka Works	ISO14001	OHSAS18001	ISO9001
		Iwakuni-Ohtake Works	ISO14001	OHSAS18001	ISO9001
		Omuta Works	ISO14001		ISO9001
	Saxin Corporation	Factory	ISO14001		ISO9001
	Sun Medical Co., Ltd.	Factory			ISO13485
	Sunrex Industry Co., Ltd.	Factory	ISO14001		ISO9001
	Shimonoseki Mitsui Chemicals, Inc.	Factory	ISO14001		ISO9001
	Japan Composite Co., Ltd.	Shimizu Factory	ISO14001		ISO9001
	Toyo Beauty Supply Corporation	Factory			ISO9001
	NIPPON ALUMINUM ALKYLs, LTD.	Osaka Plant	*	*	ISO9001
	Prime Polymer Co., Ltd.	Head Office			ISO9001
	Hokkaido Mitsui Chemicals, Inc.	Factory			ISO9001
	Utsunomiya Chemical Industry Co., Ltd.	Utsunomiya Factory			ISO9001
		Funaoka Factory			ISO9001
		Shinshiro Factory			ISO9001
		Tosu Factory			ISO9001
	Mitsui Chemicals MC Co., Ltd.	Head Office, Shimizu Factory	ISO14001	OHSAS18001	ISO9001
		Kaibara Factory	ISO14001	OHSAS18001	ISO9001
	MITSUI CHEMICALS SUN ALLOYS CO., LTD.	Factory			ISO9001
	Mitsui Chemicals Industrial Products, Ltd.	Saitama Factory	ISO14001		ISO9001
		Ohtake Factory	*	*	ISO9001
	Mitsui Chemicals Tohcello, Inc.	Head Office	ISO14001		ISO9001
		Katsuta Works	ISO14001		ISO9001
		Ibaraki Works	ISO14001		ISO9001
		Hamamatsu Works	ISO14001		ISO9001
		Anjo Works	ISO14001		ISO9001
	Shikoku Tohcello Co., Ltd.	Factory	ISO14001		ISO9001
	Mitsui Chemicals & SKC Polyurethanes Inc.	Tokuyama Factory	ISO14001		ISO9001
	Yamamoto Chemicals, Inc.	Head Office, Yao Plant	ISO14001		ISO9001
		Omuta Plant	ISO14001		ISO9001

* Included in the certification of Mitsui Chemicals Sites as it is located within the Mitsui Chemicals sites premises.

Country Region	Company	Business Sites	Certification		
			Environment	Occupational Health & Safety	Quality
China	Tianjin Cosmo Polyurethane Co., Ltd.	Tianjin Plant	ISO14001		ISO9001
		Suzhou Plant	ISO14001		ISO9001
	Mitsui Chemicals Functional Composites (Shanghai) Co., Ltd.	Factory	ISO14001		ISO9001
	Mitsui Advanced Composites (Zhongshan) Co., Ltd.	Plant	ISO14001		ISO9001 IATF16949
South Korea	Zhang Jia Gang Free Trade Zone Mitsui Link-upon Advanced Material, Inc.	Factory	ISO14001		ISO9001 QC080000
	Foshan Mitsui Chemicals & SKC Polyurethanes Co., Ltd.	Plant	ISO14001		ISO9001
Southeast Asia	KOC Solution CO., Ltd	Factory			ISO9001
	Mitsui Elastomers Singapore Pte. Ltd.	Factory	ISO14001	ISO45001	ISO9001
	Mitsui Phenols Singapore Pte. Ltd	Factory	ISO14001	OHSAS18001	ISO9001
	Prime Evolve Singapore Pte. Ltd.	Factory	ISO14001	OHSAS18001	ISO9001

Country Region	Company	Business Sites	Certification		
			Environment	Occupational Health & Safety	Quality
Southeast Asia	SDC Technologies Asia Pacific, Pte. Ltd.	Factory			ISO9001
	Grand Siam Composites Co., Ltd.	Works	ISO14001	ISO45001	ISO9001 IATF16949
	Mitsui Hygiene Materials (Thailand) Co., Ltd.	Factory	ISO14001 ISO50001	ISO45001	ISO9001
	Siam Tohcello Co., Ltd.	Works	ISO14001	OHSAS18001	ISO9001
	Thai Mitsui Specialty Chemicals Co., Ltd.	Works	ISO14001	ISO45001	ISO9001
	P. T. PETnesia Resindo	Works	ISO14001	ISO45001 SMK3	ISO9001 ISO22001
	Mitsui Chemicals Scientex Sdn. Bhd.	Works	ISO14001	OHSAS18001	ISO9001
	MCNS Polyurethanes Malaysia Sdn. Bhd.	Works	ISO14001		ISO9001
	PT. MCNS Polyurethanes Indonesia	Works	ISO14001	OHSAS18001 SMK3	ISO9001
	Mitsui Prime Advanced Composites India, Pvt. Ltd.	Factory	ISO14001		ISO9001
USA	Advanced Composites, Inc.	Ohio Plant	ISO14001	ISO45001	ISO9001 IATF16949
		Tennessee Plant	ISO14001	OHSAS18001	ISO9001 IATF16949
	Advanced Composites Mexicana, S.A. de C.V.	Factory	ISO14001 Clean Industry		ISO9001 IATF16949
	Anderson Development Company	Factory	ISO14001 RC14001		ISO9001
	SDC Technologies, Inc.	Factory			ISO9001
	Mitsui Prime Advanced Composites do Brasil Indústria e Comércio de Compostos Plásticos S.A.	Factory			ISO9001
Europe	Acomon S.R. L.	Factory	ISO14001		ISO9001

* Total 44 sites (76%) of 58 production sites acquired ISO 14001 certification.

* Also, 18 sites (31%) of 58 production sites acquired OHSAS 18001 or ISO45001 certification.

Roll Out Globally

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

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 RC meetings that gather together the staff in charge of Responsible Care of various subsidiaries and affiliates. In fiscal 2020, we provided a training to prevent spontaneous combustion of resin across the regions to deploy the practice horizontally. We have conventionally held this meeting onsite, however, this year we needed to present it online due to the COVID-19 pandemic. Although we could not meet people directly, the online meeting enabled attendance of multiple members from each company, and, therefore, a greater number of people could share the learning. We also provided an assignment for attendees before the meeting to encourage discussions during the meeting.

China

The SHE (Safety, Health, and Environment) meeting for Chinese affiliates was held in November 2020 attended by 12 affiliates in the China region. The agenda of the meeting was waste management, which is a growing issue in China, and attendees shared details of practices in their companies and exchanged opinions. As a part of this meeting, the Head Office made a presentation on the approach to RC management, introduction to the safety reinforcement project, and preventive measures for spontaneous combustion of resin. Concrete examples of each company's efforts were also introduced and attendees were pleased to have had such a practical discussion.

Americas

Five companies in the Americas participated in the RC Meeting for the region in March 2021. They shared their RC practices as carried out in each company. Awareness of Responsible Care is advanced in the Americas, and they presented the activities in wide ranging areas, such as safety and prevention, and product stewardship. COVID-19 prevention measures practiced in the companies over the last year were also shared. Head Office presented the approach to RC management. Attendees discussed the practices of each company for as long as time permitted, deepening their exchanges with each other.

Asia Pacific

In March 2021, an Asia-Pacific RC Meeting was held, attended by 17 companies in the region. They presented the companies' environmental and safety efforts and the activities by the Responsible Care Association, as well as sharing information on the COVID-19 prevention measures adopted by each company during the last year. The presentation topics varied because the region covers the various number of companies and business types. Head Office provided a presentation on the approach to RC management, introduction to the safety and reinforcement project at Mitsui Chemicals' Plant Operation Technology Training Center, and preventive measures for spontaneous combustion of resin.

Evaluation of the Responsible Care Activities of the Mitsui Chemicals Group

The Mitsui Chemicals Group's Responsible Care activities are highly esteemed by external parties.

Our Plant Operation Technology Training Center received the 2020 Responsible Care Grand Prix Award organized by the Japan Chemical Industry Association. The award was presented in recognition of the rich contents of our training programs and learning materials, program globalization, and efforts to convert the program to online courses enabling training to be continued during the COVID-19 pandemic. Further, we have received the RC Chairman's Award from the Association of International Chemical Manufacturers (AICM) for four consecutive years. This award was presented in appreciation of our group companies in China for making efforts to support the sustainable development of the Chinese chemical industry and for their social contribution. Our work included ensuring production procedures with due care for safety and the environment, continuous disclosure of safety and environmental data, and providing training support for Chinese chemical corporations through our Plant Operation Technology Training Center.

Mitsui Chemicals Group's Responsible Care-related Awards

Countries	FY2020 awards	Awardees
Japan	2020 Responsible Care Grand Prix Award / Japan Chemical Industry Association	Mitsui Chemicals Plant Operation Technology Training Center
China	RC Chairman's Award / Association of International Chemical Manufacturers	Mitsui Chemicals
Thailand	Award for Good Governance in Environment (Gold Star Award) / Industrial Estate Authority of Thailand	GRAND SIAM COMPOSITES CO., LTD.
	National Safety Performance Award / Department of Labor Protection and Welfare Zero Accident Award / Thailand Institute of Occupational Safety and Health	MITSUIHYGIENE MATERIALS (THAILAND) CO., LTD.
Singapore	SCIC Responsible Care Awards Employee Health and Safety Code: Gold / Singapore Chemical Industry Council (SCIC)	MITSUI PHENOLS SINGAPORE PTE. LTD.
	SCIC Responsible Care Awards Employee Health and Safety Code: Achievements / Singapore Chemical Industry Council (SCIC)	MITSUI ELASTOMERS SINGAPORE PTE. LTD.

Safety and Prevention

Management System

Initiatives to Prevent Major Accidents

Accidents and Occupational Injuries

Safety Education

Plant Operation Technology Training Center

Management System



Policy and Basic Approach

The Mitsui Chemicals Group places top priority on safety for the Group's sustainable growth. Safety is the foundation of society's trust, and at the same time, ensuring safety increases our manufacturing quality, leading to improvement of corporate value from the financial viewpoint.

With this approach, we established a management policy that states "Safety is our top priority," and [our Responsible Care Policy](#) declares that, "We pledge that safety is our top priority and will focus on achieving zero accidents and occupational injuries." Top management repeats this policy as the President's message, etc. to all the Group employees on many occasions, such as in opening addresses, plants visits, Safety Day messages, and in Company newsletters.

All employees of the Mitsui Chemicals Group including contractors are committed to relentlessly implementing the safety culture, reaffirming their heartfelt commitment to the pledge "safety is essential and for the benefit, not only of ourselves, but also our families, colleagues, and society as a whole."

The Mitsui Chemicals Group understands the key to realizing this vision of safety and accident prevention is to maintain a high level of safety regardless of the diversification of employees, facilities, and technologies as business globalization and business portfolio reform progresses. In line with this vision, we strive to provide education and training to employees to be able to put fundamental safety initiatives into practice, globally promote the safety culture, and introduce and disseminate new safety technologies.

System and Responsible Officers

The chief responsible officer is the president. The responsible officer in charge of the Production & Technology Center is appointed as the person directly responsible. The Safety & Environment Technology Division formulates, disseminates, and promotes the safety and prevention strategy. **The Responsible Care Committee** creates an annual plan and a medium to long-term plan, based on the strategy progress reports and any challenges identified during the strategy review and environmental analyses obtained within and outside the Group.

We hold regular meetings with each site, such as monthly all works liaison meetings and semiannual affiliate liaison meetings, to ensure safety and accident prevention in each business division, production site, and affiliate.

The Safety and Environment Technology Division regularly monitors the achievement of the priority issue targets relating to safety and accident prevention at domestic sites and ascertains the progress made. The Division also collects, consolidates, and analyzes information on the occurrence of any serious accidents and occupational injuries across the entire Group and shares this information throughout the Group.

Management and labor union members in the Head Office hold regular meetings to deliberate issues relating to occupational health and safety. Such meetings are also conducted in each site as Health and Safety Committee meetings, in which attendees report on and deliberate issues relating to occupational health and safety, including occupational injuries.

Internal Audit

The Internal Control Division conducts environmental & safety audits (for environmental protection, safety and prevention) at Works and laboratories of the Mitsui Chemicals Group.

Environmental & Safety Audit (safety and prevention)	Confirms that the policy of "safety is our top priority" is being comprehensively implemented, that activities are being organized to eliminate accidents and occupational injuries and that there is compliance with the relevant laws and regulations. Indicates nonconformities that require revision or improvement.
	Scope: Works and laboratories of Mitsui Chemicals Inc. and its subsidiaries and affiliates
	Frequency* Once every one to three years (depending on size, business type and management level of the audited organization)

* A remote audit is conducted if an On-site audit is difficult due to COVID-19 restrictions.

Goals and Results

Accidents

KPI	Scope	FY2020			FY2021	FY2025 (Medium to Long-term)
		Goals	Results	Level Achieved	Goals	Goals

Number of major accidents ^{*1}	Mitsui Chemicals Group	0	0	○	0	0 ongoing
Number of abnormal conditions / accidents ^{*2}	Mitsui Chemicals Group	7 or less	29	×	7 or less	—

***1 Major accidents:**

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

***2 Abnormal conditions/accidents:**

Events that were legally handled as an abnormal condition or accident among the reported explosions, fires, leakages, bursts, breakages, or abnormal reactions. This classification was revised in fiscal 2021 to exclude leakage of CFCs and small amount leakages.

Occupational injury

KPI	Scope	FY2020			FY2021	FY2025 (Medium to Long-term)
		Goals	Results	Level Achieved	Goals	Goals
Number of serious accidents ^{*1}	Mitsui Chemicals Group	—	0	—	0	—
Significant occupational injury frequency ^{*2}	Mitsui Chemicals Group	0.15 or less	0.22	×	0.15 or less	0.15 or less
	Mitsui Chemicals, Inc. ^{*3}	0.15 or less	0.10	○	0.15 or less	—
	Domestic Subsidiaries & Affiliates	0.15 or less	0.40	×	0.15 or less	—
	Overseas Subsidiaries & Affiliates	0.15 or less	0.21	×	0.15 or less	—
	Construction subcontractors	0.23 or less	0.39	×	0.29 or less	—

***1 Serious Occupational Injuries:**

Occupational injuries that fall under disability grades 1 to 7, causing death, injury or illness.

***2 Significant occupational injuries:**

“Significant Occupational Injuries(SOIs)” refer to occupational injuries that resulted in absence from work or death. SOIs also include lighter occupational injuries that, due to the potential danger in the cause of the injury, could have led to absence from work or death. SOIs do not include those injuries that are not directly related to operations.

***3 Includes contractors operating on site.**

Initiatives to Prevent Major Accidents

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. We take this latest incident very seriously and will strive to prevent any future recurrence. Reflecting on that incident, we have been implementing a series of initiatives to prevent major accidents such as fundamental safety measures to ensure that nothing like that ever happens again.

Top Management's Strong Commitment to Safety and Prevention

On Safety Day and during National Safety Week, etc., 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." In addition, we are working to ensure active involvement in activities to disseminate our safety culture at worksites that includes the Vice President, Senior Managing Executive Officer and the Center Executive of the Production & Technology Center by conducting tours of our works and each production sites of domestic and overseas affiliates. The fiscal 2020 results are as follows.

- Instructions to make safety the top priority provided directly to employees at Head Office during the opening address (simultaneously broadcast to all domestic sites)
- Broadcasting the President's safety day moral discourse across the Group as a whole, and pledge to make safety the top priority published in Company newsletter (in Japanese and English)
- Communicated safety instructions directly to employees at Head Office on Safety Day (broadcast pre-recorded video to all domestic sites)
- Broadcasting the President's National Safety Week message across the Group as a whole (in Japanese, English and Chinese)
- Direct safety instructions provided to employees at Works (hold remotely in consideration of prevention of COVID-19)
- The Company newsletter featured the president safety interview

Safety Day

To keep alive the memory of the explosion and fire that occurred at a resorcinol production facility, Mitsui Chemicals has designated April 22 as Safety Day, a day on which a safety pledge ceremony and presentations take place each year. The events were downsized in fiscal 2020, and the events in fiscal 2021 took place in each site with COVID-19 prevention measures implemented, such as by utilizing video conferencing systems.

In the safety pledge ceremony, the President's moral discourse on safety matters has been communicated to the entire Mitsui

Chemicals Group, with all employees reaffirming their commitment to making safety their top priority in everything they do. Each site reaffirmed safety-first awareness through lecture meetings and communicating messages from the company President and the general manager of Works.



Head Office safety pledge ceremony (April 2021)



Safety pledge ceremony at Iwakuni-Ohtake Works (April 2021)

Fundamental Safety Measures

Mitsui Chemicals takes extremely seriously the explosion and fire at the resorcinol production facility at its Iwakuni-Ohtake Works on April 22, 2012. For these eight years, we have been introducing a series of fundamental safety measures, reviewing and improving comprehensive safety and prevention at a company-wide level. A number of measures that have been developed after exhaustive discussions are now incorporated into our daily activities, and continuous safety improvements are being made by repeating the PDCA cycle in our daily tasks. While carefully weighing the priorities against each other in implementing these fundamental safety measures to raise safety levels, we will continue to introduce more initiatives in the years ahead.

Overview of Efforts Aimed at Advancing Fundamental Safety Measures

From the beginning of 2013, we built up the fundamental safety measures shown in overview in the chart below and conducted them on company-wide basis.

Key Points of the Fundamental Safety Measures

- The steering committee^{*1}, which reports directly to the president, deliberates company-wide issues and sets the direction for activities
- Management spearheads the participation in safety initiatives through active dialogue owing to greater opportunities for Head Office personnel to visit plants
- Issues pointed out by external experts and other third parties are reflected in plant operations
- General managers of Works give safety talks, while cross-sectional safety inspections are performed by safety advisors^{*2}
- Meetings among foremen organized by managers help to enhance communication
- Enhance involvement of subcontractors' safety management

*1 Steering committee:

To make swift progress of fundamental safety measures, the members shown in the diagram meet to discuss Group-wide issues and set the direction of activities.











































*2 Safety advisors:

Veteran employees involved in daily activities and improving the overall level of safety at plants by exchanging opinions with workers.



Progress with Fundamental Safety Measures

The fundamental safety measures are deployed as 11 measures that address three important challenges. Through these measures, we have been building a system that can incorporate advances in safety technologies, improving technical assessment systems, and reinforcing safety management, including for work subcontractors, as well as providing thorough training to the line managers of these activities. The coverage of leadership education for the line managers was reinforced in fiscal 2020 by expanding coverage from section managers to include subsection managers. In response to the fire that occurred in Osaka Works during the regular repair work of its chimney in 2018, all Works were requested to revise the related work management procedure. In fiscal 2020, the Safety and Environment Division confirmed that the improved procedures were in place in each Works, ensuring a more robust organizational safety function.

Three important challenges, 11 measures		Implementation schedule (fiscal year)							
		2013	2014	2015	2016	2017	2018	2019	2020
(1) Allow line managers to focus on and properly manage worksites									
①	Reduce the workload of line managers		On an ongoing basis			Strengthen			
②	Train line managers			On an ongoing basis		Strengthen			
(2) Improve technical skills and ensure skills are passed down (clarify rights & responsibilities)									
③	Train engineering staff with situational awareness			On an ongoing basis		Strengthen		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		On an ongoing basis	
(3) Ensure safety is the top priority, cultivate professionalism, and give workers a sense of accomplishment									
⑥	Reorganize/boost functions of Safety & Environment Division					On an ongoing basis	Strengthen		
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						

Thorough Risk Assessments

Mitsui Chemicals applies the HAZOP^{*1} to assess safety in the building, expansion, and refurbishment of facilities and to identify dangers in plants as a means of eliminating the possibility of accidents. Learning the lessons from the resorcinol production facility explosion and fire at the Iwakuni-Ohtake Works, we expanded to include non-routine operations at Works. In addition, the Company has been conducting non-routine risk assessments on a continuous and constructive basis.

For the first time we introduced the HAZOP/LOPA^{*2} procedure to Osaka Works as a quantitative risk assessment method in fiscal 2020 aiming at more thorough appraisals. We plan to introduce this procedure at other Works.

We will further reinforce our voluntarily accident prevention by thorough risk assessments.

^{*1} HAZOP:

Hazard and Operability Studies. A method to formulate safety measures by seeking any possible deviation from normal operations, and analyzing the cause of such deviation and its possible impact.

***2 HAZOP/LOPA:**

Hazard and Operability Studies/Layer of Protection Analysis.

Taking a risk mitigation measure available for a risk identified by HAZOP as an independent protection layer, estimate the probability of failure on demand for this protection layer. Then combine the frequency of an initiating event with the said probability to determine the mitigated consequence (e.g. fire, explosion, etc.) frequency (per year) for the given initiating event. This helps to determine any necessary additional independent protection layers required.

Fostering HAZOP Leaders

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 will plan to periodically hold these training sessions to foster HAZOP leaders and to improve the level of HAZOP.

Measures to Non-routine Risk Assessment

We emphasize non-routine risk assessments, such as emergency shutdowns or startups, as they impose a high probability of an accident. We assessed risks related to emergency shutdowns in fiscal 2013, and those related to startups in fiscal 2015 in model plants. This assessment was then carried out in all Works. We also assessed the risks related to normal shutdown procedures using a methodology that combined What-if* and batch HAZOP.

*** What-if:**

A method to formulate safety measures by repeating "What if..." questions to explore possible incidents and their impact.

Safety Culture Assessment

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

By the end of fiscal 2019, all of our five Works had completed their second Safety Culture Assessments. Mutual Communications is one of the eight core elements* that form a robust safety culture, and some Works showed a low score in this area in their first Safety Culture Assessment. These Works improved their scores significantly in their second assessments thanks to various efforts, such as by the general managers of Works giving safety-related talks and department managers improving their communication methods. We understand that this assessment is effective to raise awareness of safety culture and the assessment results improve practices in the workplace. We continue receiving the assessment regularly to confirm our improvement results.

*** Eight core elements of safety culture:**

Motivation, Governance, Proactive Commitment, Mutual Communications, Resource Management, Work Management, Learning, and Awareness of Danger. Answering 110 questions built around the above eight elements visualizes the safety culture in a factory or workplace, as well as clarifying the strengths and weaknesses of the workplace compared with industry benchmarks.



Status of Undertaking Safety Culture Assessment (to fiscal 2020)

Mitsui Chemicals Works*	All five Works received their second assessments. A branch factory of one of these Works has received its third assessment.
Domestic Subsidiaries & Affiliates	Nine companies (13 factories) received their first assessments. Of these, two companies (3 factories) received second assessments.
Overseas Subsidiaries & Affiliates	Five companies (5 factories) received their first assessments.

* Including subsidiaries and affiliates within the site premises where the Works manager has 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.

By the end of fiscal 2018, Osaka Works, Ichihara Works, and Iwakuni-Ohtake Works underwent safety capability evaluations by the Japan Safety Competency Center after each had conducted self-assessments. Ichihara Works received a second evaluation in fiscal 2020. The assessment results showed that our safety infrastructure and safety culture were generally “fair”; however, we are now keen to address the issues identified in the assessment. We are particularly focusing on risk assessments related to

safety and accident prevention as we believe further precautions are necessary. We continue to receive assessments by the Japan Safety Competency Center as a reputable third-party opinion to ensure our safety and accident prevention activities are effective.



Safety capability evaluation in Ichihara Works

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, we have finished an assessment of the seismic resistance of our existing high-pressure gas facilities. Based on the results of the assessment, the Company has formulated a repair plan and completed the planned seismic enhancement work by fiscal 2020.

Safety and Accident Prevention Utilizing Advanced Technologies

By effectively adopting advanced technologies, the Mitsui Chemicals Group aims to build next generation works that function in a highly efficient, safe, and stable manner. In fiscal 2017, we established the Advanced Production Technology Promotion Division to enable company-wide adoption of the latest technologies, such as AI, IoT, Big Data analytics, and image analysis. The technologies we are currently introducing (and assessing their effectiveness) to the Works include: an online simulator and soft sensors that monitor and support plant operations; an AI-based facility failure detection system; wearable cameras and tablets to support frontline work; and wireless sensors, drones, and high-performance cameras to support facility management. We continue to strengthen our production technology by reforming factory operations and safety management with advanced technologies aiming at safer and more stable production.

Examples



Operation check using a drone



Gas leakage detection using high-performance camera



Wearable camera for frontline work

High-Pressure Gas Handling Accreditation

In March 2021, Mitsui Chemicals Osaka Works became the first in the Group to be accredited under the Super Accredited Businesses System* operated by the Ministry of Economy, Trade and Industry (METI). This system requires businesses to ensure a higher level of safety, taking measures covering adoption of the latest technologies and risk assessment, and employee training, compared with conventional accreditation systems. Maintaining these practices to retain accreditation increases the level of voluntary safety management.

Osaka Works was honored with accreditation in recognition of implementing more robust risk assessment utilizing HAZOP/LOPA and active employment of advanced technologies. Ichihara Works is now working for this accreditation towards June 2022.

* Super Accredited Businesses System:

An accreditation system started by METI in April 2017 to recognize a business that adopts measures to ensure a particularly high level of safety as a Super Accredited Business. The accredited businesses are given more freedom in selecting methods for in-house facility safety inspections and their scheduling. This also helps increase international competitiveness.

Accidents and Occupational Injuries

The Mitsui Chemicals Group positions as KPIs and monitors major accidents, the number of abnormal conditions/accidents as well as the occupational injury frequency.

Major Accidents and Abnormal Conditions/Accidents

In fiscal 2020, the Mitsui Chemicals Group reported zero major accidents^{*1}, meeting its target of zero. However, the number of abnormal conditions/accidents^{*2} is on the rise, totaling 29 against the target of seven or less. Because the causes of 25 of these accidents were equipment-related, studying prevention has become a major issue. To prevent recurrence, we are working on (1) developing appropriate maintenance plans, (2) reinforcing change management (risk assessment) and (3) improving the quality of construction.

Out of 29 abnormal conditions/accidents, 8 concerned CFC leakage and 9 were small amount leakages, all of which were identified at an early stage and damage was limited to the minimum. In response to these incidents, we revised our management goals in fiscal 2021. We decided to increase the level of safety measures by focusing on controlling incidents that would have a large impact and set this as a corporate-wide management goal. The CFC leakages and small amount leakages are now managed by the Safety & Environment Technology Division.

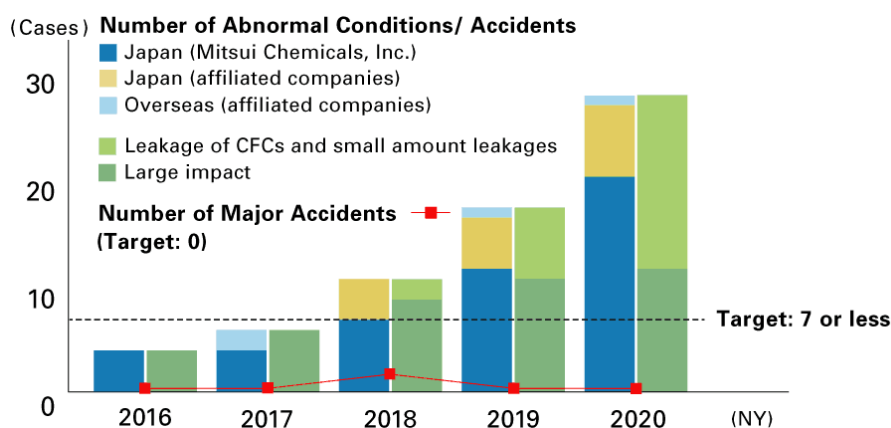
*1 Major Accidents:

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

*2 Abnormal conditions/accidents:

Events that were legally handled as an abnormal condition or accident among the reported explosions, fires, leakages, bursts, breakages, or abnormal reactions. This classification was revised in fiscal 2021 to exclude leakage of CFCs and small amount leakages.

Number of Major Accidents and Abnormal Conditions/Accidents



* Including subsidiaries and affiliates within our Works, and the Works general manager bears the responsibility for Responsible Care implementation.

Occupational Injuries

In fiscal 2020, the Mitsui Chemicals Group reported zero serious occupational injuries^{*1} that must not be occurred, meeting its target of zero. Compared with the Japanese overall industry average and the Japanese chemical industry average, we maintain 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 of 0.15 or below with regard to significant occupational injuries^{*2}.

The significant occupational injury frequency for the Mitsui Chemicals Group was 0.10, which is now below the permitted target value of 0.15. We believe that this comes as a result of our painstaking efforts to maximize safety procedures, which we have continued over the years. However, the target was not met by our domestic and overseas affiliates and work subcontractors. Our long-term challenge is to ensure that our safety culture permeates the entire group and to cultivate human resources who have excellent sensitivity to danger. We are particularly directing our support towards domestic affiliates that have not managed to completely stop incidents concerning "being caught or entangled in machinery" because such incidents could easily result in severe occupational injuries.

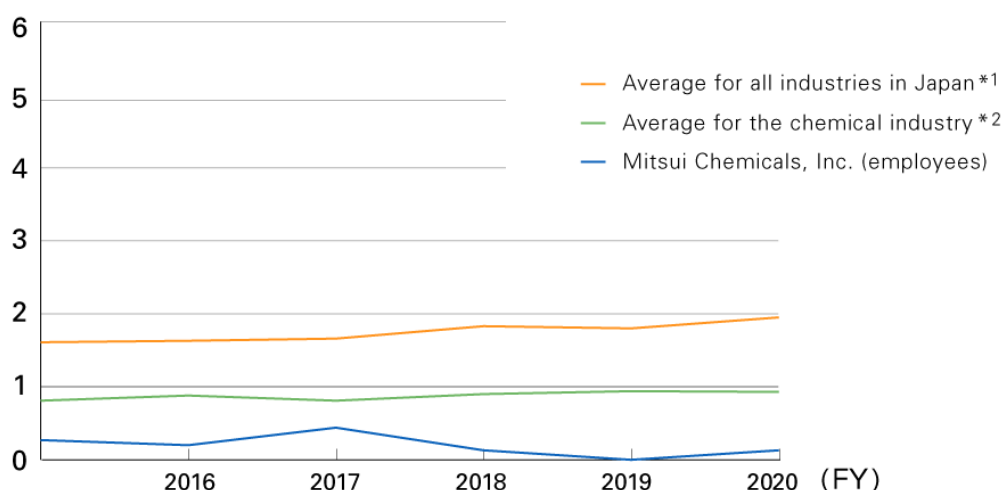
^{*1} Serious Occupational Injuries:

Occupational injuries that fall under disability grades 1 to 7, causing death, injury or illness.

^{*2} Significant Occupational Injuries:

"Significant Occupational Injuries(SOIs)" refer to occupational injuries that resulted in absence from work or death. SOIs also include lighter occupational injuries that, due to the potential danger in the cause of the injury, could have led to absence from work or death. SOIs do not include those injuries that are not directly related to operations.

Comparison of Occupational Injury Frequency between Mitsui Chemicals, the All Industries in Japan and the Japanese Chemical Industry



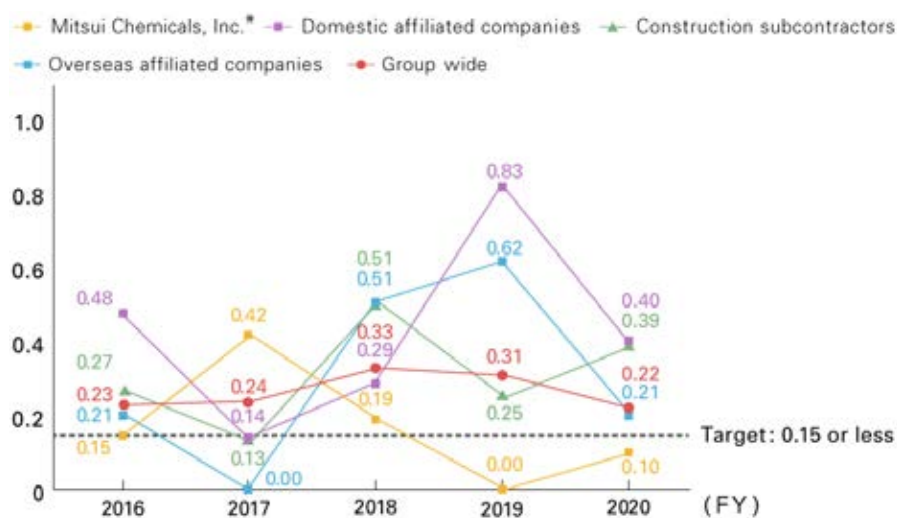
* Occupational injury frequency = Number of individuals killed or injured by occupational accidents x 1 million hours / Total working hours for all employees

* The figures for the all industries in Japan and for the Japanese chemical industry indicate the Days Away From Work Case (DAFWC) frequency.

Sources:

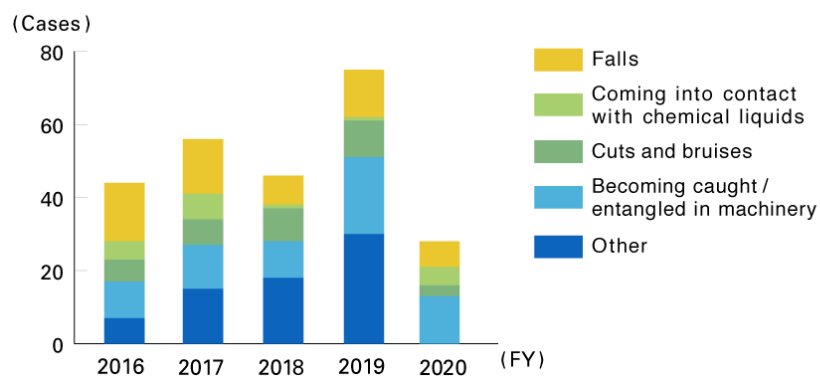
^{*1} Ministry of Health, Labour and Welfare White Paper Survey on Industrial Accidents

Significant Occupational Injury Frequency



* Includes contractors operating on site.

Number of Occupational Injuries Resulting in Zero or More Lost Work Days by Type (Mitsui Chemicals Group)



Safety Education

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

Emergency Drills

The Mitsui Chemicals Group systematically conducts emergency drills in Works to prepare for accidents, earthquakes, and tsunamis.

Envisioning emergency situations, such as a fire or leakage of hazardous substances, our Works regularly conduct comprehensive disaster prevention drills jointly with municipal fire and police departments. Such drills test the emergency response procedures, help make improvements when a deficiency is found, and enhance our defense capabilities through collaborations with the local authorities. Those Works located within petrochemical complexes also conduct joint disaster prevention drills with neighboring corporations and fire departments as a mutual support scheme. Affiliates in Japan and overseas conduct drills suited to their laws and work environments in preparation for their differing emergency situations.



Emergency drill for toxic gas leakage and ignition (Omuta Works)

We also conduct emergency shutdown drills and evacuation drills in preparation for natural disasters, taking account of recent large earthquakes and tsunamis.



Tsunami warning response drill simulating a Nankai Trough Earthquake (Iwakuni-Ohtake Works)

Skill Improvement for Volunteer Firefighting Units

Mitsui Chemicals' Ichihara Works, Osaka Works, Iwakuni-Ohtake Works, and Omuta Works are equipped with volunteer firefighting units. The unit members are regularly trained in preparation for an emergency.

In recognition of their daily efforts, the Osaka Works unit received the best performance award and the Iwakuni-Ohtake Works unit received the outstanding performance award of the Minister's Commendation under the 2020 Skill Contest of Self-Defense Disaster Management Groups at Petroleum Complexes held by the Fire and Disaster Management Agency, Ministry of Internal Affairs and Communications.

This skills contest has been held since fiscal 2014 to inspire volunteer firefighters, as well as motivating them to continue to improve their skills. The participants complete safety, reliability, and promptness of their performance by conducting a procedure of releasing foam water from a height onto a simulated fire at a hazardous facilities. This is our seventh consecutive year to receive an award since the beginning of the contest, and the first year that we received the best performance award. We continue improving our firefighting skills through determined training to contribute to the safe and stable operations of our Works.



Osaka Works volunteer firefighting unit at the award ceremony and in skills contest

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

In order to eliminate accidents and occupational injuries at the Mitsui Chemicals Group, we undertake initiatives at the Works and at domestic and overseas affiliates to entrench and energize hazard prediction (Kiken Yochi, or "KY") and Pointing-and-Calling. At each Works of Mitsui Chemicals, 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 KY initiatives, and Companywide meetings held once a year. At these meetings, KY trainers report on the status of KY initiatives at their Works, and exchange opinion on troubles

or questions about KY initiatives. KY trainers utilize 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, the Safety & Environment Technology Division have provided training support on an ongoing basis. Through this support, we are working to ensure that all of our affiliates understand the significance and necessity of KY activities and Pointing-and-Calling so that they can use and entrench them in their actual work situations. 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 necessity to entrench KY and Pointing-and-Calling, and the Company is encouraging their development through training.

KY training sessions

	Number of Attendees (Total Training Time)		
	FY2018	FY2019	FY2020
Mitsui Chemicals, Inc.	963 (3,659.4hr)	1,010 (2,424hr)	1,220 (2,440hr)
Domestic Subsidiaries & Affiliates	357 (821.1hr)	259 (725.2hr)	31 (93hr)
Overseas Subsidiaries & Affiliates	68 (340hr)	37 (222hr)	47 (141hr)
Total	1,388 (4,820.5hr)	1,306 (3,371.2hr)	1,298 (2,674hr)

Near-miss Activities

At each Mitsui Chemicals Group 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.

Near-miss Activities—Iwakuni-Ohtake Works

Referring to the accidents and occupational injuries that occurred in other workplaces and Works, all members of the Ohtake Manufacturing Section shared the task of identifying locations and operations with risks typical to a chemical plant that could cause a near-miss case. Such risks include (1) concerns for corrosion and collapses of stairs and floor (2) Machinery for open inspections etc. under a nitrogen atmosphere; and (3) Fires caused by alkyl aluminum. Among these identified near-miss cases, the Health and Safety Committee members in each workplace select locations and operations with associated high risks and notify job group members on a monthly basis to prevent possible accidents. They also suggest improvement ideas for a better safety work environment.

Small-group Activities

Our Works 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 best practices horizontally across the Group, 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.

Small-group Activities — Ichihara Works

Staff members of the Elastomer Section 1, noticed that there was a high percentage of defect products under a brand manufactured in the works. In order to reduce these defective products, operators and full-time workers cooperated with each other to investigate the causes, formulate countermeasures, and consider plans. This resulted in a review of manufacturing conditions, which successfully led to a significant reduction in defects. The works achieved its predetermined goal of more than 10 million yen cost reduction and profit improvement per year.

The 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 2020, 12 applications were submitted from domestic and overseas production sites, one of which was selected for the President's Awards and six for Production & Technology Center Executive's Awards. The Company's global expansion is advancing due not only to the Mitsui Chemicals 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.

President's Award for Best Plant

ZHANG JIA GANG FREE TRADE ZONE MITSUI LINK-UPON ADVANCED MATERIALS, INC. (China)

Theme: Improvement and revitalization of comprehensive communication in the Group and other companies

Production & Technology Center Executive's Award

Hexene Sect., Manufacturing Dept.-2, Ichihara Works

Service and Disaster Prevention Sect., Manufacturing Dept., Osaka Works

EO Sect., Manufacturing Dept.-1, Osaka Works

Electronic Material Sect., Manufacturing Dept.-2, Osaka Works

Isocyanate Sect., Urethan Manufacturing Dept.-2, Omuta Works

Grand SIAM Grand Siam Composites Co., Ltd. (Thailand)



President's Award for Best Plant Ceremony(ZHANG JIA GANG FREE TRADE ZONE MITSUI LINK-UPON ADVANCED MATERIALS, INC.)

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, 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.

The fiscal 2020 exchange meeting took place online to share information and exchange opinions with the organizations that won the President's Award for Best Plant 2018 and 2019,* as the meetings for these organizations were postponed due to the COVID-19 pandemic. We aim to hold the exchange meeting in fiscal 2021 as planned for the winner of the President's Award for Best Plant 2020. Details of winning practices are published on the intra-company networks in Japanese, English, and Chinese to disseminate good practice across the global Mitsui Chemicals Group.

* FY2018 President's Award for Best Plant: Ohtake Manufacturing Section, Manufacturing Dept.-2, Iwakuni-Ohtake Works, FY2019 President's Award for Best Plant: Mitsui Chemicals Sun Alloys Co., Ltd.

Safety and Prevention

Management System

Initiatives to Prevent Major Accidents

Accidents and Occupational Injuries

Safety Education

Plant Operation Technology Training Center

Plant Operation Technology Training Center

Mitsui Chemicals' Plant Operation Technology Training Center

The Mitsui Chemicals Group established its first Plant Operation Technology Training Center in Mobara in 2006, and then in Nagoya in 2007, to train plant operation personnel. Chemical plant operators are trained in Mobara, and the Nagoya center provides training programs for operators of fabricated products plant. These training programs are targeted not only at employees in Mitsui Chemicals Inc.'s Works, but also staff in R&D centers and indirect departments, as well as in affiliate companies under the global Mitsui Chemicals Group. Our hands-on and experience-based training programs cultivate safety-minded and skilled operators with substantial equipment knowledge.



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

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

For Mitsui Chemicals employees				
		Number of Attendees (Total Training Time)		
		FY2018	FY2019	FY2020
	When joined Company	174	90 (765hr)	5 (43hr)
	Follow-up training (six months after joining Company)	166	134 (3,752hr)	90 (2,520hr)

For Plant Operators	Promoted staff (3-4 years after joining Company)	56	95 (2,660hr)	55 (1,540hr)
	Workplace managers (8 years or more after joining Company)	43	42 (588hr)	18 (252hr)
For Engineers	When joined Company	44	32 (336hr)	0 (0hr)
	3-5 years after joining Company	29	28 (588hr)	7 (147hr)
For Researchers		59	60 (630hr)	25 (263hr)
Others		201	92 (414hr)	119 (1,592hr)
For employees of affiliates				
		Number of Attendees (Total Training Time)		
		FY2018	FY2019	FY2020
Domestic affiliates		263	353 (2,824hr)	199 (1,592hr)
Overseas affiliates		88	45 (630hr)	0 (0hr)
Total				
		Number of Attendees (Total Training Time)		
		FY2018	FY2019	FY2020
		1,123	971 (13,187hr)	518 (6,893hr)

COVID-19 Pandemic and Web Training

We suspended all training programs until June 2020 due to the COVID-19 pandemic. During this period, we prepared thorough infection prevention measures, including minimizing the number of attendees, health checks for lecturers and attendees, disinfection on entering the building, and ensuring ventilation, distancing, and dispersion. After implementing these measures, we resumed the sessions.



Reduced attendees from 20 to 14



Disinfectant was made available at various points



Temperature check with thermograph at the building entrance

Still, the number of visitors to our training centers has naturally been reduced to a third of a normal year. To offer learning opportunities to those who cannot physically visit the centers, we newly developed and started providing web-based training programs through which attendees can enjoy a simulation of On-site experience-based training. The programs have been used by Mitsui Chemicals and its domestic subsidiaries and affiliates, and we plan to offer them to overseas subsidiaries and affiliates in fiscal 2021.

The programs were all tailored to order. We designed the curriculums to meet the needs of individual companies, taking account of the skill level of trainees and the likely risks they may encounter. We also plan to translate the languages used in the programs, not only to English and Chinese, but also to Malay, Nepalese, Indonesian, Spanish, and Dutch. Attendees have reported that the web training programs are easy to understand and provide a good insight into the work, even though they cannot physically experience it. Although we recognize that such web training cannot replace real physical training, we continue utilizing it as a new form of training with benefits such as not requiring lecturers and trainees to travel.

Web Training Overview

Concept	Hybrid (lectures, demonstration images, videos, and pre-recorded video) and interactive (questions and group discussions) simulation of physical training.	
Contents	Programs made to date	Initial contents were on safe operations, such as pointing and calling, static electricity and dust explosions, oxygen deficiency and poisoning, burns and chemical injury, falling and dropping, and pinching and rolling.
	Future plans	All the experience-based programs currently available will be converted to web training, except those for plant operations and non-routine work.
Operation	Program started in July 2020. Design and provide curriculums that suit the needs of each company, mainly for the affiliates for which experience-based training was postponed.	
	Mobara Training Center Mitsui Chemicals and domestic affiliates: 143 attendees (2,370 hours) Overseas affiliates: 10 attendees (230 hours)	
	Nagoya Training Center Mitsui Chemicals and domestic affiliates: 199 attendees (1,296 hours) Overseas affiliates: 0 attendees (0 hours)	
Future prospects	<ul style="list-style-type: none"> - Enhance contents (Plan to add a program about facility failure response within fiscal 2021). - Create programs in local languages for overseas affiliates using machine translation (within fiscal 2021). 	



Web training: Questions from the trainer encourage attendees' thinking and discovery

On-site Training (VR Training)

The COVID-19 pandemic in fiscal 2020 made it impossible for training center staff to visit Works to provide training. To work around this situation, we established a new training method utilizing an improved virtual reality (VR) system, originally introduced in fiscal 2018. We plan to expand the program contents and available tools for this VR training. VR training was utilized particularly for occupational injury prevention for new employees. In fiscal 2020, some 300 employees received VR training across the five Mitsui Chemicals Works.

VR Safety Training

Method	VR tools are dispatched to the Works. Remotely train the Work's lecturer in advance on usage of the tools and the program contents. Also, provide remote support for the lecturer during the actual training session.	
VR tools	Mobara Training Center	2 sets (extra set added in FY2020)
	Nagoya Training Center	1 set
Program contents	Forward falling and dropping, pinched by belt conveyer, falling from stairs, rolled into roller device, falling (customized), fire burst from ejector due to vent blockage, dust explosion, residual pressure burst during pipe maintenance, and electric shock from power panel.	

On-site Training (VR Training)

For Our Group employees			
	Number of Attendees (Total Training Time)		
	FY2018	FY2019	FY2020
On-site training program	239	1,255 (10,040hr)	283 (2,264hr) (Replaced by VR Safety Training)

Globalization of Training Centers

Since fiscal 2018, we have been proactively focusing on developing human resources that will serve as the foundation to support the global business of the Group. We offer educational programs and training support not only for Mitsui Chemicals but also for domestic and overseas subsidiaries and affiliates, customizing them to the specific needs of each company.

For affiliates in the Southeast Asia region, the Operation Excellence Training Center (OETC) of the Siam Group in Thailand has been giving training courses in Thai and English. The Siam Group is capable of providing the same level of training as in Japan, utilizing the training system and knowhow licensed from us. The fiscal 2020 training was provided only to affiliates in Thailand to minimize the risk of COVID-19 infection. Instead, web training was provided to affiliates in other countries, such as safety lecturer training for a Singapore affiliate, and safety training tailored for the local needs of a Chinese affiliate. We continue to offer web training to other overseas affiliates, one by one, having completed surveys of their needs and created custom-made training plans.

Training Centers Available to Other Companies

Our training centers have been open to other companies since fiscal 2015 so that they can train their employees to handle hazardous materials. The demand for human resource development and training for production site safety is extremely high, and many companies from different industries utilize our Centers. Our programs are highly rated by attendees with comments such as: "I learned many things that I can utilize in my company," and "It was easy to understand through experienced-based training through case studies of past accidents and injuries." Although the number of external users and visitors has decreased significantly in fiscal 2020 due to COVID-19 pandemic restrictions, we received numerous requests for continuation of the courses. We responded with courses that adopted thorough infection prevention measures.

External Training Sessions (Mobara) / Responses to Center Tour Requests (Mobara and Nagoya)

	FY2018	FY2019	FY2020
Number of Training Attendees	317	274	109
Number of Center Visitors	630	456	35

We promote activities at our training centers externally through magazines and lectures, aiming to contribute to building a society with zero industrial accidents and injuries.

In fiscal 2020, we contributed articles to Natural Gas magazine, published by the Japan Natural Gas Association, and High-Pressure Gas magazine by the High-Pressure Gas Safety Institute of Japan. We also presented a lecture in the 2021 Industrial Safety Measures Symposium. Extensive educational materials and program contents, global availability, and our constant efforts for the activities during the COVID-19 pandemic were all highly appreciated, and we were awarded the 2020 Responsible Care Grand Prize organized by the Japan Chemical Industry Association.

Management System	GHG and Energy	Industrial Waste
Environmentally Hazardous Substances	Water	Biodiversity
Environmental Accounting/Compliance		

Management System

Policy and Basic Approach

The Mitsui Chemicals group's business activities may affect the global environment, such as GHG emissions from the consumption of energy, including electricity and heat; water resource consumption in product heating, cooling, and cleaning processes; and emissions of chemical substances to the atmosphere, water, and soil etc. Aiming to minimize the negative impact on the global environment throughout the lifecycles of the products we act to protect the environment in two ways: by reducing the environmental impact of our business activities and by appropriately managing chemical substances. 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.

Our Responsible Care Policy states that the Group makes 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. In line with the Policy, we established internal regulations for the management of the environment and safety with basic items regarding environmental protection. In this way, we are promoting environmental protection.

- * Please refer [here](#) for details of Climate Change Policy.
- * Please refer [here](#) for details of Reduce Environmental Load through Products and Services.
- * Please refer [here](#) for details of Product Stewardship.

System and Responsible Officers

The responsible officer in charge of the Production & Technology Center is the person directly responsible for our environmental protection system. 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.

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.

The Internal Control Division conducts environmental & safety audits (for environmental protection, safety and prevention) at Works and laboratories of the Mitsui Chemicals Group.

Environmental & Safety Audit (environment protection)	Confirms the status of environment protection and that there is compliance with the relevant laws and regulations. Indicates nonconformities that require revision or improvement.
	Scope: Works and laboratories of Mitsui Chemicals Inc. and its subsidiaries and affiliates
	Frequency*: Once every one to three years (depending on size, business type and management level of the audited organization)

* A remote audit is conducted if an onsite audit is difficult due to COVID-19 restrictions.

Goals and Results

GHG / Energy

KPI	Scope	FY2020			FY2021	Medium to Long-term
		Goals	Results	Level Achieved	Goals	Goals
GHG emissions ^{*1} reduction rate (Compared with FY2005)	Japan	—	29.0%	—	—	25.4% or more (FY2030)
Reduction of GHG emissions ^{*1} (Compared with the previous fiscal year)	Japan	50 thousand tons or more	83 thousand tons	○	20 thousand tons or more	—
Five-year annual energy intensity reduction rate	Mitsui Chemicals, Inc.	1% or more ^{*2}	-0.7%	×	1% or more ^{*2}	1% or more (FY2025)
Energy intensity index (FY2009=100)	Mitsui Chemicals, Inc.	89.5 or less	96.6	×	Average annual reduction of 1% or more ^{*2}	—

*1 Emission and reduction volume at full capacity, which is different than what is shown in the graph on the “GHG and Energy” page.

*2 Goal is to achieve either target

Substances Subject to the PRTR Act

KPI	Scope	FY2020			FY2021	Medium to Long-term
		Goals	Results	Level Achieved	Goals	Goals
Emission of substances subject to the PRTR Act	Mitsui Chemicals, Inc.	Formulate initiatives toward 450 ton/year	As planed	○	Systematic promotion to reduce emissions of substances subject to the PRTR Act	Continuous promotion to reduce emissions of substances subject to the PRTR Act

Industrial Waste

KPI	Scope	FY2020			FY2021	Medium to Long-term
		Goals	Results	Level Achieved	Goals	Goals
Landfill rate for industrial waste	Japan	1% or less	0.4%	○	1% or less	1% or less
	Overseas	1% or less	0.3%	○	1% or less	1% or less

Air

KPI	Scope	FY2020			FY2021	Medium to Long-term
		Goals	Results	Level Achieved	Goals	Goals
Volatile Organic Compound (VOC) emissions	Mitsui Chemicals, Inc.	3,000 ton or less	1,537 ton	○	3,000 ton or less	Make plans for further reductions

General measures to preserve the environment notwithstanding the above

KPI	Scope	FY2020			FY2021	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 and regulations	Mitsui Chemicals Group	0	0	○	0	0

Management System	GHG and Energy	Industrial Waste
Environmentally Hazardous Substances	Water	Biodiversity
Environmental Accounting/Compliance		

GHG and Energy

Based upon [our Climate Change Policy](#), the Mitsui Chemicals Group is committed to reducing GHG emissions and energy consumption, particularly aiming at low-carbon manufacturing.

* See [here](#) for other information concerning climate change.

[Climate Change-Related Information \(CDP\)](#) (PDF : 1.3MB)

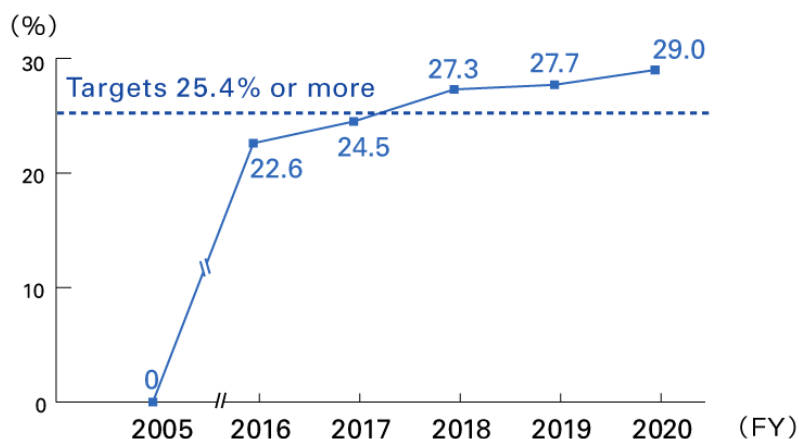
[Climate Change-Related Verification Statement \(PDF: 408KB\)](#)

GHG Emissions and Energy Consumption

In VISION 2025, our long-term business plan established in fiscal 2016, the Mitsui Chemicals Group set out the target of “reducing domestic greenhouse gas (GHG) emissions by 25.4% by fiscal 2030 (compared with fiscal 2005, operating at full capacity).” Since then, we have been working hard to achieve this target. In addition, we announced [the 2050 Carbon Neutral Declaration](#) in November 2020 in response to the rising number of environmental issues and growing global demand for decarbonization. Next, we set out a new target of “globally reducing the Group’s GHG emissions by 40% by fiscal 2030 (compared with fiscal 2013)” in June 2021 with a commitment to accelerate GHG reduction efforts and expand its scope. To achieve these targets, we will actively engage ourselves in increasing adoption of low-carbon raw materials and fuel, promotion of energy efficiency, conversion to renewable energy, and creation of process innovation technologies to build a low-carbon society.

As the fiscal 2020 target, we set out to “reduce GHG emissions by 50,000 tons or more (compared with fiscal 2019, operating at full capacity). We achieved an 83,000-ton reduction, well exceeding the target figure, by introducing a highly efficient gas turbine power generation system, and thorough implementation of energy saving measures throughout our Works, such as the gradual enhancement of heat recovery and streamlining of refining processes. These efforts resulted in a 29% reduction in the Group’s GHG emissions (compared with fiscal 2005, operating at full capacity).

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

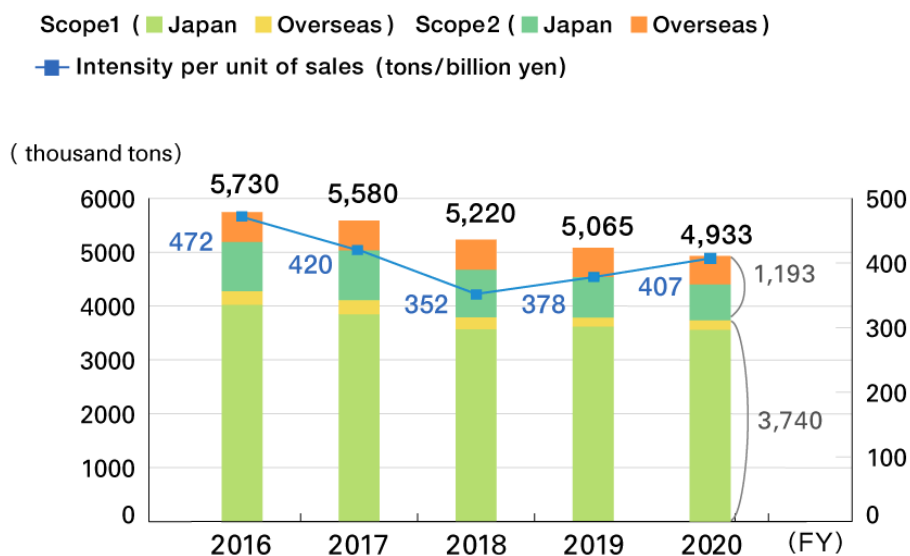


* Scope of affiliates: Domestic consolidated subsidiaries

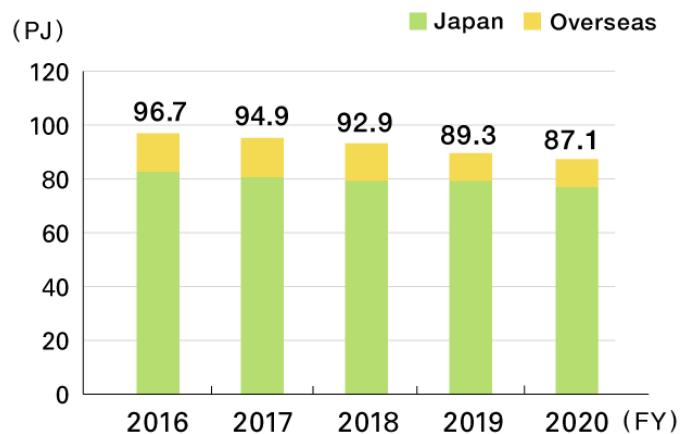
The Mitsui Chemicals Group reduced GHG emissions (Scope 1 and 2) in fiscal 2020 by 130,000 tons compared with fiscal 2019 due to the decrease in operations caused by the COVID-19 pandemic and implementation of energy saving measures. VISION 2025 stipulated a target of a five-year average annual energy intensity reduction rate of 1% or more; however, the actual figure in fiscal 2020 was a 0.7% increase, again resulting from the operational decrease caused by the COVID-19 pandemic. Looking ahead, while targeting a five-year rate of at least 1%, since fiscal 2018 we have aimed to either achieve a five-year annual reduction rate of at least 1% or an average annual reduction in the energy intensity index (FY2009 = 100) of at least 1%. This is because of the difficulties involved in evaluating long-term reduction efforts based on a five-year annual 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 (Scope 1 and 2)

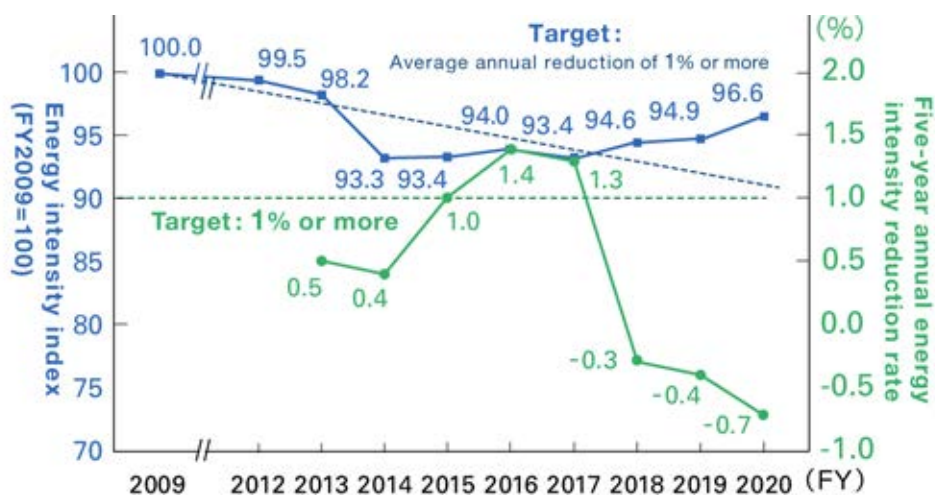


Energy Consumption



- * 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, NF₃.

Energy Intensity (Mitsui Chemicals, Inc.)

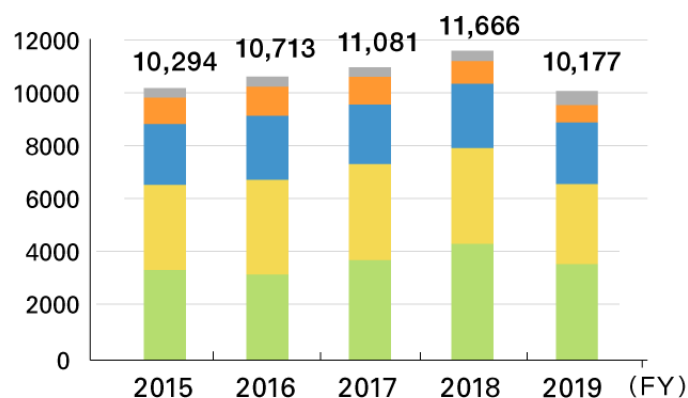


- * Energy intensity denominator is ethylene conversion production volume.

GHG Emissions (Scope 3) (Mitsui Chemicals, Inc.)

- 01: Purchased goods and services
- 11: Sold product specifications
- 12: Sold product disposals
- 15: Investment
- Others

(Thousand tons CO₂eq)



Breakdown of GHG Emissions (Scope 3) (Mitsui Chemicals, Inc. Fiscal 2019)

Category	Emissions (Thousands of tons CO ₂ eq / year)
01 : Purchased goods and services	3,637
02 : Capital goods	114
03 : Fuel- and energy-related activities (not included in Scope 1 and 2)	312
04 : Transportation/distribution (upstream)	47
05 : Waste generated from operations	38
06 : Business travel	4
07 : Employee commuting	5
08 : Leased assets (upstream)	1
11 : Sold product specifications	3,029
12 : Sold product disposals	2,334
15 : Investment	654
Total	10,177

〔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.

Highly Efficient Gas Turbine Power Generation System for Self-Sufficiency

Mitsui Chemicals installed a highly efficient gas turbine power generation system in its Osaka Works and commenced operation in December 2020. This was a joint project with Daigas Energy Co., Ltd. under a grant from the 2018 Subsidy for Promoting Investment in Energy Saving provided by the Ministry of Economy, Trade and Industry.

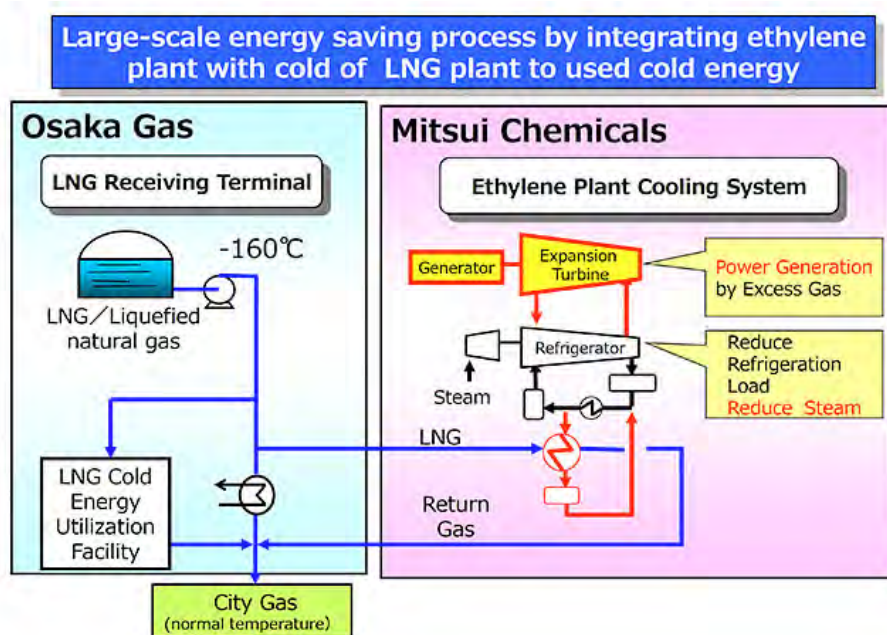
The system increases the Works' self-sufficiency in power. It also reduces fuel usage by the naphtha cracking furnaces in the ethylene plant by taking the high-temperature exhaust gas generated by the power generation facilities for use as the combustion air in the furnaces. This is reducing CO₂ emissions from Osaka Works by 70,000 tons per year (compared with fiscal 2016).

Energy-Saving Process Using LNG Cold Energy

Together with Osaka Gas Co., Ltd., Mitsui Chemicals and its group company, Osaka Petrochemical Industries, Ltd. have adopted energy-saving process by using liquefied natural gas (LNG)-generated cold energy in the ethylene plant. This world-first energy-saving process using LNG-generated cold energy on a large-scale at our ethylene plant commenced in October 2010.

To transport and store natural gas, it is liquefied by cooling it to -160°C . Liquefied gas is a good source of cold energy. During its liquefied state, LNG emits boil off gas which has auto-refrigeration properties. When returning LNG to its gas state, it continues to retain superior cooling abilities.

At Mitsui Chemicals' Osaka Works OPC ethylene plant, after thermal decomposition of naphtha (crude gasoline) at high temperatures, base materials such as ethylene and propylene are separated and purified by cooling the cracked gas. By efficient use of LNG cold energy from the adjacent OPC ethylene plant of Osaka Gas Senboku Works, a significant reduction in CO_2 emissions was possible.



CCU (Carbon Capture Usage) Technologies

Mitsui Chemicals took part in the CCU Project ($\text{CO}_2 + \text{H}_2 \Rightarrow \text{CH}_3\text{OH} + \text{H}_2\text{O}$) lead by the Research Institute of Innovative Technology for the Earth (RITE) (commissioned by NEDO), and developed a high activity catalyst. Refinement of this highly active catalyst eventually was tested by the pilot plant of CCU technology in Mitsui Chemicals Osaka Works in 2009. This was a verification test, producing 100 tons of methanol per year from hydrogen and CO_2 which was contained in the exhaust gases. We have confirmed the conversion ratio from CO_2 to methanol and the catalyst life and obtained necessary data items for creating a technological package. However, due to several issues that remained to be addressed concerning costs and availability of hydrogen source, this technology has not yet been commercialized. Nevertheless, we believe that this promising technology should greatly contribute to the realization of low-carbon society which is currently sought by the world.

Management System	GHG and Energy	Industrial Waste
Environmentally Hazardous Substances	Water	Biodiversity
Environmental Accounting/Compliance		

Industrial Waste

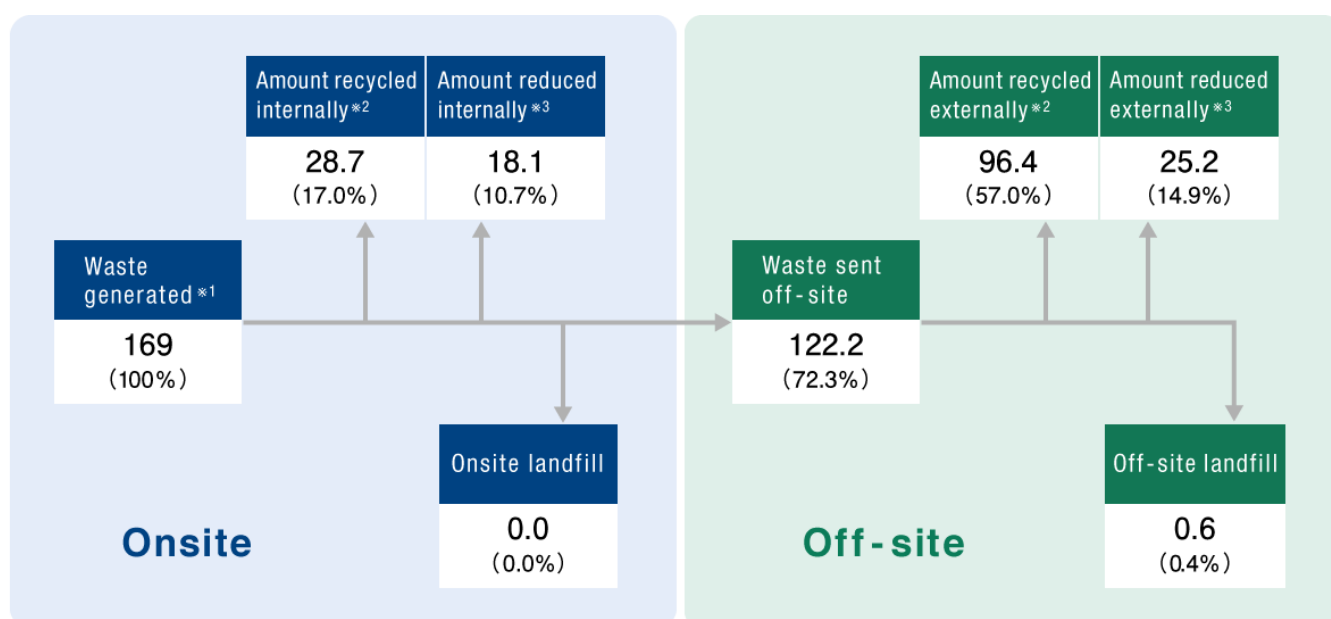
The Mitsui Chemicals Group aims at minimizing the landfill rate for industrial waste to 1% or less. In order to reduce the landfill volume, we are implementing waste reduction measures such as energy recovery and recycling wastes into cement materials and base course materials for road. In fiscal 2020, we achieved the goals set by Mitsui Chemicals Inc. and domestic affiliates, making a total of ten consecutive years of meeting these goals. Overseas affiliates have now achieved their goals for twelve consecutive years.

* Please refer [here](#) for scope of data.

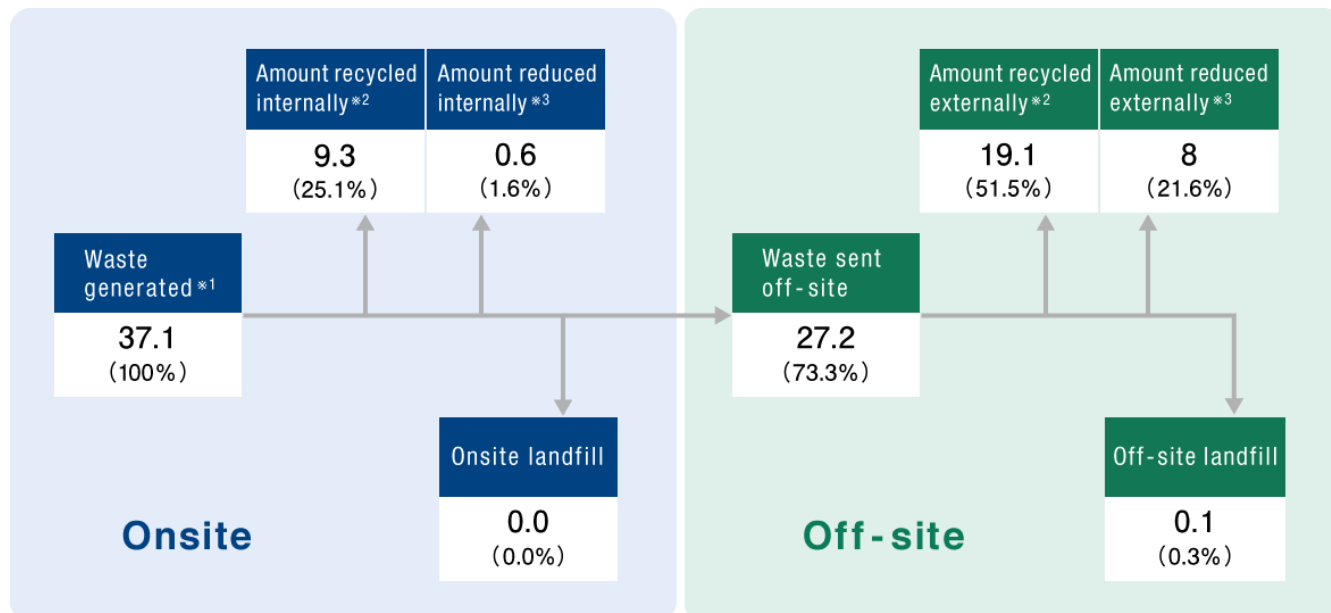
The Waste Management and Public Cleansing Law was revised partially to tighten controls over inappropriate disposal of waste. Due to this revision, business operators who discharge 50 tons or more of specially controlled industrial waste must use an electronic manifest from fiscal 2020. We implement the operation of the electronic manifest.

Industrial Waste Treatment Process (FY2020)

Japan



Overseas



* Unit: Thousand tons

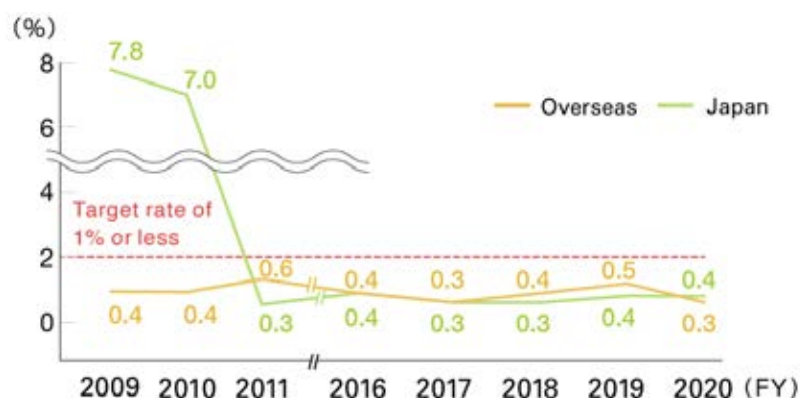
* Any minor discrepancies in percentages are due to rounding.

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

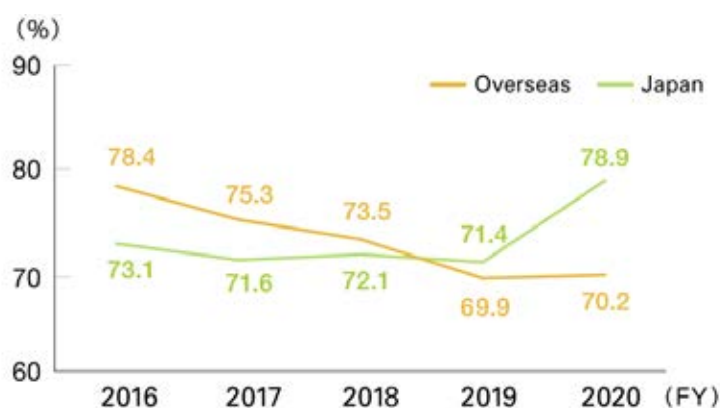
*2 Recycled waste volume: The value includes recycled plastic waste and waste oil used as a fuel.

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

Landfill Rate for Industrial Waste



Recycling Rate



* Landfill rate for industrial waste = (Onsite landfill + Off-site landfill) / Waste generated

* Recycling rate = Amount recycled externally / Waste sent off-site

Management System	GHG and Energy	Industrial Waste
Environmentally Hazardous Substances	Water	Biodiversity
Environmental Accounting/Compliance		

Environmentally Hazardous Substances

The Mitsui Chemicals Group is monitoring emissions of volatile organic compound (VOC), NOx, Sox, soot and dust, hazardous air pollutants, and substances subject to the PRTR Act, and working to reduce environmental impact.

* Please refer [here](#) for scope of data.

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.

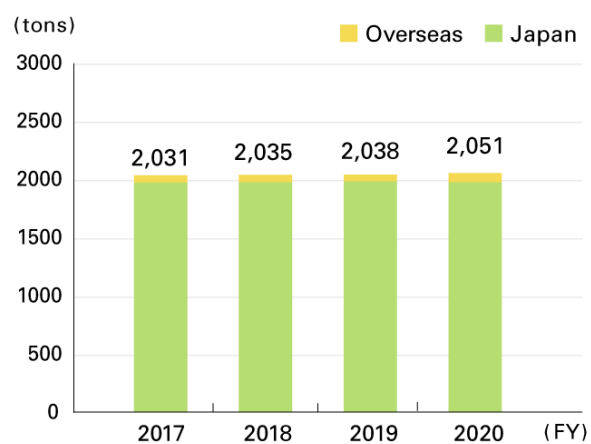
The Japanese government set a target of reducing fixed-source volatile organic compound (VOC) emissions in fiscal 2010 by 30% compared with fiscal 2000. VOC emissions at Mitsui Chemicals reached 8,523t in fiscal 2000, so our goal is 5,966 tons/year. However, we intensified the goal to 3,000 tons/year or less and succeeded in making drastic reductions by fiscal 2010. We have continued maintaining emissions at this level.

Because the Mitsui Chemicals Group produces various chemical products, a wide range of VOCs are emitted. We use various methods to reduce VOC emissions into the air, including absorption by activated carbon and other filters, neutralization by acid or alkaline water, combustive decomposition, and Pressure Swing Adsorption (PSA).

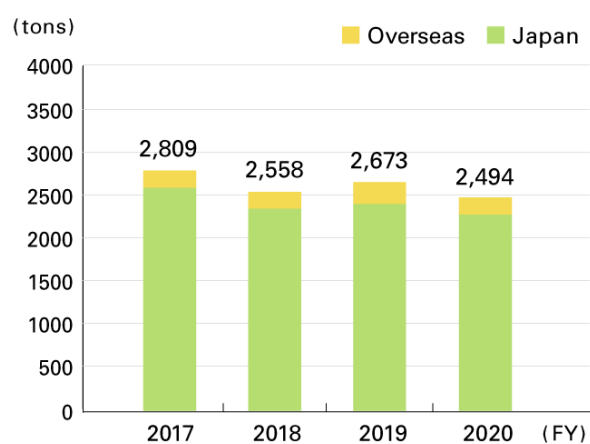
Further, burning fuel in chemical product manufacturing processes generates SOx, NOx, and soot and dust. We therefore implement a variety of measures to reduce release of these items into the atmosphere by removing them using catalysts, installing dust collectors and washing towers, and using fuels free from nitrogen and sulfur.

There had been a temporary increase in emissions of chloroethylene, a hazardous air pollutant due to tank removal work in fiscal 2020, however, emissions of the substance are projected to be zero from next year.

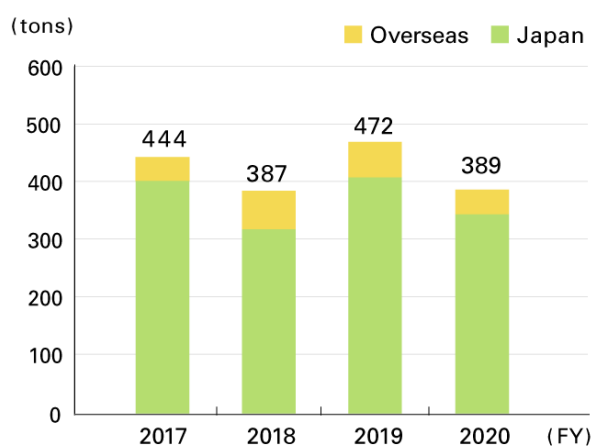
Volatile Organic Compound (VOC) Emissions



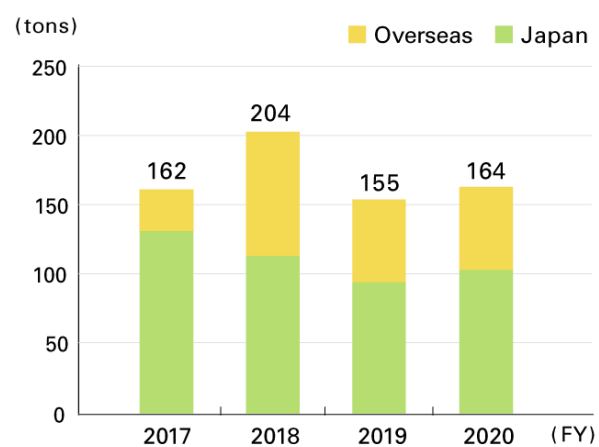
NOx Emissions



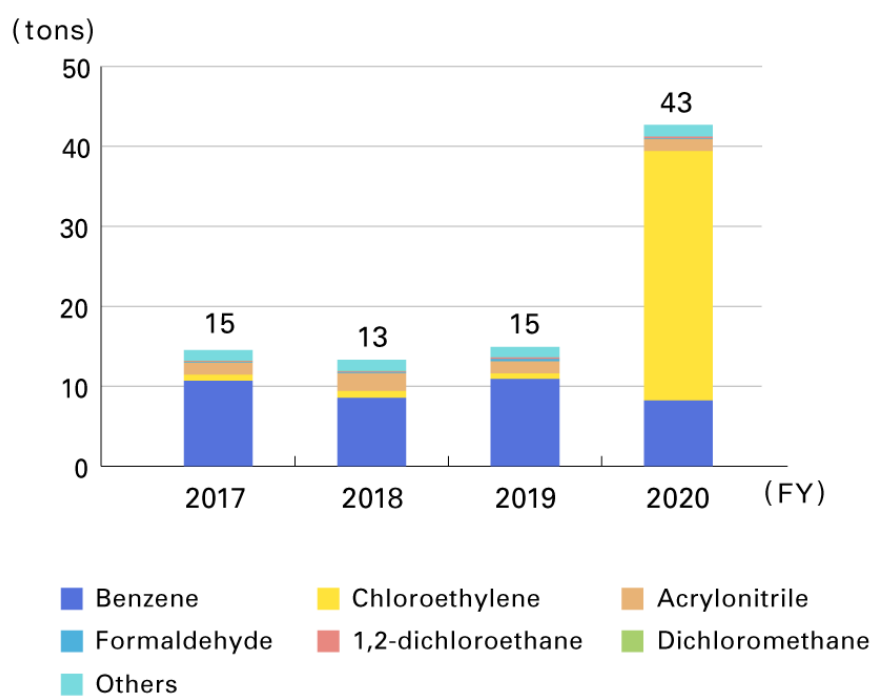
SOx Emissions



Soot and Dust Emissions



Emissions of Hazardous Air Pollutants (Mitsui Chemicals, Inc.)



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

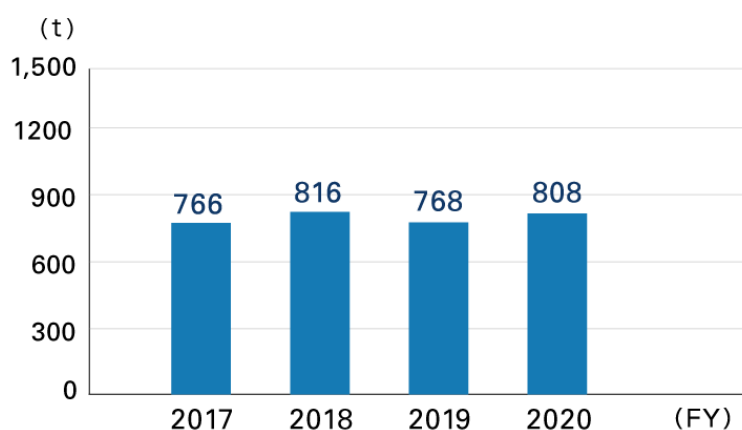
Substances Subject to the PRTR Act

In accordance with the Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management (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. We are further reinforcing our management while also seeking other ways to reduce annual emissions 450tons or less.

* PRTR: Pollutant Release and Transfer Register.

[PRTR Data for Individual Sites](#) (PDF: 569KB)

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 (FY2020)

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	167.76	0.00	0.00	167.76	0.00	28.57
Toluene	300	18.06	0.00	0.00	18.06	0.00	2.56
Cumene	83	12.84	0.00	0.00	12.84	0.00	0.00
Xylene	80	8.86	0.00	0.00	8.86	0.00	0.17
Ethylbenzene	53	6.40	0.00	0.00	6.40	0.00	0.14
Epichlorohydrin	65	2.14	0.00	0.00	2.14	0.00	0.00
Zinc compounds(water-soluble)	1	0.00	1.26	0.00	1.26	0.00	0.00
Hydrogen fluoride and its water-soluble salt	374	0.00	0.96	0.00	0.96	0.00	0.00
Benzene	400	0.82	0.01	0.00	0.82	0.00	1.37
HCFC-123	164	0.55	0.00	0.00	0.55	0.00	0.00

Mobara Branch Factory

Substance	Ordinance designation number	Emitted				Transferred	
		Air	Water	Soil	Total	Sewage	Off-site
Styrene	240	0.11	0.00	0.00	0.11	0.00	0.00
Methyl methacrylate	420	0.07	0.00	0.00	0.07	0.00	0.00
N-Butyl acrylate	7	0.03	0.00	0.00	0.03	0.00	0.00
Xylene	80	0.02	0.00	0.00	0.02	0.00	0.00
Acrylic acid	4	0.01	0.00	0.00	0.01	0.00	0.00
N-Butyl methacrylic	419	0.01	0.00	0.00	0.01	0.00	0.00

Nagoya Works

Substance	Ordinance designation number	Emitted				Transferred	
		Air	Water	Soil	Total	Sewage	Off-site
Acrylonitrile	9	0.01	37.66	0.00	37.67	37.66	137.82
1,2-Epoxypropane	68	1.14	1.49	0.00	2.63	1.49	0.19
Styrene	240	0.29	2.06	0.00	2.35	2.06	8.27
Toluene	300	1.48	0.00	0.00	1.48	0.00	46.99
Xylene	80	0.26	0.00	0.00	0.26	0.00	5.53
Ethylbenzene	53	0.26	0.00	0.00	0.26	0.00	5.50
Ethylene oxide	56	0.14	0.11	0.00	0.25	0.11	0.04
N,N-Dimethylformamide	232	0.01	0.00	0.00	0.01	0.00	2.72
Phenol	349	0.00	0.00	0.00	0.00	0.00	75.18

Osaka Works

Substance	Ordinance designation number	Emitted				Transferred	
		Air	Water	Soil	Total	Sewage	Off-site
chloroethylene	94	31.19	0.10	0.00	31.29	0.00	0.00
Cumene	83	16.74	0.00	0.00	16.74	0.00	0.03
Dicyclopentadiene	190	5.22	0.00	0.00	5.22	0.00	0.00
Benzene	400	4.53	0.01	0.00	4.54	0.00	0.00
Zinc compounds(water-soluble)	1	0.00	3.89	0.00	3.89	0.00	0.15
Toluene	300	3.10	0.01	0.00	3.12	0.00	2.64
Trichlorofluoromethane	288	2.43	0.00	0.00	2.43	0.00	0.00
Methyl methacrylate	420	2.33	0.00	0.00	2.33	0.00	12.87
α -methylstyrene	436	1.52	0.00	0.00	1.52	0.00	0.00
Acrylonitrile	9	1.51	0.00	0.00	1.52	0.00	3.60
Dioxins	243	0.00	0.02	0.00	0.03	0.00	0.09

Iwakuni-Ohtake Works

Substance	Ordinance designation number	Emitted				Transferred	
		Air	Water	Soil	Total	Sewage	Off-site
N-Hexane	392	164.36	0.00	0.00	164.36	0.00	0.00
Xylene	80	22.51	0.00	0.00	22.51	0.00	0.02
Toluene	300	21.37	0.02	0.00	21.39	0.00	0.00
1,4-Dioxane	150	0.00	4.46	0.00	4.46	0.00	0.00
Bromomethane	386	4.17	0.00	0.00	4.17	0.00	0.00
Benzene	400	2.56	0.00	0.00	2.56	0.00	0.00
Acetaldehyde	12	0.74	0.00	0.00	0.74	0.00	0.00
Cumene	83	0.36	0.00	0.00	0.36	0.00	0.00
Ethylbenzene	53	0.23	0.00	0.00	0.23	0.00	0.00
Phenol	349	0.01	0.14	0.00	0.15	0.00	0.00
Dioxins	243	0.00	0.05	0.00	0.05	0.00	19.13

Omuta Works

Substance	Ordinance designation number	Emitted				Transferred	
		Air	Water	Soil	Total	Sewage	Off-site
Toluene	300	202.67	0.18	0.00	202.85	0.00	670.80
Dichlorobenzene	181	54.05	0.65	0.00	54.70	0.00	305.66
Toluene	300	18.70	0.00	0.00	18.70	0.00	0.00
Dicyclopentadiene	190	10.17	0.00	0.00	10.17	0.00	5.63
Formaldehyde	411	0.00	9.39	0.00	9.39	0.00	1.79
Epichlorohydrin	65	6.52	0.00	0.00	6.52	0.00	0.00
N,N-Dimethylformamide	232	0.14	5.71	0.00	5.85	0.00	0.00
Phenol	349	1.74	0.00	0.00	1.74	0.00	0.69
Acetonitrile	13	0.00	0.50	0.00	0.50	0.00	0.00
Cresol	86	0.47	0.00	0.00	0.47	0.00	1.59
Dioxins	243	0.00	0.38	0.00	0.38	0.00	0.00

Sodegaura Center

Substance	Ordinance designation number	Emitted				Transferred	
		Air	Water	Soil	Total	Sewage	Off-site
N-Hexane	392	0.28	0.00	0.00	0.28	0.00	3.06
Dichlorobenzene	181	0.11	0.00	0.00	0.11	0.00	1.20
Dichloromethane	186	0.08	0.00	0.00	0.08	0.00	1.39
Xylene	80	0.02	0.00	0.00	0.02	0.00	2.70
Tolylene Diisocyanate	298	0.00	0.00	0.00	0.00	0.00	0.87

Management System	GHG and Energy	Industrial Waste
Environmentally Hazardous Substances	Water	Biodiversity
Environmental Accounting/Compliance		

Water

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, we ask suppliers to carry out activities that include waste water management and efficient utilization of water in [the Sustainable Procurement Guidelines](#).

* Please refer [here](#) for scope of data.

Climate Change Policy

[Water-related Information \(CDP\)](#) (PDF : 929KB)

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.

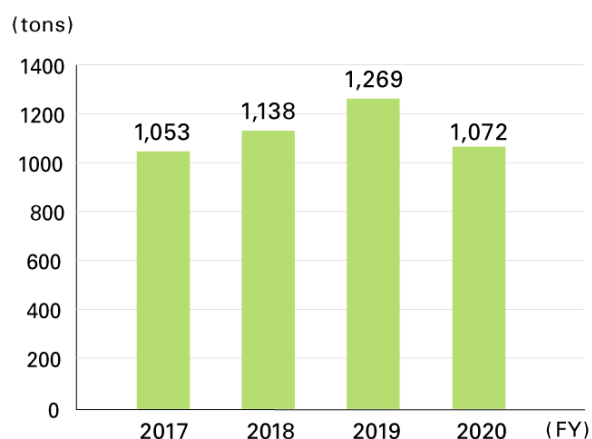
Reduction in water quality contaminants

The Mitsui Chemicals Group has adopted benchmarks on water quality contaminants designated by laws and regulations and monitors the emissions of these substances such as chemical oxygen demand (COD), nitrogen and phosphorus, to preserve the water environment. The emission levels for each of these chemicals are maintained far below the target levels required by laws or other regulations.

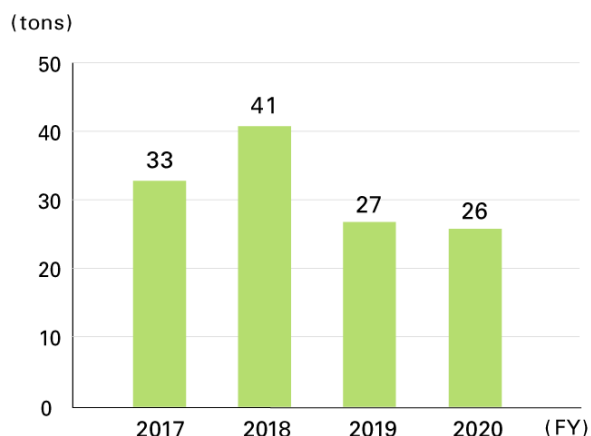
In domestic production sites with high water usage, the wastewater from different plants is collected together before it is treated by neutralization, oil separation, and removal of solids. We also pass the wastewater through an activated sludge process to remove organic substances using microorganisms. However, some of the water cannot be treated by the activated sludge process as it contains substances that inhibit microorganisms from organic decomposition or the organic substances contained in the water are persistent. Such wastewater is treated in a normal manner after treated with ozone, combustion, or anammox.*

* Anammox: Anaerobic ammonium oxidation. A process to remove nitrites from ammonium-rich wastewater using ammonia-oxidizing bacteria.

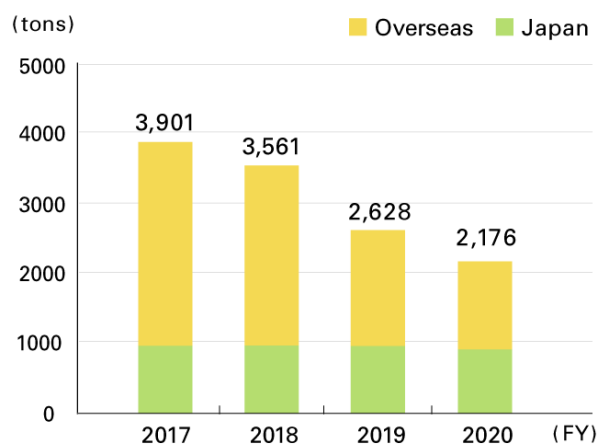
Total Nitrogen Emissions (Mitsui Chemicals, Inc.)



Total Phosphorous Emissions (Mitsui Chemicals, Inc.)



COD, BOD Emissions

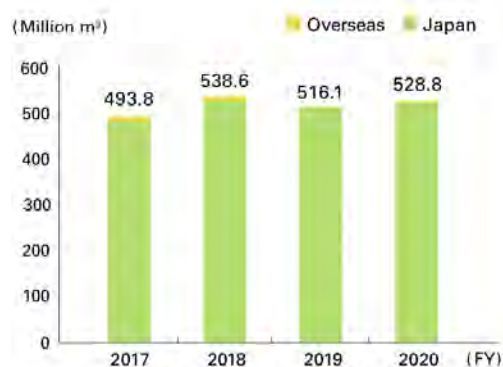


Efficient Use of Water

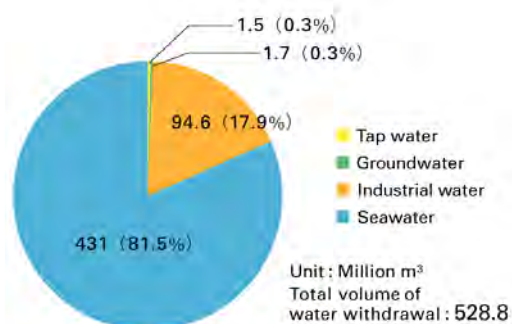
The Mitsui Chemicals Group monitors the volumes of water withdrawal, discharge, consumption, and recycling in an effort to use water efficiently. The Group proactively engages in water recycling such as circulating cooling water systems, particularly at production facilities that use large amounts of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

Volume of Water Withdrawal

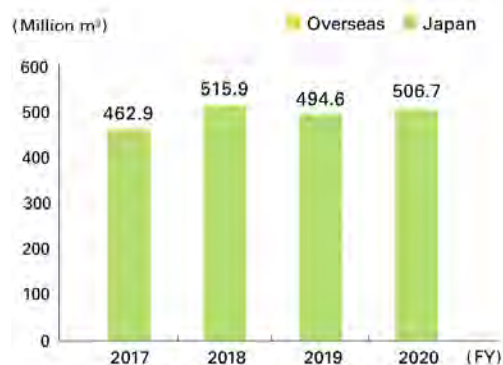
(tap water, groundwater, industrial water, and seawater)



Breakdown of Volume of Water Withdrawal (FY2020)



Discharge Water Volume



Water Consumption*



* Water consumption = water withdrawal – discharge water volume

Water Recycling Volume and Ratio*



* Water recycling ratio = water recycling volume / (volume of water withdrawal + water recycling volume)

The Mitsui Chemicals Group conducts water risk assessments for its production sites from the present up to the year 2040. To do this, we use the AQUEDUCT Water Risk Atlas of World Resources International (WRI). The Water Risk Filter of the World Wildlife Fund (WWF) has also been added as an evaluation tool from fiscal 2018. Assessment tools have been used to identify regions where water stress is high. Detailed assessments of the unit water levels at production sites, water usage volumes and local data have also been conducted to verify that the water risk at each site is at an acceptable level. In addition, similar surveys are conducted at new plants when operations are commenced.

Including **biodiversity risk** as a part of water risks, we use IBAT to gather data and investigate biodiversity risk based on the following evaluation items: Protected areas, priority protected areas, endangered species and endangered freshwater species surrounding our production sites.

In support of the **TCFD recommendations**, we are conducting assessments on the physical risks to our production sites (floods, drought & temperature changes), based on IPCC RCP 2.6 and RCP 8.5. In the future, we will conduct environmental impact assessments to include items with high materiality in the scenario analysis. In identifying sites to be assessed, 47 sites in eight areas that rank high in importance (Japan, China, Southeast Asia, India, United States, Europe, Brazil and Mexico) have been selected for analysis and assessment for the risk of floods, drought and temperature changes. The risk of water-related natural disasters tend to be high for Japan, China, Southeast Asia and India and the number of disasters is expected to increase in many areas. Water supplies tend to be strained in India and Mexico, with a similar trend anticipated for Singapore and Thailand.

Also, we conducted impact assessments for our 13 production sites in Japan and overseas. Utilizing a particular assessment model, we estimated the value of asset losses from river flooding or high tides from 2020 to 2070. The assessment results suggested that the risk impact from river flooding on assets in production sites in Japan becomes greater after 2030. The risk impact from high tides also becomes greater after 2030 for one site in Japan and two overseas sites. We plan to expand the scope of production sites subject to impact assessment, and determine the necessary countermeasures. Based on the assessment results, the approved countermeasures will then be reflected in our business strategies.

Management System	GHG and Energy	Industrial Waste
Environmentally Hazardous Substances	Water	Biodiversity
Environmental Accounting/Compliance		

Biodiversity

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.

To prevent any loss of biodiversity, the Mitsui Chemicals Group is working on the following initiatives aimed at [mitigating climate change](#), [recycling of resources](#), [managing chemical substances](#) and [reducing environmentally harmful substances](#) to contribute to realizing a cohesive society in harmony with the global environment.

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.

Biodiversity Risk Assessment

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 production sites of our Group companies. Using IBAT,* these surveys confirmed the absence of nature protected areas (i.e. world heritage sites, IUCN Category I, II, III, Ramsar Sites) within a 3km radius around these production sites.

* 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.

Contributions through Products and Services

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™ products sales revenue ratio as a KPI in the Long-term Business Plan VISION 2030, we aim to expand products that help conserve biodiversity.

Contributions through the Supply Chain

In procuring our raw materials, we are making efforts to select materials and suppliers that will result in a lower environmental impact in line with [our Purchasing Policy](#). As we include "preservation of biodiversity" to [the Sustainable Procurement Guidelines](#), we request our suppliers to support the preservation of biodiversity. In [logistics](#), we work to reduce environmental impact 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.

Participation in Initiatives

We support [the Declaration of Biodiversity by the Japan Business Federation \(Keidanren\)](#) and participate in [the Japan Business and Biodiversity Partnership](#). The policy and initiatives of Mitsui Chemicals in this area has been introduced in [Initiative on the Declaration of Biodiversity by Keidanren](#).

Social initiatives that support the conservation of biodiversity

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

* Major activities are shown [here](#).

Wildlife Survey on Rice Fields

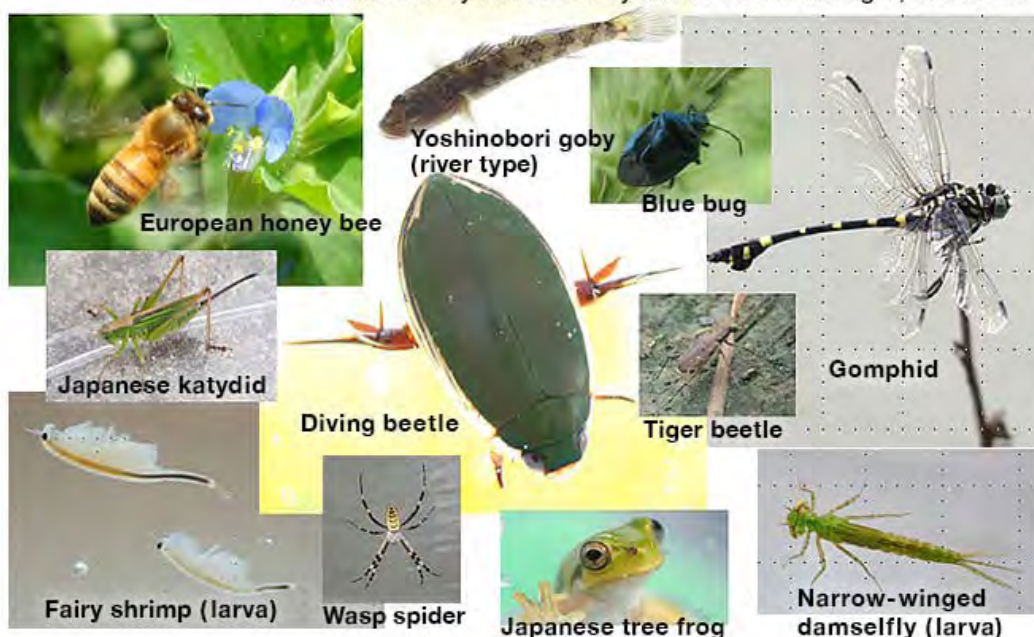
The Mitsui Chemicals Group affiliate company, Mitsui Chemicals Agro, Inc. (MCAG), has been conducting a “Wildlife Survey on Rice Fields” using MCAG products since 2012.

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 wildlife, which contributes to adding value to local rice.



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.

Rare wildlife found in survey (example)

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



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.

Management System	GHG and Energy	Industrial Waste
Environmentally Hazardous Substances	Water	Biodiversity
Environmental Accounting/Compliance		

Environmental Accounting/Compliance

Environmental Compliance

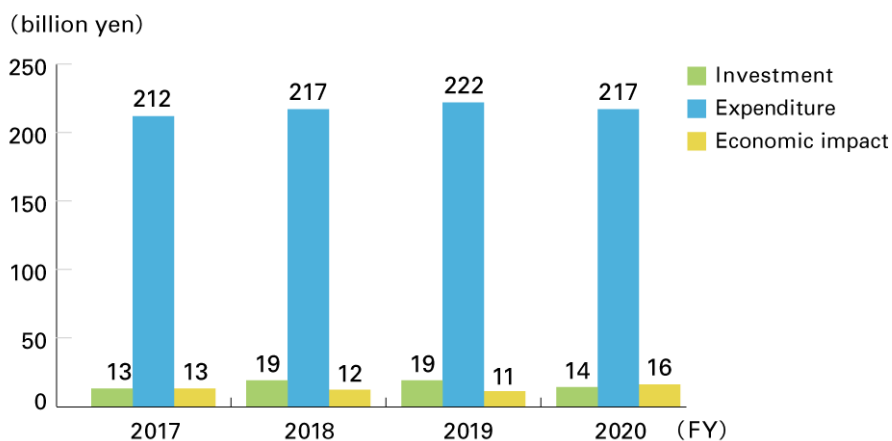
The Mitsui Chemicals Group believes that compliance with the environmental laws and regulations of the nations and regions in which it operates and addressing the opinions and complaints of local residents are an important part of environmental compliance.

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 local residents. Moreover, Mitsui Chemicals opens [our Risk Hotline](#) that allows members of the local community to express their opinions. Thanks in part to these efforts, there were no violations of environmental laws or regulations in fiscal 2020. We will continue our efforts in environmental compliance in order to earn and maintain the trust of society in general.

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.

Environmental Accounts (Mitsui Chemicals, Inc.)



Environmental Accounts

Breakdown of Investment and Expenditure (FY2020 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)		1,445	14,323
1-1 Pollution prevention cost	Measures to prevent VOC air pollution, odors, reduce wastewater, etc.	(339)	(11,721)
1-2 Global environmental conservation cost	Energy saving equipment	(673)	(172)
1-3 Resource circulation cost	Recycling waste plastics, etc.	(423)	(2,430)
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	621
4. R&D costs (Cost of environmental research and development activities)	Developing products and processes to protect the environment, reduce environmental impact, etc.	0	5,824
5. Social activity costs (Cost of environmental social activities)	Increasing greenery, funding measures to combat pollution, etc.	0	202
6. Environmental remediation cost (Cost of remediating environmental damage)	Remediating pollution, etc.	0	700
Total		1,445	21,671

Environmental Accounts

Breakdown of Economic Impact (FY2020 Mitsui Chemicals, Inc.)

Unit: million yen

Category	Main benefits	Economic impact
1. Income from recycling	Recycling waste into resources	379
2. Income from saving energy	Saving energy	991
3. Income from saving resources	Improving our raw material intensity index	224
Total		1,594

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

Management System

Regulatory Compliance and Distributing the
Safety Use Information

Providing Safe Products

Training

Management System

Policy and Basic Approach

The Mitsui Chemicals Group's [Responsible Care Policy](#) states "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 also stipulate Mitsui Chemicals Group's Principles for Chemicals Management to unify our basic group-wide approach.

As a member of the supply chain, the chemical industry is responsible for chemicals management from product development to disposal (product stewardship). The Mitsui Chemicals Group promotes voluntary chemical management in addition to compliance with the regulatory requirements of each country.

Cooperation with business partners is indispensable to minimize the risks to people and the environment throughout our products' lifecycles. The Mitsui Chemicals Group continues to collect chemical information from suppliers, assess the risks concerning our products, and maintains mutual communications with customers on any hazards in our products and how to handle them safely.

Mitsui Chemicals Group's Principles for Chemicals Management

Mitsui Chemicals Group will contribute to the development of a safe and sustainable society by managing chemicals in accordance with the following principles in order to ensure the health and safety of all persons and reduce environmental impact.

1. We establish Chemicals management policies and rules, and take actions in accordance with them.
2. We manage our chemicals management system appropriately.
3. We promote the safe handling of chemical products throughout the value chain through risk communication with our business partners.
4. We understand the needs of our stakeholders and provide appropriate product information.

Founded on the above Policy and Principles, and taking account of global chemical management trends and the Group's business direction, we determine the medium-term goals (Our ideal state) and priority issues on which to take action over the next five years. We are advancing initiatives while revising the priority issues every year.

In fiscal 2021, we commenced setting up the Product Risk Management Long-Term Targets (2030 Targets) from the viewpoint of mechanical and chemical recycling, aiming to continue to offer safe and sustainable products as a part of the Group's Recycling Strategy toward a circular economy.

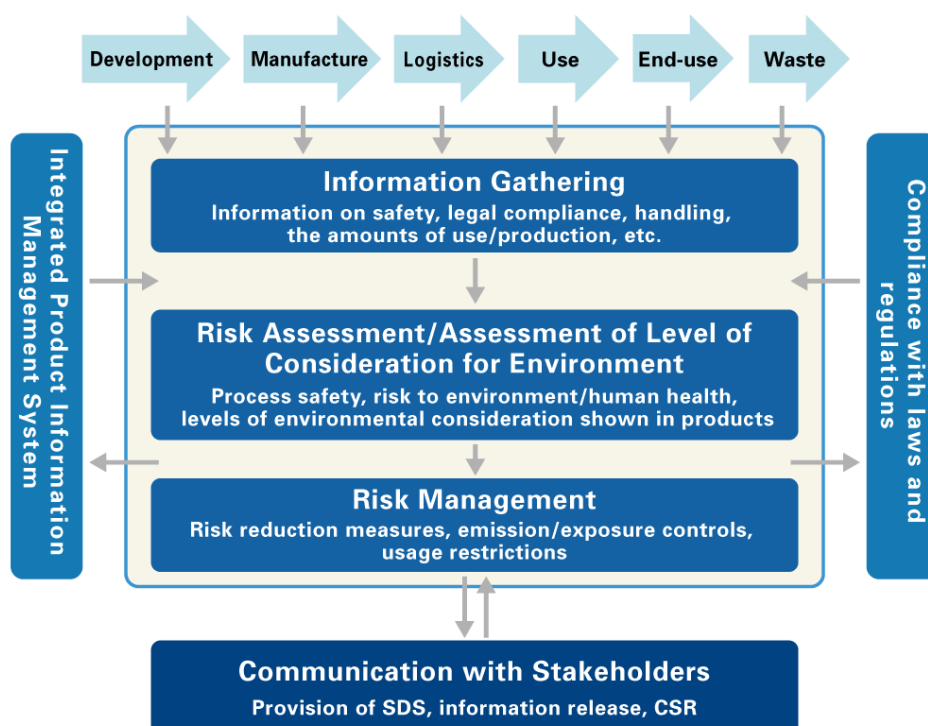
Medium-Term Goals (Our Ideal State in 2025)

Ideal State: A state in which the Principles for Chemicals Management is established, accelerating sustainable development and growth, product value is heightened, and such efforts are recognized by stakeholders throughout the Mitsui Chemicals Group.

Priority Issues

- 1.Reinforcing chemical substance management across the entire Mitsui Chemicals Group
- 2.Ensuring compliance with laws and regulations on chemical substances
- 3.Reinforcing management of chemicals in products
- 4.Reinforcing product risk management corresponding to new chemical policies

The Mitsui Chemicals Group's Chemicals Management



System and Responsible Officers

Our relevant divisions closely collaborate with each other as product stewardship is important across the entire product lifecycle.

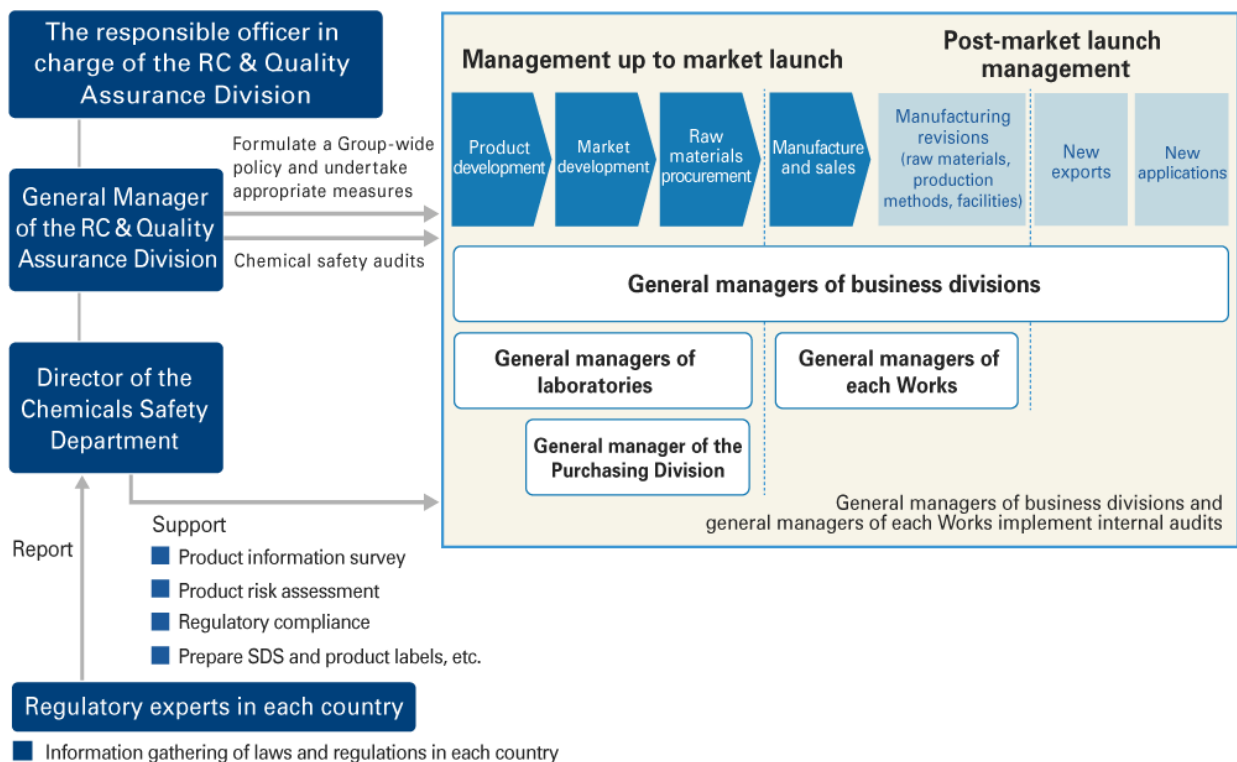
The responsible Officer in charge of the RC & Quality Assurance Division reviews and establishes the group-wide chemicals management policy, and ensures that the policy is understood and put into practice in all companies. The officer also provides advice, instructions, and guidance to the Business Sector Presidents. The General Manager of the RC & Quality Assurance Division combines the latest movements among chemical safety policies and laws from different countries with information gathered from regulatory experts to create concrete measures for compliance, and promotes the implementation of such measures across the Group. Under the initiative of the General Manager of the RC & Quality Assurance Division, Director of the Chemicals Safety Department supports for concrete action, including product information surveys, product risk assessments, compliance with chemical regulations and standards, and creation of SDSs and product labels.

General Managers of laboratories ensure that the design of new products takes safety to people and the environment fully into account.

Chemicals management in our works is undertaken by the General Managers of the works, and when procuring materials, chemicals management is undertaken by the General Manager of the Purchasing Division.

Responsibility for product chemical safety is taken by the General Manager of the business division that owns the product and the Business Sector President responsible for that division.

Product Stewardship System (Mitsui Chemicals, Inc.)



The RC & Quality Assurance Division conducts chemical safety audits of each division and affiliated companies of the Mitsui Chemicals Group. The fairness of such audits is independently assessed by the Internal Control Division.

Chemical Safety Audit	Confirming the chemical management system, the state of its management and state of compliance with relevant laws and regulations.
	Scope: Business divisions of the Head Office, branch offices and laboratories of Mitsui Chemicals, as well as affiliated companies (selected every year)
	Frequency: In principle, once every three years

Goals and Results

KPI	Scope	FY2020			FY2021	FY2025 (Medium to Long-Term)
		Goals	Results	Level Achieved	Goals	Goals
Number of legal and regulatory violations	Mitsui Chemicals, Inc.	0	0	○	0	—
Product risk assessment implementation rate	Mitsui Chemicals, Inc.	<ul style="list-style-type: none"> Assessment implementation rate: 99% or more Formulate new assessment indicators 	<ul style="list-style-type: none"> 99% or more Continue reviewing assessment indicators (due to postponement of the International Conference on Chemicals Management) 	○	<ul style="list-style-type: none"> 99% or more Formulate new assessment indicators 	—
Provision ratio of the latest safety information for all products*	Mitsui Chemicals, Inc.	100%	100%	○	100%	Maintaining 100% (2025)

* Most recent SDS submission rate.

Management System

Regulatory Compliance and Distributing the
Safety Use Information

Providing Safe Products

Training

Regulatory Compliance and Distributing the Safety Use Information

In order to achieve the SDGs, many countries in the world are now enacting new laws or renewing regulations related to chemicals management. Compliance with these laws is the foundation of sustainable business and Mitsui Chemicals implements various measures to ensure our legal compliance. Also, providing information throughout the supply chain is indispensable for product stewardship. We are making extra efforts to provide information about the safe handling of our products—even beyond attaching the legally-specified Safety Data Sheets (SDSs) and labels.

Compliance with New or Revised Regulations Related to Chemical Substances

Following the EU REACH regulations that systematically changed the chemicals management system, many countries are also strengthening their local regulations. A number of revisions to the laws and regulations concerning existing chemical substances will also take place. We have formed a cross-organizational team, in which all business and corporate divisions participate, to formulate response measures for newly enforced or revised laws and regulations in each country. Working together with raw materials manufacturers, our internal supply chain, and suppliers, we remain fully compliant with laws and implement risk management measures systematically.

Korea

The amended Act on Registration and Evaluation, etc. of Chemicals came into force in early 2019. This is the Korean version of the REACH regulation that covers existing chemical substances that are manufactured or imported at a mass of one ton or more per year. We completed pre-notification, which is a preliminary chemical substances registration, in 2019. From fiscal 2020 we are registering the pre-notified chemicals by the deadlines specified according to the amount of production or imports.

The US

In 2020, we conducted the Chemical Data Reporting (CDR) specified by the Toxic Substances Control Act (TSCA).

Turkey

As specified by the KKDIK regulations (Turkish equivalent of REACH), we completed the preliminary registration of chemicals due at the end of December 2020. We are currently proceeding with the formal registration.

Japan

We are accurately registering newly created or imported chemical substances according to the Act on the Regulation of Manufacture and Evaluation of Chemical Substances, and the Industrial Safety and Health Act.

Contribution to the Industry

Mitsui Chemicals contributes to product stewardship in the chemical industry.

We are striving to resolve issues surrounding chemicals with other chemical corporations through the activities of the Japan Chemical Industry Association (JCIA) in Japan and the International Council of Chemical Associations (ICCA) worldwide.

International Council of Chemical Associations (ICCA) and Chemical Industry Associations in Each Country

Establishing Global Networks

We need the latest information from each country to maintain our compliance with local laws and regulations. We appoint Regulatory Experts in our affiliates in the US, Germany, China, Taiwan, and Thailand to gather information on local legislation and the policies of chemical industry organizations. The Regulatory Experts in different countries and Mitsui Chemicals exchange information in the Regulatory Experts Meetings. We conducted these meetings online in fiscal 2020 due to the travel bans resulting from the COVID-19 pandemic.

Centralized Chemicals Information and Providing the Safety Information

Thorough data management is important for chemicals management. Mitsui Chemicals uses the Mitsui Chemicals Safety Information System (MiCSIS) to centrally manage data concerning chemicals in products and raw materials we handle. The range of functions provided by MiCSIS enable us to conduct the following tasks in a prompt and reliable manner: confirming legal compliance with domestic and foreign regulations; managing production/import quantities; linking to chemSHERPA;* and creating SDSs and product labels compliant with laws and standards in Japan, the US, Europe, East Asian countries, and Thailand. We continue to reinforce data management across the Group through MiCSIS, use of which was extended to domestic affiliates in fiscal 2019.

The legally-demanded registration of chemical substances and chemical products in each country is only a beginning. Chemicals management does not end even after the products are introduced to the market. The Mitsui Chemicals Group continues adapting to changes around our products on sale and keeps our customers informed of the latest information.

* 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.

AI Solutions for Chemical Compliance Surveys

The Mitsui Chemicals Group utilizes an AI solution to support surveys on information related to chemical compliance. By teaching AI (IBM Watson) to parse various countries' legal documents relating to regulatory compliance—as well as information on synonymous chemical substance names, high-level concepts, technical terms and more—this solution makes it possible to simply input a question, get that question translated into various languages and then quickly find the necessary information. The system has been in use since January 2020, and we plan to extend the scope of its usage by increasing the learning contents.

Management System

Regulatory Compliance and Distributing the
Safety Use Information

Providing Safe Products

Training

Providing Safe Products

For human health and environmental protection as well as for sustainable development, the Sound Chemicals and Waste Management scheme for chemical substances and hazardous waste, which 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 engaging in business and product development that incorporates those perspectives, as a member of the supply chain that aims at sustainable development.

Product Risk Assessment

Mitsui Chemicals assess the potential risks for all new products. We also assess risks concerning existing products when materials or manufacturing methods are changed, their applications are extended, related laws and standards are revised, and new scientific findings are announced. As our business fields diversify, we plan to conduct risk assessments on both new and existing products to suit new applications, as well as for disposal and recycling.

As one of the certification criteria for [Blue Value™](#), we adopt comparative risk assessments of our new products against market-standard products and our existing product lineup.

* For risk assessment and management in works and distribution, see the following sections: [Occupational Health](#); [Safety and Prevention](#); [Environmental Protection](#); and [Logistics](#).

Risk Assessment for New Products

The risk assessment of a new product and a new brand is divided into five stages. A certain set of risk assessments is designated for each stage and the assessment task is shared among the R&D Laboratory, business divisions, Works, the RC & Quality Assurance Division, and the Safety & Environment Technology Division. The same applies to catalysts and additives used for materials or in the manufacturing process, and byproducts generated during manufacturing.

Stage	Role	Response Measures
I	Tentative product concept setting	Gathering of safety-related information, conducting of collection and verification of information of chemicals in products
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	↓ Implement product 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.

Risk Assessment for Existing Products

Mitsui Chemicals has conducted risk assessments for our existing products since fiscal 2015. Worker risk assessment was carried out using the Control Banding Method,^{*1} and from the total number of around 2,500 products we narrowed down the number of high-priority products to approximately 1,000. The risk levels of the highest-priority products from among these 1,000 products were calculated for all possible use conditions by utilizing tools such as ECETOC TRA,^{*2} which is used for quantitative assessments specified by the EU REACH regulation.

We continuously conduct product risk assessments. For products that may pose a high risk depending on the handling conditions, we undertake risk communications with customers to ensure their appropriate risk management.

*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).

Voluntary Control of Chemicals

Chemical substances may be harmful to human health and the environment. Mitsui Chemicals is systematically reducing its use of chemicals of concern.

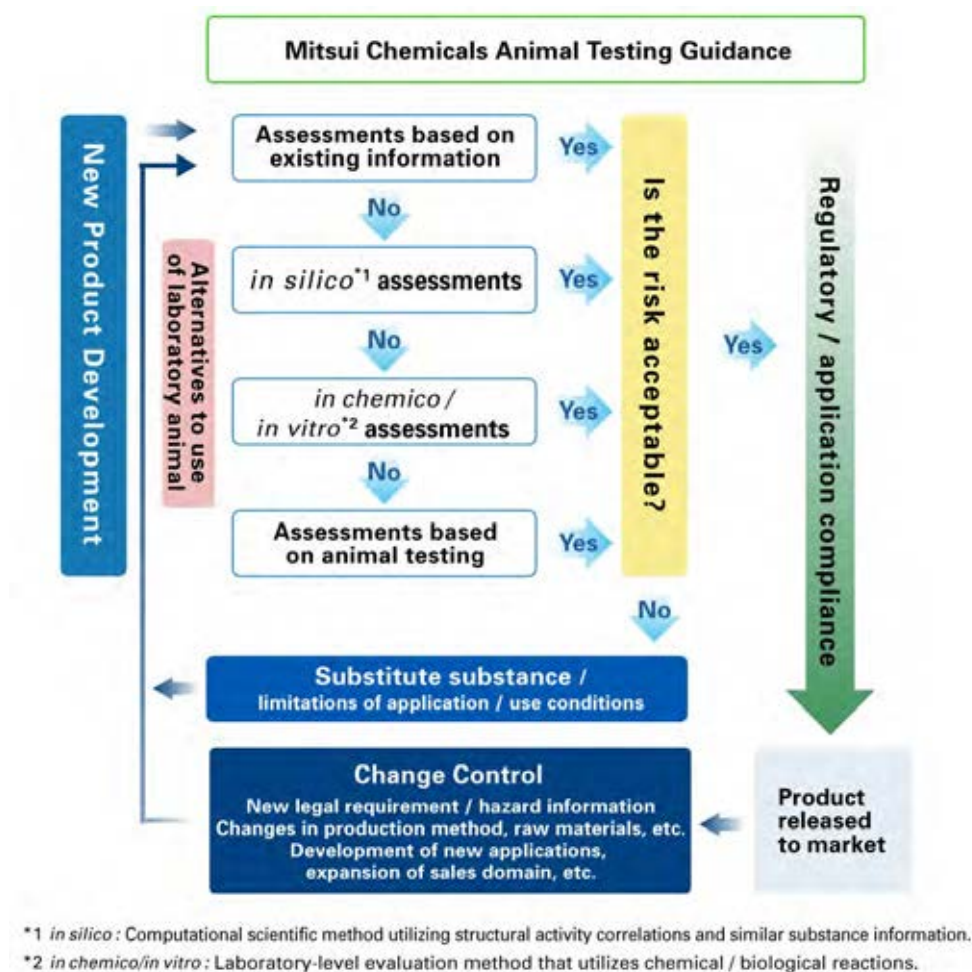
We specify chemicals subject to the following list (1) to (7), below, as Prohibited Substances, and we do not use, produce, or sell these substances. For substances the use of which is restricted or that require specific information disclosure, handling in each stage of purchasing, R&D, and manufacturing is strictly controlled. The use of substances categorized as (8) to (16) in the list are specifically determined according to product purposes.

1. Industrial Safety and Health Act: Substances subject to Prohibition on Manufacturing and Other Activities.
2. Industrial Safety and Health Act: Substances categorized as Group-1 Substances in the Ordinance on Prevention of Dangers Due to Specified Chemical Substances.
3. Act on the Regulation of Manufacture and Evaluation of Chemical Substances: Class I Specified Chemical Substances.
4. Poisonous and Deleterious Substances Control Act: Specified Poisonous Substances.
5. Act on the Protection of the Ozone Layer Through the Control of Specified Substances and Other Measures: Substances listed in Annexes A and B.
6. Act on the Prohibition of Chemical Weapons and the Regulation of Specific Chemicals: Specified substances (Schedule 1 Chemicals under the Chemical Weapons Convention).
7. Stockholm Convention on Persistent Organic Pollutants (POPs): Substances listed in Annexes A, B, and C.
8. (US) Toxic Substance Control Act (TSCA): Prohibited or restricted substances in Section 6.
9. (EU) ELV Directive.
10. (EU) RoHS Directive Annex II.
11. (EU) POPs Regulation Annex I.
12. (EU) REACH: Substances listed in the Substances of Very High Concern (SVHC) Candidate List and Annex XIV (Authorization List).
13. (EU) REACH Annex XVII (Restricted substances).
14. (EU) Medical Device Regulation (MDR): Substances listed in Annex I, 10.4.
15. Global Automotive Declarable Substance List (GADSL).
16. IEC 62474 DB Declarable substance groups and declarable substances.

Safety Assessment and Animal Testing System

The development of chemical products and chemicals management requires legally-specified safety tests. There are also cases in which animal test may be necessary. Mitsui Chemicals established “the Institutional Animal Care and Use Committee”, and specifies internal regulations compliant with “the Act on Welfare and Management of Animals”, “Standards Relating to the Care and Keeping and Reducing Pain of Laboratory Animals”, “Basic Guidelines for Animal Testing in Institutes Under the Jurisdiction of the Ministry of Health, Labour and Welfare (MHLW)”, and “Guidelines for Proper Conduct of Animal Experiments”, etc. “The Institutional Animal Care and Use Committee” ensures appropriate animal testing by examining all the animal experiments conducted directly by Mitsui Chemicals or commissioned to external institutes from the viewpoints of animal welfare—including the 3R principles (Replacement: utilization of alternative methods; Reduction: reducing the number of animal testing used; and Refinement: alleviation of suffering), animal ethics, and scientific necessity. These initiatives are subject to self-checks every year to ensure compliance with the latest laws and standards. We received certification* by the Japan Health Sciences Foundation in March 2020 confirming that our animal testing was compliant with the MHLW’s basic guidelines.

* The certification program was transferred to the Japan Pharmaceutical Information Center in April 2021 due to the dissolution of the Japan Health Sciences Foundation.



Acquisition of New Assessment Technologies

The Integrated Approaches to Testing and Assessment (IATA) is becoming widespread as a global trend of risk assessment. IATA is an approach that integrates existing data, and testing data *in silico* (techniques that predict harmfulness from a chemical substance's structure) and *in vitro* (alternative testing without using animals) to make animal testing a last resort. IATA has been adopted under the OECD testing guidelines as well as in regulations in different countries. Mitsui Chemicals is actively employing such advanced methods.

In fiscal 2018, in an effort to contribute to establishing technologies for alternatives to animal testing, we participated in activities to improve the precision of predicting irritation in the OECD QSAR^{*1} toolbox, one of the *in silico* approaches, to develop an assessment flow that produces more objective results. We published our development at a European toxicity conference Eurotox 2018 and in an academic journal^{*2}. Also, ADRA^{*3}, developed in a project in which we participated, was adopted in the OECD Guidelines for the Testing of Chemicals in 2019. We also participated in activities led by JaCVAM^{*4}, which disseminates alternative methods to animal testing.

*1 QSAR: Quantitative Structure—Activity Relationships.

*2 [Atsutoshi Abe, Takuhito Sezaki, Katsutoshi Kinoshita, Development of a read-across workflow for skin irritation and corrosion predictions, SAR AND QSAR IN ENVIRONMENTAL RESEARCH 30 \(2019\), pp.279–298](#)

*3 ADRA: Amino acid Derivative Reactivity Assay. A test method to detect the first key event that leads to an Adverse Outcome Pathway (AOP) in skin sensitization.

*4 JaCVAM: Japanese Center for the Validation of Alternative Methods. An organization under the Center for Biological Safety and Research, National Institute of Health Science.

Training

It is indispensable to raise the awareness of our individual employees for product stewardship. We provide them with training programs to acquire knowledge to comply with regulations and handle products correctly, and spread the knowledge across the supply chain in order to establish a corporate culture that protects human health and the environment.

The chemicals management training program of Mitsui Chemicals comprises e-learning, a basic seminar course, and an advanced course.

As the COVID-19 pandemic in fiscal 2020 made it difficult to hold group training sessions with many attendees, we adapted the basic seminar course to form an online course. Working with our R&D administration departments, we also created and provided an introductory program for new research employees.

E-Learning	We provide employees with a basic knowledge of chemicals management to ensure the safety of our products and legal compliance. Educational records are managed by an internal system.
	<div>Scope</div> All employees in business and laboratories and all line managers of works and indirect departments
	<div>Education contents</div> <ol style="list-style-type: none"> I. Basics of laws and regulations on chemicals management II. Basics of chemicals management in Mitsui Chemicals <ul style="list-style-type: none"> - Mitsui Chemicals Responsible Care Policy - Basic knowledge specified by corporate rules on chemicals management
Basic seminar course	We provide employees with a knowledge of the concrete chemical handling methods used in our companies to secure the safety and compliance of our products.
	<div>Scope</div> Employees responsible for practical handling in the business division, laboratories, etc.
	<div>Education contents</div> Part 1: Chemicals management in Mitsui Chemicals <ul style="list-style-type: none"> ● Identifying chemicals in products ● Investigation of safety information ● Product risk assessment in Mitsui Chemicals ● Legal compliance before product market introduction ● Providing safety information (SDS, labels, etc.)

	<ul style="list-style-type: none"> Chemicals management after product market introduction <p>Part 2: Domestic and overseas legal trends</p>
Advanced course	Learning about chemicals specific to a certain product or application, such as food packaging materials.
	<div>Scope</div> <p>Employees involved in specific types of products and purposes</p>
	<div>Education contents</div> <p>(Examples) Food packaging, Mitsui Chemicals Safety Information System (MiCSIS), how to use the safety information search tool.</p>

Management System

Policy and Basic Approach

In its Corporate Mission, the Mitsui Chemicals Group establishes increased customer satisfaction as one of its social contribution areas. Our Responsible Care Policy states that 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. To retain our customers' trust by offering products and services that fully satisfy their needs, we are taking a two-pronged approach to quality management through quality control and quality assurance to improve our management levels more than ever across the supply chain. We have identified specific principles for global quality management in order to ensure a uniform awareness of the basic acceptable level of quality. We are now working 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

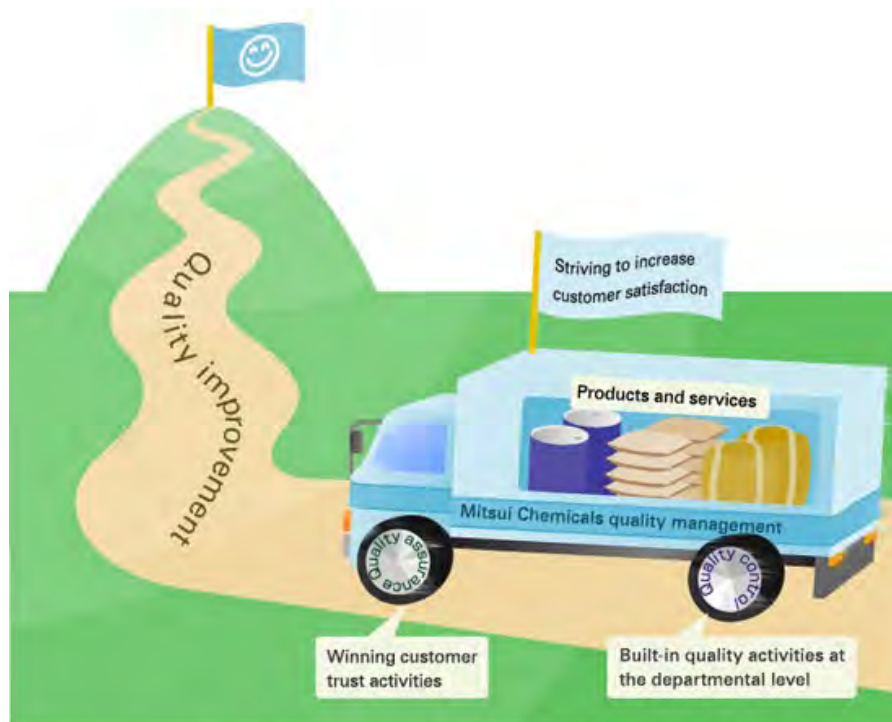
***1 Built-in quality activities:**

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

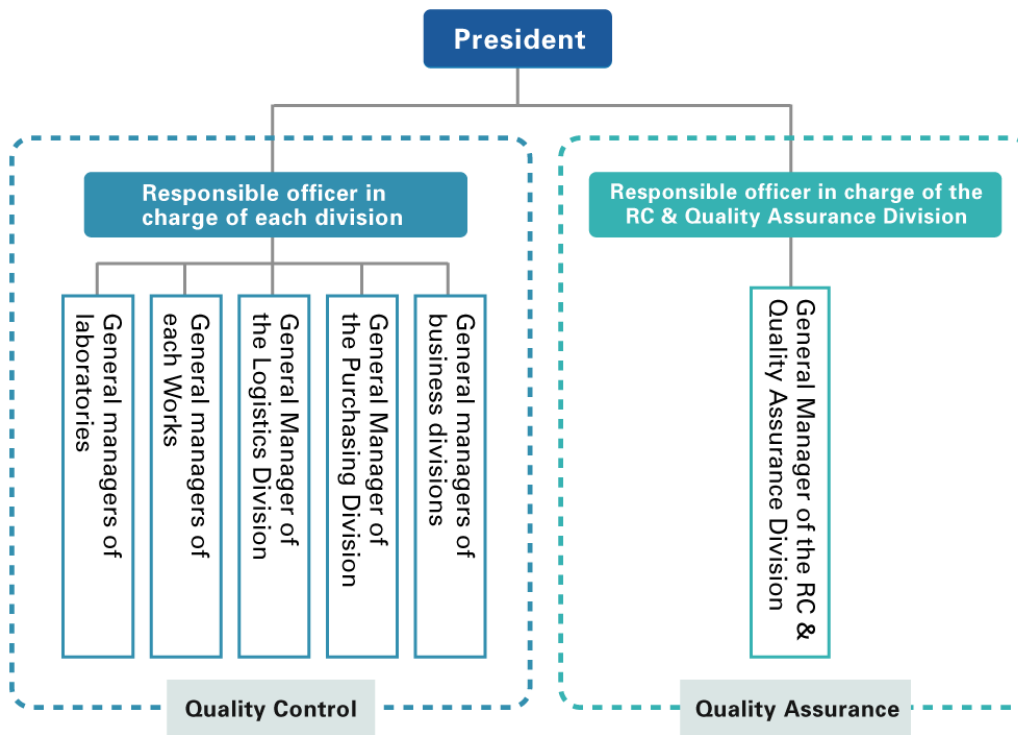


Reference: ISO9000 (Quality management systems - Fundamentals and vocabulary)
Quality assurance: Part of quality management, focused on providing confidence that quality requirements will be fulfilled
Quality control: Part of quality management, focused on fulfilling quality requirements

System and Responsible Officers

The President bears the ultimate responsibility for quality management. Our business divisions, 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 are responsible for quality management. The RC & Quality Assurance Division controls quality management for the entire Mitsui Chemicals Group in Japan and overseas.

In the [Mitsui Chemicals Responsible Care Policy](#), we established details of our quality system and other key issues such as the organization and procedures for the PDCA cycle in the internal regulation as the basis of our quality management. In fiscal 2020, we established a Global Policy on quality management for the development of an advanced quality management system for the Mitsui Chemicals Group as a whole, including increased support for subsidiaries and affiliates in Japan and overseas.



Internal Audits

Our RC & Quality Assurance Division conducts quality audits in the Mitsui Chemicals Group's various departments, including the head office, works, and domestic and overseas affiliates. The suitability of these audits is then independently audited by the Internal Control Division.

Quality audits	Confirms that the assignment of responsibilities is clear to ensure product and service provision as required by customers; an appropriate quality management system is implemented; and the system is effectively operated to improve customer satisfaction. Creates the audit program for the following year based on a review of the current year's audit findings and risks inside and outside the Company. From fiscal 2019, audits included checking that product inspections were sound. Remote audits were also used in fiscal 2020.
	Scope: Works of Mitsui Chemicals, Inc., business divisions, logistics and purchasing divisions, affiliates of the consolidated subsidiaries that have a manufacturing division (including production contractors). May include other affiliates, as necessary.
	Frequency: Once every one to three years (depending on size, business type, and management level of the audited organization).

PL Accidents and major legal and regulatory violations

KPI	Scope	FY2020			FY2021	FY2025 (Medium to Long-term)
		Goals	Results	Level Achieved	Goals	Goals
Number of PL accidents	Mitsui Chemicals Group	0	0	○	0	0
Number of major quality-related legal and regulatory violations	Mitsui Chemicals Group	0	0	○	0	0

Complaints

KPI	Scope	FY2020			FY2021	FY2025 (Medium to Long-term)
		Goals	Results	Level Achieved	Goals	Goals
Incidence of customer non-conformance	Mitsui Chemicals Group	—	—	—	—	Less than 10ppm
Number of complaints for which the Company is responsible	Mitsui Chemicals, Inc.	Reduce by at least 10%(over 2017)	Reduced 24%(over 2017)	○	Reduce by at least 10% (over previous year)	A deemed level of zero complaints
Number of high risk complaints	Mitsui Chemicals, Inc.	Less than 10% of the total	6% of the total	○	Less than 10% of the total	A deemed level of zero complaints

Again in fiscal 2020, we did not experience any product liability incidents or major quality-related legal or regulatory violations. Solemnly implementation of activities focused on frontline inspections and risk reductions at manufacturing sites and in the logistics division, as well as in other business divisions, succeeded in achieving our target for the number of complaints received.

Initiatives

Improving the Standard of Quality Management

We conduct highly effective **quality audits** and enhance the human resource development programs to improve quality management levels.

Quality Training

As part of our human resources development program, we established quality training plans for each organizational level, from new employees to top management, and we have now started to implement these plans. In fiscal 2020, lectures on the theme "the importance of corporate culture in which action is taken with quality awareness" were held for top management. In addition, we have introduced a range of quality training programs on human error and quality control methods at all our works. There are 20 quality e-learning courses available not only for domestic companies but also for overseas affiliates. Especially for the compliance, we are using audits and other initiatives as direct training opportunities as well as conducting quality lectures. Moreover, we have been implementing frontline measures to prevent quality issues on the shop floor (QRG activities) with the aim of identifying and eliminating risks that could lead to quality issues. We are implementing these measures in our subsidiaries and affiliates.

Examples of e-learning courses	FY2020 participants/hours (Mitsui Chemicals)
Compliance of quality with laws and rules	5,734 (2,389h)
Basic Training for quality management	1,154 (673h)
Basic training for quality control methods	1,320 (660h)

Award for Quality Management Activities in the Mitsui Chemicals Group

We run the Award for Quality Management Activity in the Mitsui Chemicals Group scheme each November, which is an industry-designated quality promotion month. We award efforts to revitalize Responsible Care (RC) activities to improve our chemical substances management level and quality management at Mitsui Chemicals and its domestic and overseas affiliates. We give awards to those who have achieved outstanding results across our workplaces to support and stimulate RC activities.

Award for Quality Management Activity in Mitsui Chemicals Group in fiscal 2020

General Manager's Prize of the RC & Quality Assurance Division	Description of activities
Siam Tohcello Co., Ltd. (Thailand)	Continuously improving RC as a whole through the introduction of lean systems

Excellence Prize	Description of activities
Advanced Composites, Inc. (the U.S.)	Developing and operating our centralized management system for manufacturing and quality data throughout the supply chain
Grand Siam Composites Co., Ltd. (Thailand)	Using FMEA* to cut the risk of including unwanted metallic foreign matter
Thai Mitsui Specialty Chemicals Co., Ltd. (Thailand)	Worksite-led activities to reduce potential quality risks and human errors
Ichihara Works, Mitsui Chemicals (Japan)	Using FMEA* to reduce the risk of including foreign matter at polymer plants
Taiwan Mitsui Chemicals, Inc. (Taiwan)	Developing and managing Taiwan Mitsui Chemicals' own database to strengthen our management of the increasing volumes of imported chemicals

* FMEA : Failure Mode and Effects Analy



General Manager's Prize of the RC & Quality Assurance Division (Siam Tohcello Co., Ltd.)

Responding to the voices of our customers

We collect customer complaints about Mitsui Chemicals products and services in the internal workflow system so that we can monitor the type of complaint, the cause and the customer's response. The data is analyzed each month to review the situation for that year and KPIs are identified for our quality management targets for the following fiscal year.

Whenever we receive a complaint about our products or services from one of our customers, the Business, Manufacturing and Logistics Divisions work together with the Quality Assurance Division to identify the cause of the complaint and to take corrective action. In this way, every effort is made to implement preventive measures across the organization as a whole. In one such initiative, all members of the Quality Assurance Division reassess the root cause of each complaint, consider appropriate countermeasures and monitor progress every week. At the same time, we endeavor to extract important case studies, particularly where there is a substantial risk of inconveniencing our customers, or where the potential exists for similar cases to arise. These case studies are then shared across the relevant departments in the monthly quality management report.

In the face of the demand for a higher level of chemical management (for chemical substances in products), we support [product stewardship](#) and implement chemical substance management throughout the entire supply chain. We respond swiftly and accurately to enquiries from customers about chemical substances in our products by organizing the information in a database and designating a department to manage it.

Response to the New Business

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.

Management System

Policy and Basic Approach

The Mitsui Chemicals Group is committed to building a sustainable logistics supply chain through a logistics system that gives attention to safety, the environment and quality.

In recent years, logistics are becoming increasingly difficult, with the rise in the risk of breaks in the logistics network caused by extreme weather conditions due to climate change and natural disasters such as earthquakes, and there are serious labor shortages in the logistics environment. Based on our awareness that we carry an important and fundamental social responsibility to maintain an uninterrupted flow of our products, even in the face of harsh changes in the social environment, we are working in collaboration with the supply chain to build a resilient logistics system capable of a versatile response to all environmental changes.

Based on the [Responsible Care Basic Policy](#) and the company rules regarding risk management, the Group has established detailed rules regarding logistics safety, environment, and quality control, and stipulates compliance with related laws and regulations and measures for logistics accidents.

To prevent accidents during the transport and storage of hazardous goods and to assure transparency and prevent violations in logistics management operations, we are working to disseminate the knowledge and expertise we have built up in logistics in our global organization. We established a Global Policy for logistics in fiscal 2020 and we are working to widen awareness of the policy globally across the Group and ensure that it is implemented in our logistics practices.

System and Responsible Officers

The responsible officer in charge of the Logistics Division manages our logistic system. The Logistics Division sets goals for the fiscal year based on results (number of accidents, complaints, etc.) up to the previous year, and establishes the annual logistics Responsible Care plan. Based on the state of progress during the previous fiscal year and issues resulting from environmental analyses in Japan and overseas, various measures (audit of logistics subcontractors, training, on-site discussion, campaigns, etc.) are incorporated into the annual plan and steps are then taken to implement them in the 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 officer in charge of the Logistics Division.

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 audit are reported to all parties involved in logistics. In addition to monitoring whether correct action has been taken to implement improvements, positive aspects are fed back across the organization. The Logistics Division provides Responsible Care education and training in logistics for our logistics subcontractors and is working to improve Responsible Care throughout the logistics supply chain.

Since fiscal 2017, managers of the logistics divisions of overseas subsidiaries and affiliates have assembled for regular global

logistics meetings to share information on logistics issues and countermeasures at our operating sites and to foster a clearer understanding of our Group-wide policy of maintaining a sustainable logistics supply chain.



Logistics managers representing India, Singapore, the U.S. and Germany attending a global logistics meeting

Goals and Results

Safety/the Environment

KPI	Scope	FY2020			FY2021	FY2025 (Medium to Long-term)
		Goals	Results	Level Achieved	Goals	Goals
Number of significant occupational injuries ^{*1} in logistics	Mitsui Chemicals Group	0	0	○	0	0
Number of major accidents ^{*2} in logistics	Mitsui Chemicals Group	0	0	○	0	0

*1 **Significant occupational injuries** in logistics :

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. Included decision standard considering impact on the environment.

Quality

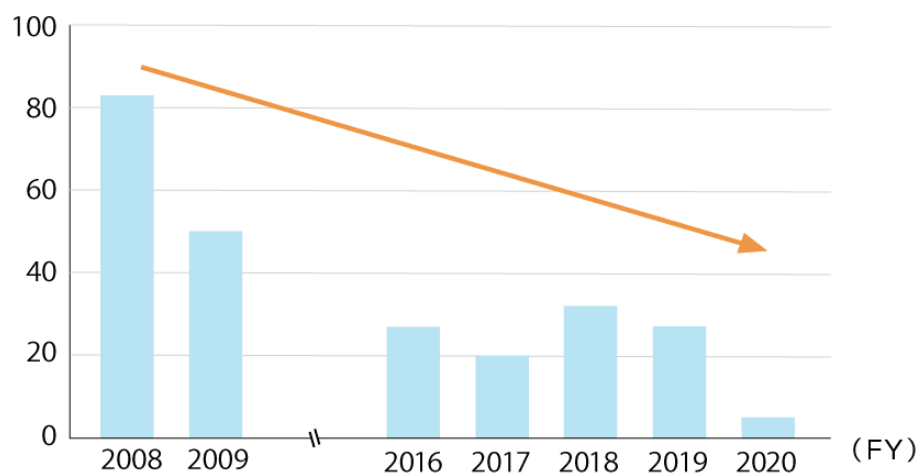
KPI	Scope	FY2020			FY2021	FY2025 (Medium to Long-term)
		Goals	Results	Level Achieved	Goals ^{*4}	Goals
Number of quality issues ^{*3}	Mitsui Chemicals Group	22 or less	5	○	20 or less	90% or less (average of the most recent three years) ^{*4}

Incidence of quality issues ^{*3}	Mitsui Chemicals Group	50ppm or less	12ppm	○	49ppm or less	10ppm or less (FY2025)
Number of complaints	Mitsui Chemicals Group	7 or less	0	○	6 or less	—

^{*3} Issues impacting customers: Quality issues (including complaints) and accidents that impacted customers.

^{*4} Goal: Goal for the fiscal year set at 90% or less of the average results for the past three years

Number of quality issues



Compliance

KPI	Scope	FY2020			FY2021	FY2025 (Medium to Long-term)
		Goals	Results	Level Achieved	Goals	Goals
Number of legal and regulatory violations	Mitsui Chemicals Group	0	0	○	0	0

Safety and Quality

Safety and quality measures in logistics

To ensure that Responsible Care in logistics is instilled in every part of the organization, Mitsui Chemicals has appointed leader who promote RC in logistics at the logistics division at Head Office and our works for concerted action throughout the Group. RC in logistics leaders hold monthly meetings to monitor the progress made in our annual Responsible Care in logistics plan. In addition, training programs are organized to improve the abilities of leader of RC in logistics, and these leaders cross-check each other's work. In cross-checking the work of leaders from other works, improvements in the work environment and procedures identified from a third-party perspective and the sharing of good practices have led to standardization in logistics safety and quality, and have resulted in a general rise in safety and quality levels.

Mitsui Chemicals delegates its entire logistics operation to logistics subcontractors. To realize logistics secured safety, the environment and quality under these partnerships, we believe it is important to communicate and disseminate a policy that positions safety as the top priority for each and every person in our logistics operations. For this reason, we are promoting active dialogue with logistics subcontractors. Logistics division at each of our works holds a logistics meeting roughly once a month with their logistics subcontractors to share information concerning logistics issues and details of Hiyari-Hatto (near miss incidents), conduct on-site patrols of the works or a mutual patrol in multiple works, and problem prevention training utilizing past cases. In addition to these measures, we publish regular monthly reports on safety and quality for RC in logistics and RC news that give clear explanations of logistics issues, the importance of protective gear and important notifications for each season (such as measures to prevent heat stroke) for logistics subcontractors to increase awareness of safety and quality in logistics.

Responsible Care audits of logistic subcontractors and safety dialogs (interviews) with on-site operators are held each year to monitor the implementation of the various measures at each logistics site. At the same time, we use the opinions and ideas from the on-site operators to re-examine our safety measures and quality control systems.

Because of the restrictions on site access imposed to prevent the spread of COVID-19, cross-checks, hands-on training and audits were conducted remotely in fiscal 2020. Although there were issues such as the online communication environment, we were able to take advantage of the fact that there are no restrictions such as travel or move. It is now possible for more parties who could not participate until now to participate widely, and we could gain valuable awareness and opinions.

Third-party logistics (3PL)* companies take the lead in managing 3PL products. The aforementioned activities are also undertaken with Logistics division at each of our works playing a supporting role.

* Third-party Logistics (3PL): A form of logistics operation where other companies undertakes all or a portion of logistical tasks.



Monthly report on safety and quality for RC in logistics: Call for safety measures including the use of the appropriate protective gear



RC news: Closer communication with logistics subcontractors on Responsible Care



Cross-checking patrol

Safety Measures for Product Transportation

Providing product information

The Mitsui Chemicals Group products include hazardous substances specified by the United Nations Recommendations on the Transport of Dangerous Goods^{*1} and Japan's Fire Service Act and other domestic laws. We provide our logistic partners a Safety Data Sheet (SDS) detailing the chemical handling and storage regardless of their hazard or danger level. We also submit a Yellow Card^{*2}, which specifies the emergency response procedure and contact details in case of an accident, and mandate the logistics subcontractors to carry the card during transportation.



Yellow card

^{*1} United Nations Recommendations on the Transport of Dangerous Goods: A recommendation developed by the United Nations Economic and Social Council's Committee of Experts on the Transport of Dangerous Goods in order to ensure the safety of international transportation of such goods, updated every two years. Depending on the danger and hazard level, dangerous goods are classified as follows: 1 explosives; 2 gases; 3 flammable liquids; 4 flammable solids; 5 oxidizing agents and organic peroxides; 6 toxic and infectious substances; 7 radioactive substances; 8 corrosive substances; and 9 miscellaneous.

*2 Yellow card: An emergency contact card on which are written the actions to be taken by 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. Promoted by the Japan Chemical Industry Association.

Collaboration with other companies in the same industry

The Mitsui Chemicals Group is keen to maintain safe and secure goods distribution by preparing for emergency situations in addition to thorough compliance with relevant laws. As for High risk goods*, we are working together with other companies in the same industry to reinforce safety measures, such as organizing a mutual emergency support system, including stocking emergency response equipment and materials. In fiscal 2020, information exchanges on problems with transporting hazardous goods and other issues took place remotely.

We are also considering a third-party review of the safety assessment of High risk goods transportation.

* High risk goods: Products that may have a significant social impact if a transportation accident occurs, determined according to its danger level, hazard level, transportation volume, etc.

Emergency response

We convene the Mitsui Chemicals Group Logistics Emergency Network (MENET) in the event of a logistics accident, enabling us to act promptly and proactively as the shipment owner. The network is divided into six areas covering different parts of Japan, and the major works in each area is appointed as the emergency support provider, available to be mobilized 24 hours-a-day. These designated works continue to improve their emergency response capabilities through annual emergency contact and mobilization drills.

Mitsui Chemicals also organizes safety and disaster prevention drills at its works to prepare for emergencies and natural disasters. In fiscal 2020, as part of its [emergency response drill](#), a simulated drill was organized at the Omuta Works on how to respond in the event of a leakage of hazardous substances during transportation.

In 2017, we concluded the Hazardous Material Emergency Response Service (HAZMATers) contract with the Maritime Disaster Prevention Center to cover a wider scope of expertise and emergency response equipment and materials. Also, in fiscal 2019, we introduced an emergency response helpline provided by the National Chemical Emergency Centre established by the UK government. This will enable us to quickly respond to overseas logistics incidents and inquiries concerning our group products, enhancing our responsible care management for our global logistics.

MENET Support Bases and HAZMATers Emergency Response Bases



Omuta Works: Monthly emergency response drill (simulating leakage of hazardous substances during transportation)

Stable Transportation

The logistics environment has entered an age where logistic subcontractors and shipping companies choose the cargo owners and the type of cargo. To achieve sustainable logistics, we must be selected by logistics subcontractors and shipping companies. For this reason, the Group is working to secure stable transportation through a comprehensive study to improve working conditions in the logistics industry, reduce environmental impact, introduce BCP, etc.

Modal Shift

In fiscal 2017, five companies including Mitsui Chemicals were collectively certified as modal shift businesses by Japan's Ministry of Land, Infrastructure, Transport and Tourism. In this instance, certification recognized the modal 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 DOW-MITSUI POLYCHEMICALS CO., LTD. in the Ohtake area (Hiroshima Prefecture). In August 2017, large containers provided by Japan Freight Railway Company (JR Freight) were introduced in full for container round use* based on the shared logistics system of the Mitsui Chemicals Group. These efforts have assured stability in the mode of transportation, reduced CO₂ emissions by 70% and reduced working time for drivers. They were achieved through the partnership between the Mitsui Chemicals Group, JR Freight and our logistics subcontractors.

* Container round use: Container round use is a concept that returning the container with another cargo after unloading the cargo on the outbound instead of returning "Empty."



Introducing container round use

We made greater advances in modal shift for transportation from the Ichihara area to the Chugoku area. Previously, Mitsui Chemicals had used trucks to ship products using 500-kilogram flexible intermediate bulk containers (FIBCs). However, the particular nature of the product did not allow stacking in two tiers. For this reason, a 12-ton truck was able to carry only eight tons of products in a single layer, which is only 67% of the truck's loading capacity. This presented a problem of loading efficiency. Accordingly, Mitsui Chemicals produced – with registered design rights on – a dedicated rack to enable the FIBCs to be stacked in

two tiers, along with a special 20-foot high-cube container that has been registered as a utility model. The containerization of the cargo made it possible to improve loading efficiency and succeed in a modal shift to the use of domestic container ships. These efforts led to a reduction in CO₂ emissions and a reduction in truck drivers' workload. We received the Award for Eco-Friendly Logistics Technology at 20th Logistics Environment Award of the Japan Association for Logistics and Transport. We are expanding this practice to other areas of Japan. We have accomplished domestic marine transportation in the Kyushu area since March 2021.



Dedicated racks enable FIBCs to be stacked

In the modal shift from trucks to ships, we are collaborating more with other private companies in the same industry. Shipments from two companies that had been transported in the past between Chiba and Yamaguchi/Hiroshima by truck are now consolidated and shipped together in a marine container on a regular container ship, achieving a modal shift and round use of the container. Alongside existing modal shift projects, this has contributed to a roughly 40% reduction in annual CO₂ emissions and contributed significantly to solving the driver shortage. In addition, side-end opening containers have been adopted for greater productivity. This has resulted in an approximately 80% reduction in cargo handling operations, resulting in a dramatic improvement in work efficiency.

These efforts have been recognized with a Special Prize in the 22nd Logistics Environment Award organized by the Japan Association for Logistics and Transport.

We plan to continue to develop sustainable logistics, not only within the Group, but also through partnerships with logistics businesses and other private companies.



20'HC ONE SIDE DOOR WITH END DOOR

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.

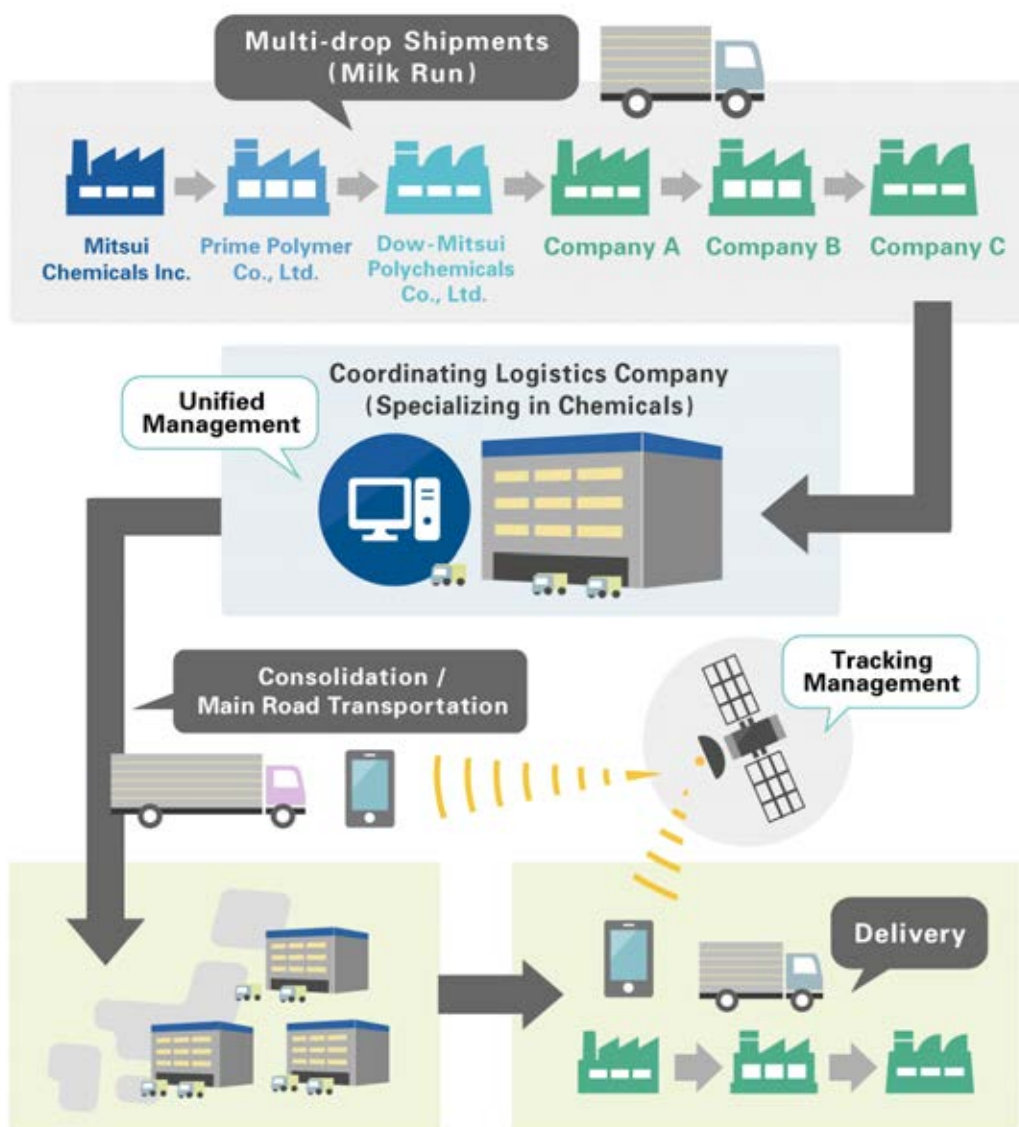


Shared Logistics System for Small-lot Products by Other Companies in the Same Business

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 have collected 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 since 2016. 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 reduced the number of transshipment points by using companies specializing in chemicals, we reduced the number of quality issues, such as damage caused in transit. We could also achieve the improvement in load efficiency which leads the effect of reducing our CO₂ emissions. This system started with shipments destined for the Tohoku areas and has expanded to destinations in the Hokuriku and Koshinetsu areas. To boost the shared logistics system, activities will be developed together with the logistics subcontractors and shippers who are participating in the system. There are different logistics collaboration schemes in both goods owners and chemical companies. We are currently working to establish a combined transportation system. This system should be able to replace or supplement some parts of the national transportation networks, through which we plan to create a stable, small-lot transportation scheme for chemicals.

Shared Logistics System



Greater Efficiency in Inventory Control and Shipment Management

For greater efficiency in inventory control and shipment management, we have introduced the use of portable terminals. The system involves printing QR codes on labels attached to each packaging type and reading the codes with portable terminals at acceptance and shipment for inventory and shipment control. This has led to a reduction in the workload and paperless processing compared with inventory control based on manual entry and spreadsheet input. Also, the risk of reading errors caused by visible checking of brand names and lot numbers has been removed by the system, preventing erroneous shipments. Full-scale operation was started at Nagoya Works in fiscal 2019, and it is scheduled to be introduced to Ichihara Works in fiscal 2021.



Project to Reduce Driver Standby Time

We are working to improve the work environment for truck drivers and ultimately to reduce the workload for logistics subcontractors, by reducing the standby time for truck drivers while waiting for loading. At the Ichihara, Osaka and Iwakuni Otake Works, an appointment system has been introduced for loading. With an appointment made in advance, truck drivers no longer need to queue and stand by from early morning. The freight can now be loaded onto their trucks as long as they arrive at the appointed time. In view of the 2024 issues* coming in a few years, we are currently reviewing further improvements to the work environment of truck drivers, including updating the appointment system to cover all loading operations.

* 2024 issues: From April 1, 2024, the limit of 960 hours of overtime per year will apply to truck drivers, and there are concerns about a further shortage of drivers in Japan.

Participation in Sustainable Logistics Initiative

Mitsui Chemicals announced its support for the sustainable logistics initiative proposed by the Ministry of Land, Infrastructure, Transport and Tourism and the Ministry of Agriculture, Forestry and Fisheries and submitted a declaration of its relevant independent activities. The initiative is aimed at addressing the increasing shortage of drivers, ensuring the stable logistics operations needed for domestic life and industrial activities while also contributing to economic growth. The initiative aims to improve productivity in truck transportation and create greater logistical efficiency while also looking to realize a better labor environment that makes work easier for female drivers and those over the age of 60. The table below describes the initiatives laid out in Mitsui Chemicals' declaration of its independent activities.

Initiative	Details and expected outcome
Introducing an appointment system	The introduction of an appointment system for trucks will help cut down on waiting time.
Utilizing pallets and more	By making use of pallets and reusable shipping cartons, cargo handling can be sped up.
Giving prior notice of shipment information	Conveying information from shippers about inbound and outbound shipments in order to give logistics workers more time to prepare.
Utilizing expressways	Mitsui Chemicals will enter into earnest negotiations about how to make use of expressways and who should bear the fees for this.
Making a modal shift toward sea and rail	Mitsui Chemicals will strive to cut down on greenhouse gas emissions by making active use of sea and rail transport for long-distance shipments.
Compliance with the law when selecting logistics companies	Mitsui Chemicals will take into account the compliance status of Logistics companies when selecting.
Implementing safety measures for cargo handling work	Providing clear operational instructions, ensuring safe passage, establishing footholds and more will help to ensure more thorough worker safety.
Stopping or suspending operations during extreme weather	If extreme weather conditions occur or are expected to occur, Mitsui Chemicals will avoid making unreasonable requests for shipments.

Energy Intensity for the Transportation of Products

Energy intensity for the transportation of products in fiscal 2020 was 7.21 kl/thousand tons, showing a slight increase compared with fiscal 2019. We will improve this figure by actively enhancing logistical efficiency such as shared logistics and a modal shift.

Energy Intensity (kL/thousand tons)

FY2017	FY2018	FY2019	FY2020
6.65	7.37	7.13	7.21

* Energy Intensity for the transportation of products:

Amount of energy consumed (crude oil equivalent in kiloliters) / Volume of product shipments (thousands of tons).

Management System

Policy and Basic Approach

The main purposes of occupational health are to prevent the health disorders 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 Mitsui Chemicals Group believes that encouraging employees to be healthy leads to the happiness of employees and their families, which in turn forms the social foundation towards the sustainable development of society. For the annual National Occupational Health Week in Japan, the CEO's message is published in Japanese, English, and Chinese to disseminate this concept across the Group.

In addition, we believe that healthy employees make for healthy organizations and contribute to an improvement in the labor productivity. We are incorporating a health promotion perspective into our basic policies and working to improve both the well-being of our employees and the organizational culture.

[the Mitsui Chemicals Group Responsible Care Policy](#) states: "We will actively promote the well-being of all our employees," which we are diligently putting into practice. The Mitsui Chemicals Group Action Guidelines also stipulate health promotion to raise health awareness among employees and encourage their proactive efforts for health management. Further, we enforced the Occupational Health Regulations, internal rules that set forth the basic framework of the Group's occupational health approach based on the above Policy and Guidelines.

Based on the philosophy of "Employee well-being is directly linked to the company's well-being," we have formed a sound work environment to prevent occupational diseases and actively implement a range of measures to encourage employees' continuing voluntary health management.

System and Responsible Officers

With the responsible officer in charge of the Human Resources Division, the industrial physician who heads the Health Management Department (supervising industrial physician) in the Human Resources Division implements concrete measures.

Leading by the supervising industrial physician, we hold 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](#). The Group's occupational health is managed under an approach that covers global, domestic affiliates, and Mitsui Chemicals.

Global Structure

Domestic and overseas affiliates implement occupational health measures based on the Responsible Care Policy.

Mitsui Chemicals submits the Management Check List regarding to occupational health to affiliates that produce or handle chemical substances to assess their health management status in workplaces. Further, the Internal Control Division undertakes an occupational health audit in Works and laboratories of Mitsui Chemicals and its affiliates (except in the U.S., Europe, and some other regions) to confirm that the working environment is appropriately organized and efforts for health promotion are in place. The onsite audit is carried out once every two to five years depending on the size of the audited site, type of business, administration level, etc. The audited companies are notified of the audit results and are requested to correct any problems identified. If a company is requested to make corrections, it is subject to a follow-up audit after one year to confirm the correction progress.

Domestic affiliates share information related to occupational health in the meeting of employees in charge of HR at domestic subsidiaries and affiliates held every six months. The information provided in the meeting includes changes in occupational health-related laws and regulations with notes on such changes, and details of occupational health issues within the Group. Our supervising industrial physician regularly visits overseas affiliates' works in different countries to provide their employees and occupational health officers with training programs on occupational health and additional health promotion.

Domestic Affiliates' Structure

We adopt the following measures for our domestic affiliates, in addition to the global measures.

- (1) Sharing information related to occupational health in the six-monthly meetings for domestic affiliates' HR officers. Such information includes recently revised occupational health-related laws and regulations with notes on changes, and detailed explanations about priority issues concerning occupational health in the Group.
- (2) Providing support on request to help resolve any occupational health issues in domestic affiliates.
- (3) Concluding comprehensive occupational health service contracts with a number of domestic affiliates, such as those operating within the premises of Mitsui Chemicals Works. Through these contracts, Mitsui Chemicals' Health Management Department directly provides the affiliates with the same health services as offered to employees of Mitsui Chemicals to enable integrated health management beyond company boundaries.

Mitsui Chemicals' Structure

In Mitsui Chemicals' Works, Head Office, and R&D Center, a Health Management Department is established directly under the head of each business site. The department is staffed by full-time industrial physicians, nurses, and health supervisors, and promotes health measures through an annual occupational health plan created to suit each site. Conferences for industrial physicians are regularly held and hosted by the supervising industrial physician to consider solutions to Group-wide health management issues and implement them. We maintain an efficient and effective health management structure through the close relationship between the Health Management Departments and the Human Resources Division, particularly in the area of utilization of training programs and corporate welfare schemes, and the employment of disabled people.

Internal Audit

The Internal Control Division conducts occupational health audits in Works and laboratories of the Mitsui Chemicals Group.

Occupational health audit	Confirms that the working environment is correctly maintained and initiatives for health promotion are being undertaken.
	Scope: Works and laboratories of Mitsui Chemicals, Inc., and its subsidiaries and affiliates (excluding particular areas, such as Europe and the US).
	Frequency of onsite audit*: Once every two to five years (depending on business size, business type, and management level, etc. of the audited organization).

* Remote audits are undertaken if an onsite audit is difficult due to COVID-19 restrictions, etc.

Goals and Results

Health and Productivity Management

KPI	Scope	FY2020			FY2021	FY2030 (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 0.78	0.86	×	Less than 0.80	0.5 or less
Frequency of absences from work due to mental health disorders	Mitsui Chemicals, Inc. registered employees	Less than 0.45	0.61	×	Less than 0.53	0.25 or less
Average rate of lifestyle-related disease	Mitsui Chemicals, Inc. registered male employees	Less than 9.7%	10.6%	×	Less than 10.0%	8.0% or less
Ratio of smokers	Mitsui Chemicals, Inc. registered employees	23.2% or less	22.2%	○	21.0% or less	20.0% or less

Preventing Exposure to Harmful Substances

KPI	Scope	FY2020			FY2021	FY2030 (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%	100%	○	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%	—

Health and Productivity Management

The Mitsui Chemicals Group has adopted as its vision “to 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.”

We have established our Company rules (occupational health regulations) that set out the basic provisions for occupational health. Founded on the basic philosophy that employee wellbeing is directly linked to the Company's wellbeing, we are actively involved in occupational health measures that include health management to prevent work-related diseases, and creating good working environments that are adapted to our employees, as well as supporting our employees in their individual activities to maintain their wellbeing.

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.

Comprehensive medical check-ups for employees (combining regular medical examinations with special medical check-ups and cancer screening) have been conducted for more than 10 years, with a coverage of nearly 100% for regular medical check-ups, nearly 100% for lung cancer screening, 85% for colon cancer, more than 60% for gastric cancer, more than 70% for abdominal ultrasound scans, more than 90% for prostate cancer screening and more than 50% for breast and uterine cervical cancer screening. The results are managed by the Health Management Department, which is responsible for explaining the need for more detailed examinations to employees who require them and encouraging employees to undergo further examinations by medical specialists. The results of specialized examinations are reported either by the employee in question or in the form of a letter received in response to the letter of recommendation. In fiscal 2020, approx. 60% of cancers were identified through these examinations and 75% were found to be curable.

Additionally, gastric cancer risk screenings are conducted regularly to encourage employees to use their own initiative for health management and to foster greater health awareness. Prompted by gastric cancer risk screenings employees underwent in the past, a growing number have wanted to rid themselves of helicobacter pylori bacteria or have undergone gastroendoscopies for gastric cancer screening. Employees who have undergone gastric cancer risk screenings and are aware of their own risks, are screened as often as they request (once a year is the most frequent) by the method they request (endoscopy or barium swallow test).

Rates of lifestyle-related diseases and ratio of smokers

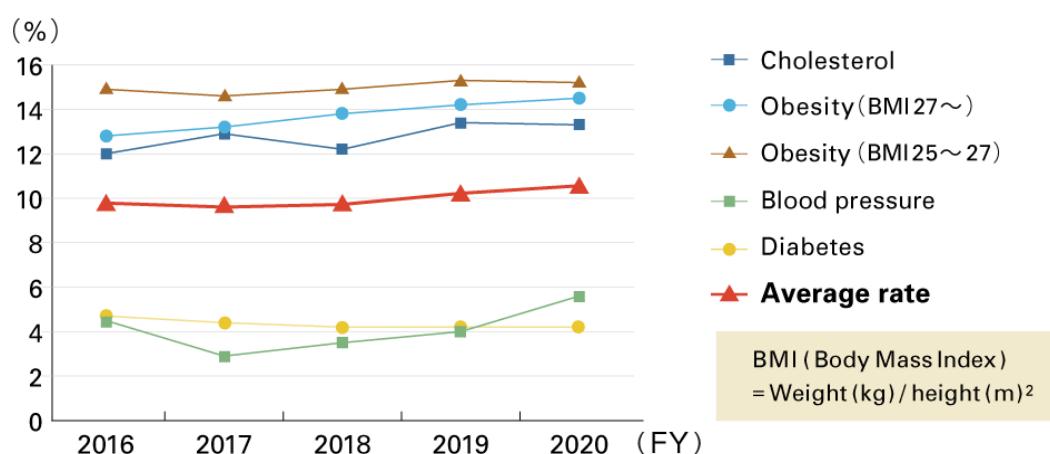
The index used to indicate the state of health of its employees shows that Mitsui Chemicals had a figure of 8.0% or less for lifestyle-related diseases in fiscal 2030 and the index is being carefully monitored. In fiscal 2020, we offered medical examination follow-up guidance and health guidance, encouragement of health examinations, follow-up guidance for persons who underwent genetic testing for diabetes and online access to health improvement activities.

The result of these various activities is that blood sugar levels have remained flat. However, the recent rise in blood pressure

levels and increase in the number of people who are overweight, indicated by a BMI greater than 27, have prompted us to strengthen our actions to urge employees to take health examinations and to provide health guidance. Also, changes in work style, including teleworking and the stay-at-home lifestyle brought on by COVID-19 pandemic, has resulted in a decrease in physical fitness even for employees who have not reported any change in their weight, such as fatty livers and degradation shown by their blood test data. For this reason, healthcare information, including the online at-home fitness program and other forms of exercise, has been delivered to employees. This will continue during the current fiscal year with new ideas and methods added to the program. Other activities include physical capability tests for older employees to monitor any decline in their physical aptitude, publication of information related to locomotive syndrome in the Company newsletter and new projects proposed by business sites to establish exercise as a habit among their young employees.

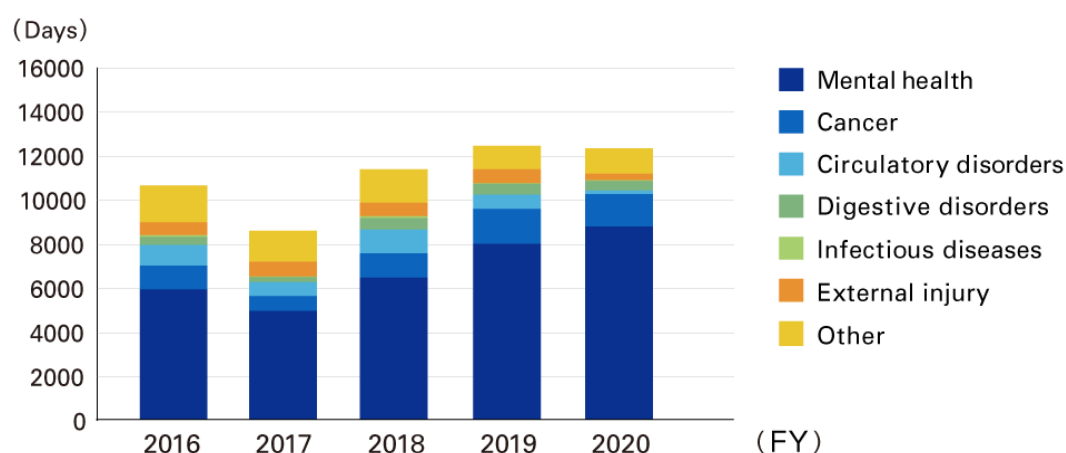
We will monitor the effect of the projects and implement those projects that reveal physical shortcomings on a Group-wide scale. The ratio of smokers has decreased by more than 10% compared to 10 years ago and is now below the national average. The Health Management Department leads the Company in providing support to employees who want to quit smoking, alongside the provision of smoking rooms to curb exposure to secondhand smoke. From fiscal 2021, each business site will start actions to ban smoking on Company premises during work hours by fiscal 2025 to protect the health of our employees.

Lifestyle-related Disease Rates (Mitsui Chemicals, Inc. Registered Male Employees)



* Lifestyle-related disease 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, lifestyle-related disease rates for men are regarded as a KPI.

Breakdown of Days Off due to Illness (Mitsui Chemicals, Inc. Registered Employees)



We also continue to help balance work and treatment for disease with the support of industrial physicians. We offer a health consultation and guidance for employees worried about their illness, such as not knowing the best action to take or when unable to understand the intention of the doctor, etc. If some special working arrangement is required for an employee, we discuss with the workplace and Human Resource Division to suit the requirements of the situation. Due to [these systems](#) that support treatment of illnesses, including cancer, it is no longer uncommon to continue working during strong treatment. We also revised the Guidebook to Help Balance Work and Medical Treatment by compiling related information and concrete examples. The book was published on the internal bulletin board to make it accessible to employees whenever they need it.

Support for employees at overseas bases

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. Because of the COVID-19 pandemic, interviews we conducted in fiscal 2020 were online. Feedback on the stress survey results for the organization that were conducted in person was also given online. During the period when face masks were difficult to procure, we supplied face masks and information regarding infection and health improvements to avoid being infected with COVID-19.

Mental Health Initiatives

Mental health can have a significant influence on work productivity and is an important issue to maintain the health of employees. With the wider spread of teleworking and changes in the social environment, mental health care has also become increasingly important. We raise awareness of mental health among employees through mental health initiatives such as training (for new employees, management staff, line managers, self-care training programs, etc.) We also conduct interviews and counselling by industrial physicians. Utilizing results of a stress survey, we aim to further improve the working environment.

Because of the abrupt Group-wide shift to teleworking in fiscal 2020 due to the COVID-19 pandemic, many employees experienced anxiety, insecurity and a sense of isolation resulting from the abrupt changes with insufficient development of the teleworking environment. To address their concerns, messages from the Chairman, the President and General Manager of the Health Management Department were sent to employees, and healthcare and health improvement information were published frequently in the Company newsletters to help them to keep healthy at home. We are continuing to release this information.

The impact of teleworking on physical and mental health revealed by analysis of the stress survey results and the key points to healthcare under these conditions were compiled and presented to the Health and Safety Committee and explained in management staff training programs, as well as published on the intranet. Because the fiscal 2020 stress survey presentation was held online, good practices could be shared with more employees than usual.

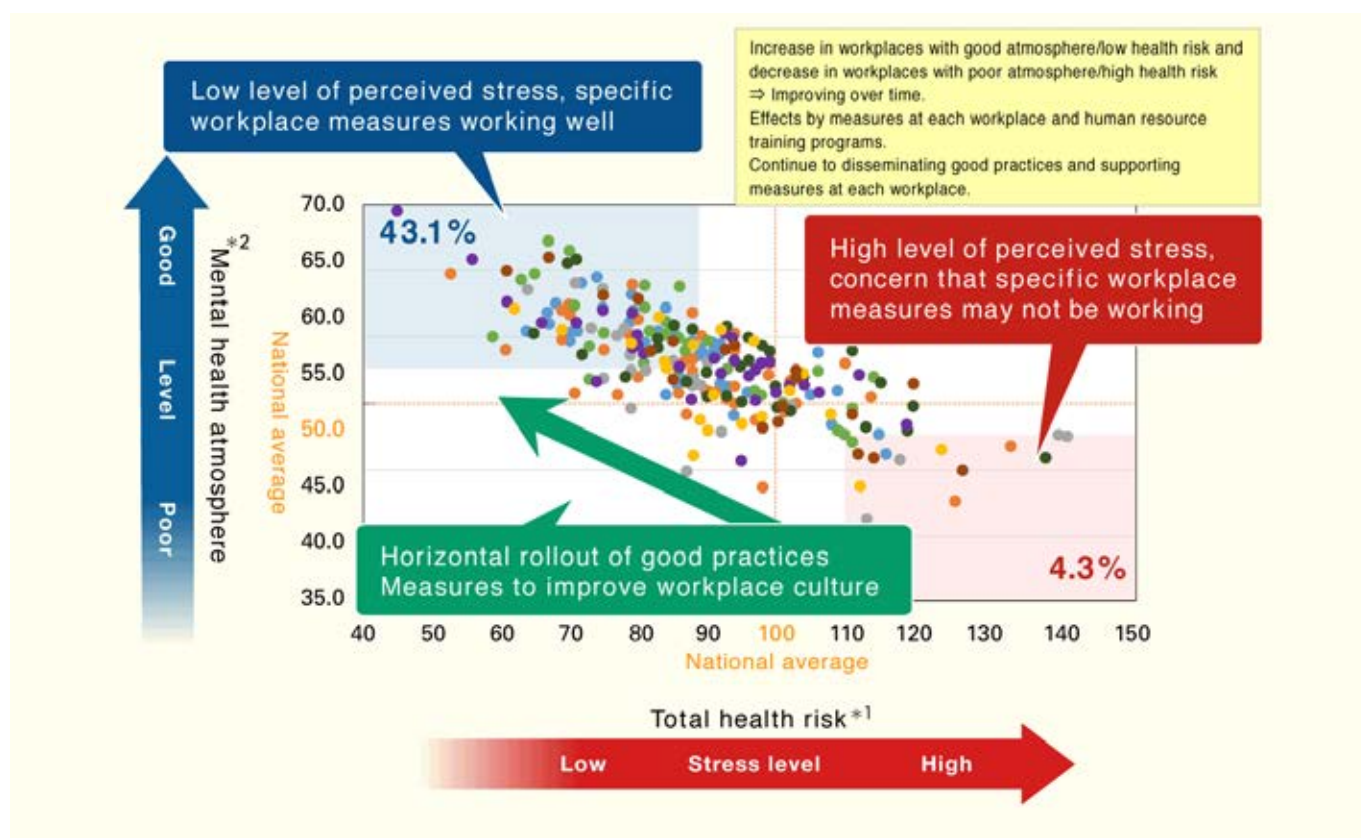
Training, interview, and counselling

In addition to training, new employees (including new graduates, midcareer hires and contract employees) undergo e-learning-based communication courses for a fixed period after entering the Company. For two years 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.

We are providing personal interviews and counseling either online or by phone since the outbreak of the COVID-19 pandemic. In addition, [Inclusion lecture meetings](#) have also been held recently. These meetings aim to create a culture to accept people with diverse characteristics and personalities, as well as those in the course of illness treatment, into workplaces.

In addition to our simple 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. In fiscal 2018, we introduced a dedicated system, through which the survey results of individuals and organizations can be checked on a website. The new stress questionnaire is helping workplaces to undertake voluntary actions to improve working conditions and many workplaces that actively utilize the survey results is increasing. 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 43.1% in fiscal 2020. 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 4.3%. With regards to human resource management, we are enhancing the contents of [our leadership training programs](#), which improve the working environment by creating a better workplace atmosphere. In fiscal 2021, we will try to improve workplace culture by collecting good practices according to environmental changes. In fiscal 2021, we continue to improve the working environment, while collecting good practices according to environmental changes.

Fiscal 2020 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.)

COVID-19 countermeasures and health support for new working styles

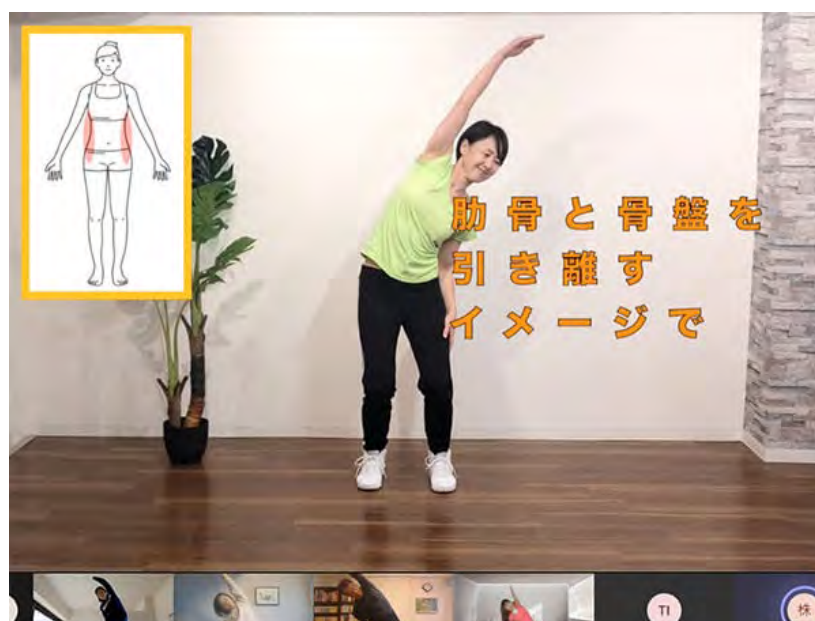
Since January 2020, we have provided the support described below as COVID-19 countermeasures. We also donated N95 and other types of masks that we stored as a flu countermeasure to medical facilities near each site.

January to February 2020	<ul style="list-style-type: none"> - Sent surgical face masks stored as a flu countermeasure to affiliated companies in China.
February 2020	<ul style="list-style-type: none"> - Established the COVID-19 Action Headquarters. - Promoted awareness of infection prevention measures. - Prepared and distributed an instruction manual for employees and their families when a family member or colleague is infected, has suspected symptoms, or has been in close contact with an infected person. - Prepared and promoted infection prevention measures in Works. - Prepared and promoted a countermeasures manual in corporate dormitories.
March 2020	<ul style="list-style-type: none"> - Published the Handbook for COVID-19 Pandemic on the intranet. - Distributed surgical face masks stored as a flu countermeasure among employees on a regular basis and dispatched the masks to employees working overseas. - Promoted countermeasures for pregnant employees and those with chronic diseases. - Prepared and promoted infection prevention measures in Works during regular shutdown maintenance.
From April 2020	<ul style="list-style-type: none"> - Messages from the Chairman, the President and General Manager of the Health Management Department - Started communicating health information to employees (four times in April, followed by once or twice a month at present) - Updated documents disseminated to employees as needed, depending on developments with the pandemic (implemented as needed since April and continuing at present) - Release of information related to COVID-19 and request to implement detailed preventive measures (continuing at present) - Produced poster featuring Company President urging the use of face masks by employees - Studied measures to prevent infection at special events (continuing at present) - Response in the event of employees becoming infected (continuing at present)
September 2020	<ul style="list-style-type: none"> - Started online fitness program - Established New Work Style Reform Work Group (since March 2020) - Started New Work Style Project (aimed at compiling a "Teleworking Guide Website" by the Human Resources Division)
April 2021	<ul style="list-style-type: none"> - Teleworking Guide Website launched
June 2021	<ul style="list-style-type: none"> - Preparations for COVID-19 vaccinations in the workplace

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 2020, our initiatives included the Healthy Mileage Campaign, fitness classes, 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 more than 40% of all employees, and some employees were participated at overseas sites. We also measured participants' visceral fat and body fat before and after the exercise program so that they can grasp their current condition and manage their bodies more objectively, as well as confirming the effectiveness of the program.



[FY2021 Health Insurance subsidy and content of activities conducted jointly with Health Insurance Association]

Lifestyle improvement support using QUPiO+ (accumulation of points for daily health improvement activities, semiannual walking event, etc.)	
Special healthcare guidance (based on special check-up results and those qualifying under special health guidance criteria)	
Cancer screening	Gastric cancer (endoscopy or X-ray), colon cancer (fecal occult blood) & five abdominal organs (abdominal ultrasound)
	Breast cancer (mammography or ultrasound) & uterocervical cancer (sampling by physician)
	Prostate cancer (PSA test)
	Lung cancer (CT scan) (if not examined for gastric cancer or colon, abdominal and prostate cancer)
Influenza vaccination	
Dental examination	
Lifestyle disease health checkup (blood sample analysis for employees not covered by the Industrial Health & Safety Act)	

Support to quit smoking (partial subsidy for buying nicotine patches—for four weeks)

Preventing aggravation of diabetic nephropathy (prevention of progress to hemodialysis caused by aggravation of diabetic nephropathy)

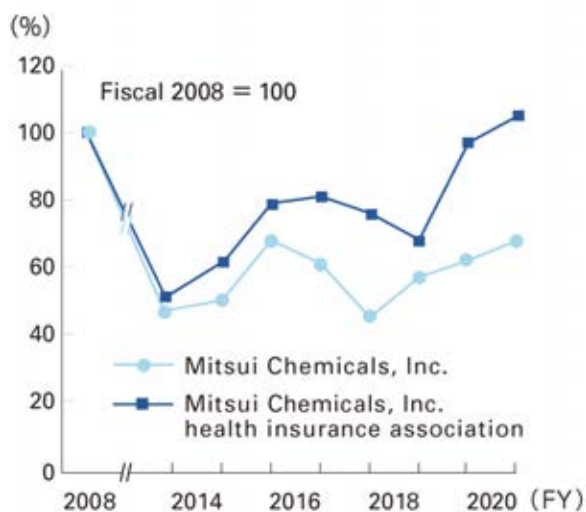
Recommendation to visit hospital (recommended for persons who show levels of blood sugar, blood pressure and lipids higher than the recommended levels)

Reducing Medical Costs

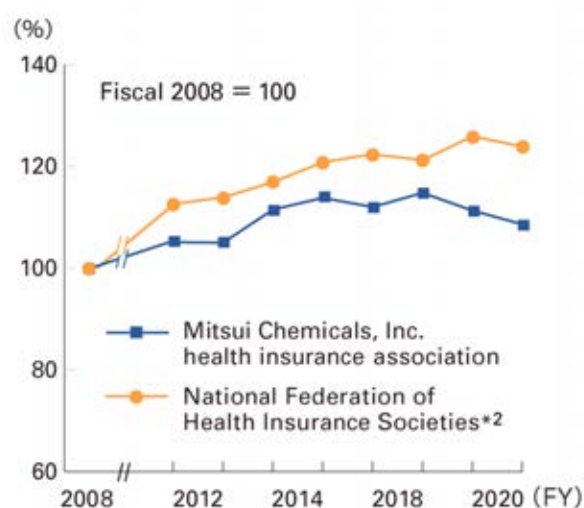
The sickness/accident allowances have been on a decreasing trend since fiscal 2015; however, they have increased since fiscal 2018 due to an increase in those suffering from mental health issues. Sickness/accident allowances in fiscal 2020 were 60% of the fiscal 2008 levels, showing a long-term decrease for cancer and cardiovascular diseases. There was also a significant overall decline in fiscal 2020 according to the Mitsui Chemicals Health Insurance Association.

The level of legally mandated benefits per insured person (medical cost) has dropped in 2020 according to both the Mitsui Chemicals Health Insurance Association and the National Federation of Health Insurance Societies. One reason is believed to be employees stopping taking health examinations to avoid exposure to COVID-19. In terms of legally mandated benefits per insured person (medical cost) according to the Mitsui Chemicals Health Insurance Association and the National Federation of Health Insurance Societies, the rate of the increase with the fiscal 2008 level taken as index of 100 shows the increase for the Mitsui Chemicals Health Insurance Association to be roughly 60% of the level for a general health insurance association. These show the comprehensive effects of our health management, and we will continue to strengthen measures to promote employee health 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.

Certified as Health and Productivity Management Organization (White 500) for Fifth Consecutive Year

Mitsui Chemicals was recognized as White 500 companies in the 2021 Certified Health and Productivity Management Organization Recognition Program (large enterprise category), hosted by the Ministry of Economy, Trade and Industry (METI) and Japan Health Council for the fifth consecutive year. The program awards enterprises that are particularly keen in taking initiatives for overcoming health-related challenges in regional communities or promote health-conscious activities.



Mitsui Chemicals Receives Sports Yell Company Certification for Fourth Consecutive Year

Mitsui Chemicals has received the Sports Yell Company certification for 2021 from the Japan Sports Agency. This marks the fourth consecutive year that Mitsui Chemicals has earned this certification. Launched in 2017, the program acknowledges companies that are proactively running sports initiatives to improve employee health. The hope is that this will lead to a growing number of sports-related social opportunities. Mitsui Chemicals was recognized by the Japan Sports Agency for its Healthy Mileage Competition, a health initiative that is run within the company.



Accredited as Tokyo Metropolitan Sports Promotion Company for 6th Consecutive Year

Mitsui Chemicals was certified as a Tokyo Metropolitan Sports Promotion Company 2019, which is hosted by the Bureau of Olympic and Paralympic Games Tokyo 2020 Preparation, under the Tokyo Metropolitan Government, for the 6th consecutive year. The program started in fiscal 2015 to recognize enterprises taking initiatives in promoting sports among employees and making social contributions in the sports area. Our certification was in recognition of the Healthy Mileage Competition for our employees.



"Silver certification" for outstanding health promotion

We are committed to working on improving health across the whole company and winning "silver certification" and "gold certification" for being an outstanding health promotion company. As a result of its screening, we received silver certification from the Tokyo Federation of the National Federation of Health Insurance Societies. The certification was granted in recognition of the Company's daily efforts in using health examination results effectively, developing an environment to improve employee health and activities that focus on diet, exercise, stopping smoking and mental health.



Certification No.1444
(Certification period:
until December 2021)

Received Gold in Gan-Ally Declaration Awards for Cancer Initiatives for Second Consecutive Year

Mitsui Chemicals received the Gold Award at the 2nd Gan-Ally Declaration Awards for second consecutive year. The Gan-Ally Declaration Awards are an award scheme created by Gan-Ally-Bu, a private sector project that focuses on tackling problems faced by people who continue to work while



undergoing treatment for cancer. The awards aim to encourage workplaces to be more accommodating of employees who have cancer, thereby creating a society where people can feel comfortable continuing to work while receiving treatment. As a result of receiving this awards, we published a Guidebook on Supporting Both Work and Treatment to enable employees to use our system more actively.

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.



Preventing Exposure to Harmful Substances

We are committed to reducing occupational health risks and improving working conditions by, for example, utilizing the Occupational Safety and Health Management System 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

The reformed Industrial Safety and Health Act now requires reinforcement of risk assessments of chemical hazards and implementation of countermeasures. Our conventional risk assessment system was updated to create a new system, and since fiscal 2016, we have been conducting a risk assessment of working with harmful substances (inhalant chemicals) using the new system.

By fiscal 2019, a total of 12,660 cases of qualitative risk assessment were implemented and all of the qualitative assessments have been completed. Of these, 4,297 cases were identified to have a high risk level and we continued systematic quantitative evaluations, such as exposure assessments of individual employees. To date, quantitative assessment for 2,145 cases have been completed. The total number of completed qualitative risk assessment cases by fiscal 2020 marked 13,443, and we have finished all qualitative risk assessments. Of these, 3,897 cases were identified to be of high risk and we have completed quantitative assessments on 2,405 cases. Those work procedures judged to be of high risk as a result of the quantitative assessment, have been subject to methodical reforms to reduce the risks involved. We plan to conduct qualitative assessments on new procedures in fiscal 2021 and also to follow up quantitative assessment of the remaining 948 cases of those 3,897 high risk cases.

In addition, we also built specific risk assessments for health problems newly caused by the absorption of chemical substances through the skin in fiscal 2018 in response to a rise in social concern about absorption of hazardous chemicals through the skin. In fiscal 2019, we started this assessments and have completed the all assessment of 3,565 cases in fiscal 2020. Based on the assessment results, we are reviewing facility response and working procedures as well as selecting protectors with more appropriate shielding and durability to reduce risks.

Working environment improvement example (1) – Sampling of specific chemical substances

Before

Benzene (xylene) was sampled into a bottle, which imposed contact risks not only with airborne particles but also from spills.

After

A sample cylinder was adopted to enable fully sealed sampling. The risk was improved to Level I.



Working environment improvement example (2) – Sampling of specific chemical substances

Before

Blow cleaning of sample bottles, rinsing the bottles with the target chemical, and actual sampling were all carried out in a sampling box. This imposed contact risks not only with airborne particles but also from spills.



After

The previous sampling system was replaced with a cylinder sampling system, which enabled purging, rinsing, and sampling within a fully sealed system. The risk was improved to Level I.



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. We canceled overseas inspections in fiscal 2020 due to the COVID-19 pandemic. We will resume inspections as soon as the pandemic restrictions are lifted.

Engagement with Society



Respect for Human Rights

- Policy
- Initiatives

Sustainable Procurement

- Management System
- Supplier Evaluation and Guidance for Improvement
- Participating in Initiatives

Human Resources Management

- Management System
- Talent Management
- Diversity
- Compensation & Benefit
- Talent acquisition
- Talent and Organization Development
- Employee-friendly Working Environment and Labor Productivity
- HRIS and People Analytics

Social Activities

- Management System
- Laboratory Classes on the Wonders of Chemistry
- Nurturing Future Generations
- Environment
- Support for Employees' Participation in Social Activities
- Disaster Relief
- Working in Harmony with Local Communities

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.

Established in February 2016

Revised in December 2017

Initiatives

The Mitsui Chemicals Group lists “respect for human rights” as one of the “prerequisites for business continuity” as a part of the Group’s [material topics](#) and is working to put this into company-wide practice.

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 information from the United States State Department’s “Country Reports on Human Rights Practices” and “Trafficking in Persons Report” as well as survey materials such as “Human Rights Watch World Report” and “Transparency Corruption Perceptions Index” from NGOs and other organizations involved in human rights, and conduct investigations of challenges with regard to regional human rights where the Group’s business sites exist. According to the reference survey materials, there are various issues in each region, such as discrimination in employment and work, working conditions, forced labor and child labor, human rights violations against foreign workers and involvement in corruption. There are also such issues in the supply chain (raw material suppliers, subcontractors, processing subcontractors, logistics partners, etc.). The global pandemic brought on by COVID-19 has become a major issue for the Group and its global business operations. The impact is not limited to operation of our global supply chain but also to potential human right issues in various parts of the world which we believe our Group cannot ignore. Under collaborations with external experts, we started reorganizing the business activities and value chain in each global headquarters in fiscal 2021, taking account of the impact on human rights from climate change, pollution, and waste in addition to the conventional viewpoints. As the next step, we plan to identify the human rights issues that our business sites must consider.

Initiatives toward the Human Rights Due Diligence



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. To facilitate a deeper understanding of the basic principles of business and human rights, in fiscal 2019 we introduced the "Business and Human Rights e-Learning" series published by the Asia-Pacific Human Rights Information Center and Amnesty International Japan. A total of 9,844 employees, including those from domestic Group companies, studied this program in fiscal 2020. We plan to expand the scope of this program across the entire Group. Also, reports and consultation on human rights are received on the [Risk Hotline](#) and at the harassment consultation services. The business audit by the Internal Control Division includes an internal audit process based on self-assessment of internal controls utilizing the compliance checklist. The compliance checklist includes items related to compliance with the related laws and regulations, prevention of bribery and corruption, harassment, appropriate handling of personal information and human rights issues such as discrimination, forced labor and child labor. The checklist is revised every year.

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.

Human Rights e-Learning Program (Mitsui Chemicals, domestic affiliates and subsidiaries)

e-Learning Program	FY2020 Number of participants/Total hours
Business and Human Rights	9,844 (6,562 hours)

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](#) and [the Mitsui Chemicals Group Sustainable Procurement Guidelines](#). Under these policies, we place considerable importance on respect for human rights, fair working conditions and a good work environment, reduction in environmental impact, compliance with laws and regulations, social norms and considerations for those in the supply chain. When we begin a new business arrangement and with ongoing suppliers, depending on the nature of the business, we conduct regular checks on the supplier's efforts through our [sustainable procurement Self-assessment Questionnaires \(SAQ\)](#). We use the questionnaire results to provide feedback to suppliers and to support their efforts to improve. In addition, we have also extended our [Risk Hotline](#) 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.

Supplier Evaluation and Guidance for Improvement

Participation in Human Rights Due Diligence Workshop Organized by Caux Round Table Japan

Through dialog with companies, NPOs/NGOs and knowledgeable experts, the Mitsui Chemicals Group deepens its understanding of the contexts in which human rights challenges occur as well as the relationship between business activities and human rights. We then consider what are the important human rights issues for us and business activities considering these issues, and work to utilize that understanding in our corporate activities.

The Group participated in [the Human Rights Due Diligence Workshop](#) 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. In the 2020 program, we identified important human rights issues in each industry by utilizing the human rights guidance tools created by the UNEP Finance Initiative. We also took other human rights-related backgrounds into consideration, such as the COVID-19 impact on workers, children, and communities; ICT business; building a sustainable supply chain driven by the Tokyo Olympics; human trafficking and modern slavery; and the rights of indigenous people.

2020 Stakeholder Engagement Programme (Human rights due diligence workshop)

Management System

Policy and Basic Approach

The Mitsui Chemicals Group engages in purchasing activities based on the Mitsui Chemicals Group Purchasing Policy. The policy incorporates a sustainable procurement perspective, in addition to conducting fair and honest transactions. In terms of procurement activities described in [the Mitsui Chemicals Group Sustainable Procurement Guidelines](#), the Mitsui Chemicals Group has defined assignments on which to work with the full cooperation of our suppliers toward fulfilling our environmental and social responsibilities across the entire supply chain from a global perspective.

Mitsui Chemicals Group has established basic rules for purchasing as part of its global policy. The practical application of these rules ensures fair and law-abiding procurement for the Group at the appropriate terms, quality and pricing, and ultimately ensures compliance with laws and maintains and strengthens the Group's competitiveness.

The Mitsui Chemicals Group Purchasing Policy

The Mitsui Chemicals Group recognizes that all its suppliers are good partners and endeavors to trade with them fairly and in good faith in the hope that both the Group and its suppliers will achieve sustainable development.

The Mitsui Chemicals Group also tackles issues, with a global perspective, including environmental, social and corporate governance issues, across the entire supply chain, aiming to achieve sustainable procurement.

The Mitsui Chemicals Group is committed to conducting purchasing activities in accordance with this Group Purchasing Policy.

1. Ensuring compliance

We will conduct purchasing activities in compliance with the applicable laws and regulations and appropriate social practices of the regions and countries in which we operate.

We will also require the same level of compliance from our suppliers.

2. Equal opportunity and transparency

We will be open in choosing our suppliers, and will offer equal opportunity for fair trade in good faith.

3. Selection of suppliers from the viewpoint of "sustainable procurement"

In the interests of building stronger partnerships, we will give priority to the following criteria.

- (1) Suppliers that respect human rights, prohibit discrimination, and do not engage in any acts which violate human rights
- (2) Suppliers that ensure fair working conditions and provide a safe and healthy working environment
Suppliers that prohibit forced labor, prohibit child labor and discrimination in hiring
- (3) Suppliers that are aware of environmental issues and are committed to solving and addressing them
- (4) Suppliers that conduct fair corporate activities based on a sound management practices
- (5) Suppliers whose performance in areas such as pricing, quality, and delivery term are at an adequate and reasonable level, and endeavor to maintain and improve their performance

* See the Mitsui Chemicals Group Sustainable Procurement Guidelines established by Mitsui Chemicals for further details.

Revised on February 1, 2019

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 our Group (Purchasing Division, major business divisions, and domestic and overseas affiliates).

To realize sustainable procurement, the Purchasing Division regularly verifies the status of our suppliers by conducting sustainable procurement SAQ surveys and audits.

Progress of the sustainable procurement activity plan and results is monitored in the monthly division meetings, and follow-ups are reflected in plans for the next fiscal year. In addition, we verify the status of sustainable procurement activities during annual audits conducted by corporate auditors and the Purchasing Division.

Goals and Results

KPI	Scope	FY2020			Medium to Long-Term (FY2025)
		Goals	Results	Level Achieved	Goals
Sustainable procurement ratio*	Mitsui Chemicals Group	—	—	—	70%
	Mitsui Chemicals, Inc. (By Purchasing Division and major business divisions)	—	45%	—	—
	Mitsui Chismicals, Inc. Purchasing Division	—	85%	—	—

* Sustainable procurement ratio:

The sustainable procurement SAQ response rate from suppliers (transaction value basis). Feedback and improvement assistance are provided to suppliers based on the response results.

The Mitsui Chemicals Group Sustainable Procurement Guidelines

The Mitsui Chemicals Group aims for sustainable growth with society through initiatives for solving social challenges by upgrading its triple bottom line management with a focus on the economy, environment and society. Based on this concept, we practice “Always Act in Good Faith,” “For People and Society” and “Dream-Inspiring Innovation” as set forth in the Mitsui Chemicals Group Action Guidelines when conducting our business activities.

In the procurement activities, we believe that it is important to forge powerful relationships with our suppliers to fulfill environmental and social responsibilities in the entire supply chain from a global perspective. We also recognize that these initiatives will contribute to the mutual and sustainable development of our suppliers and the Mitsui Chemicals Group.

In light of these factors, the Mitsui Chemicals Group has created tasks that we would like to work on with the full cooperation of our suppliers in the Mitsui Chemicals Group Sustainable Procurement Guidelines. We would like to have the understanding and support of each our suppliers for these Guidelines and request that they undertake the initiatives described below.

Corporate Governance

1. Sound corporate management

Establish an organizational system for sound corporate management through in-house control systems and structures for ensuring the effectiveness and efficiency of business operations as a corporation, the reliability of financial reports, compliance with laws and regulations applicable to your business activities and the protection of assets.

2. Accountability

Appropriately distribute the financial and non-financial information to inside and outside the company based on the recognition of accountability to society and stakeholders.

Human Rights

1. Respect for human rights and prohibition of discrimination

Support and respect the protection of human rights proclaimed internationally. Moreover, never under any circumstances engage in any 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 other differences.

2. Prevention of human rights violations

Endeavor to avoid causing any human rights violations and indirectly creating adverse human rights impacts through your business activities. In addition, work to prevent or mitigate adverse human rights impacts through all stakeholders involved in the course of your business activities.

Labor

1. Provision of equal opportunities

Equally provide employees with opportunities for personal career growth through human resources development initiatives. Moreover, provide equal opportunities for employment to human resources with motivation and ability.

2. Payment of proper wages

Observe the statutory minimum wage in countries and regions where your business activities are conducted. In addition, endeavor to establish wages by giving due consideration to the improvement of employees' personal growth and their motivation.

3. Fair application of working hours and leave of absence

Observe the labor hours prescribed in laws and regulation of countries and regions where your business activities are conducted. In addition, grant workers the right to take paid vacation.

4. Prohibition of forced labor

Guarantee that employees are free to separate from the service at their own discretion as all work is voluntary.

5. Prohibition of child labor

Never employ children who are under the legal working age in countries and regions where your business activities are conducted. In addition, never assign such jobs that impair children's health, safety and morality.

6. Respect for basic labor rights

Respect employees' rights to organize and bargain collectively and other basic labor rights.

7. Advance management of occupational safety and health

Grasp the risk of an accident occurring at work and the risk of exposure to chemical substances hazardous to the human body, noise, foul odors and so on and ensure a safe and healthy work environment. In addition, take measures with due care for employees' mental health.

Environment

1. Management of chemical substances

Manage chemical substances contained in products in accordance with standards prescribed in laws and regulations.

2. Reduction of environmental load

Endeavor to reduce environmentally harmful substances released into the air, water and soil (including greenhouse gases) by setting levels equal to those required by laws and regulations or independent targets exceeding the required levels.

3. Efficient use of resources

Promote efficient use of energy, water, raw materials and other resources by setting independent targets.

4. Waste management

Take responsibility in the disposal or recycling of waste materials by setting independent targets.

5. Biodiversity conservation

Promote biodiversity conservation by reviewing the direct and indirect impact of your business on ecosystems.

Risk Compliance

1. Corruption prevention

Maintain sound relationships with local administration authorities and public officials where your business activities are conducted, by managing the reception thereof to prevent corruption.

2. Prevention of offering or accepting improper advantage to or from customers, suppliers and so on

Maintain sound relationships with customers, suppliers and so on by avoiding excessive gift-giving, entertainment and collusive relationships regarding marketing and purchasing activities.

3. Prevention of non-compliance with competition laws

Prevent unfair trading, including bid-rigging, cartels and abuse of dominant bargaining position.

4. Elimination of anti-social forces

Eliminate any relationship with organized crime groups, corporate racketeers and other anti-social forces and never provide any benefits to anti-social forces.

5. Respect for third parties' intellectual property

Respect third parties' patents, copyrights, trademarks and other intellectual properties and prevent unauthorized use thereof.

6. Establishment of contact points for complaints and consultations

Develop a system to allow for an individual who came to know important risk information to directly report and consult with an internal dedicated division or external contact points. Moreover, ensure that confidentiality of the individual who made said reporting or consultation will be strictly maintained and that the individual will never suffer prejudicial treatment.

7. Establishment of a system for business continuity plan (BCP)

Develop a system to ensure the continuity of important operations and business or early restoration in case of a disaster.

8. Management of confidential information and protection of personal information

Properly manage confidential information of customers, suppliers, one's own company and so on to prevent leakage

thereof. In addition, implement proper management and protection of personal information of customers, suppliers, one's own company and so on.

Quality and Safety

1. Ensuring quality and safety of products and services

Provide products and services that meet laws and regulations and safety standards established in countries and regions where your business operations are conducted and that satisfy quality standards required in advance.

2. Appropriate response to defects arising in products and services

Implement prompt information disclosure and notify the competent authorities in the event that an accident occurs with regards to products and services or that defective products are distributed. Moreover, implement a product recall and develop a system for formulating measures to ensure the safety of supply destinations.

Supply Chains

1. Basic stance for supply chains

For the purpose of fulfilling social responsibilities across the entire supply chain, endeavor to ensure that not only one's own company but also suppliers are fully aware and comply with the significance of sustainable procurement.

2. Responsible procurement of raw materials

Never purchase or use raw materials containing any gold (Au), tantalum (Ta), tungsten (W) and tin (Sn) that are conflict minerals related to inhumane acts by local armed groups in the Democratic Republic of the Congo and its neighboring countries.

Communication with Local Communities

1. Contribution to local communities

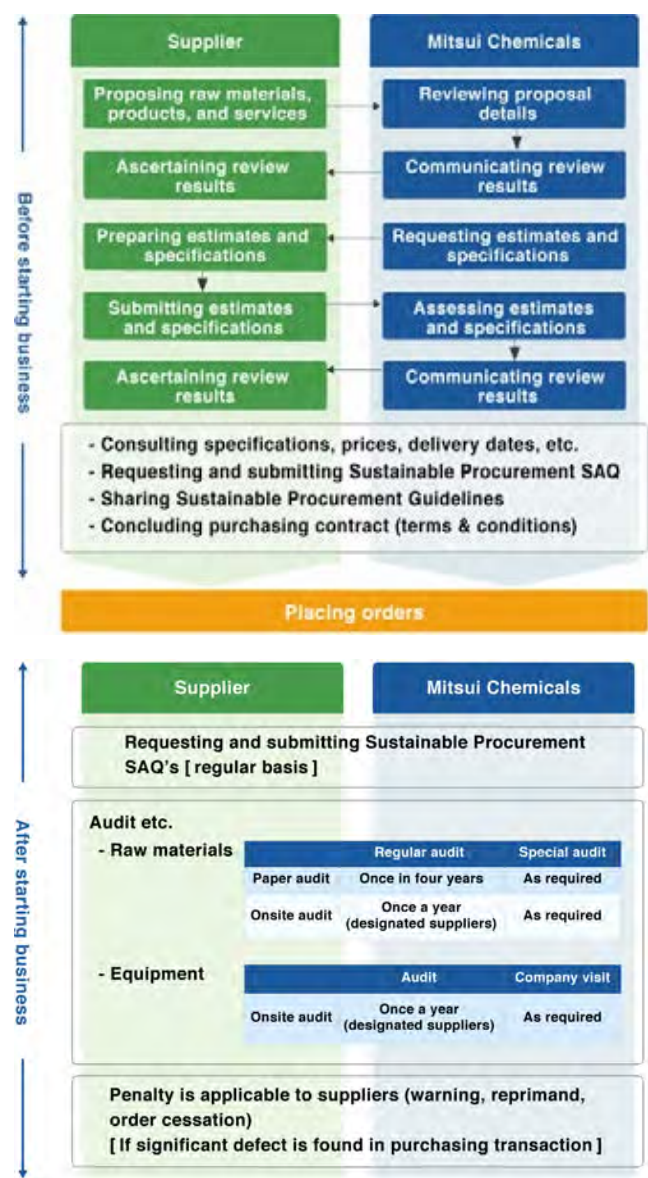
Respect the culture and customs in countries and regions where your business activities are conducted and perform activities to contribute to the sustainable development of local communities.

End.

Supplier Evaluation and Guidance for Improvement

The Mitsui Chemicals Group Purchasing Policy states that we select suppliers from a sustainable procurement perspective as one of the selection criteria. When commencing transactions with new suppliers, as well as periodically with our current suppliers depending on transaction details, the Mitsui Chemicals Group verifies their efforts towards realizing a sustainable society. This involves confirming a wide range of specific items 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. When such surveys and audits identify any significant discrepancies, a penalty, such as suspension of transactions, is imposed according to the penalty criteria.

Transaction Procedures



The Mitsui Chemicals Group requests its suppliers to understand and commit to its [Sustainable Procurement Guidelines](#) to ensure sustainable procurement.

In addition, we are conducting a survey of suppliers with the use of the [CSR/Sustainable Procurement Self-assessment Questionnaire \(SAQ\)](#) published by the Global Compact Network Japan Supply Chain Working Group. This SAQ was drafted to conform with the UN Global Compact's 10 principles and international regulations such as ISO 26000 and GRI.

We tabulated SAQs turned in by suppliers. The findings are fed back to the suppliers as support in making improvements. The SAQ completion rate (Group-wide transaction value basis) is included in our 2025 Long-term Business Plan as the sustainable procurement ratio, one of the KPIs.

The SAQ survey of Purchasing Division suppliers* was conducted between fiscal 2017 and fiscal 2018. Responses were received from 307 companies, accounting for roughly 90% of our transaction value. Analysis of the responses showed a number of differences in the level of response to the SAQ and led to the publication of an awareness promotion reference guidebook in fiscal 2018, which explains the objectives of the sustainable procurement SAQ, its intention of questions and recommended activities. We visited suppliers who scored less than 40% to provide support with making improvements matching the conditions at each company. These visits resulted in score improvements for all the companies visited and comments from the companies visited revealed that they gained a greater understanding of the purpose of these questions. We have asked these suppliers to continue to make further improvements.

In fiscal 2019 and fiscal 2020, the SAQ survey was expanded to cover suppliers of our business divisions and domestic affiliates and subsidiaries to gain their cooperation in sustainable procurement. During the period from fiscal 2017 to fiscal 2020, 898 companies (of which 419 are suppliers of the 13 principal affiliates and subsidiaries and account for a large part of their transaction value) submitted responses to the SAQ, accelerating the drive to achieve sustainable procurement across the entire Mitsui Chemicals Group.

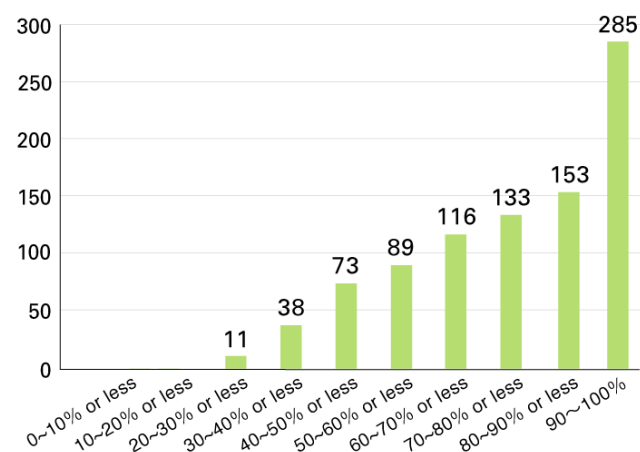
* Purchasing Division suppliers:

510 suppliers of raw materials; 800 suppliers of equipment; 1,230 suppliers of indirect materials (as of April 2021)

Sustainable procurement SAQ results (FY2017 to FY2020)

SAQ score levels	No. of suppliers	Actions for improvement
Level 3 (Score 70% or higher)	571	Feed back comments along with information about average score of all companies, industry average, and chart of company scores.
Level 2 (Score 40% or higher to less than 70%)	278	Submit a guidebook for the SAQ and request corrections by the next survey (FY2021).
Level 1 (Less than 40%)	49	Visit company premises and exchange opinions towards improvement, as well as explain the intention of SAQ using a guidebook for the SAQ. Also, request resubmission of the SAQ.
Total no. of responses	898	

FY2017 to FY2020 Number of companies by total score



FY2017 to FY2020 Scoring rate by themes



Sustainable procurement ratio

Scope (transaction value basis)	FY2017	FY2018	FY2019	FY2020	Medium to Long-Term (FY2025)
Mitsui Chemicals Group	—	—	—	—	70%
Mitsui Chemicals, Inc. (By Purchasing Division and major business divisions)	39%	44%	44%	45%	—
Mitsui Chemicals, Inc. Purchasing Division	73%	84%	84%	85%	—

Other forms of support provided to suppliers

The following information is supplied to our suppliers to ensure mutually beneficial sustainable development for both the Mitsui Chemicals Group and its suppliers. In fiscal 2016, Mitsui Chemicals sent reminder letters to around 2,600 Purchasing Division suppliers and partners containing the following items.

In fiscal 2018, briefings on the following were held for contractors at our works, and the reminder letters were given to participants. A letter was also issued notifying all suppliers and partners of the Purchasing Division that no gifts can be accepted.

- 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

Policy on conflict minerals

In the Mitsui Chemicals Group Sustainable Procurement Guidelines, we state “Never purchase or use raw materials containing conflict minerals” as a basis for our responsible procurement of raw materials. In fiscal 2015, the Purchasing Division conducted an investigation covering all raw 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).

Since fiscal 2016, the Purchasing Division and RC & Quality Assurance Division are working together to identify tin catalysts, etc. within all Group product compositions registered in the chemical product safety information system. Every year, we conduct conflict mineral surveys of our suppliers using CMRT* and confirm each year that none of these conflict minerals are purchased or used. The sustainable procurement SAQ includes a category for identifying all activities related to conflict minerals.

Should we be shown in the future to have used conflict minerals, we will immediately halt procurement of the relevant minerals.

* CMRT:

Conflict Minerals Reporting Template provided by the Responsible Minerals Initiative (RMI) for submitting reports on conflict minerals.

Internal training for sustainable procurement

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. In fiscal 2018, we provided a training program on the items covered in the sustainable procurement SAQ to all Purchasing Division employees to ensure their understanding of the aims of the SAQ. In fiscal 2019, we explained the sustainable procurement SAQ to purchasing personnel in our business divisions and domestic subsidiaries and affiliates. In fiscal 2020, a quality audit e-learning program was added to the requirements for employees in the Purchasing Division to study how the supplier and the buyer collaborate in assessing current conditions, to study processes that lead to improvements and to enable them to be applied in various forms of audit.

For comprehensive implementation of the policy across the entire Mitsui Chemicals Group, the e-learning course on procurement rules was updated in fiscal 2020. The relevant e-learning programs have been made mandatory not only for employees in the Purchasing Division but for all purchasing staff members within the Group to ensure full awareness of the need to comply with sustainable procurement when selecting a supplier or a partner.

Participating in Initiatives

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.

RSPO Certification



Participation in Global Compact Network Japan Supply Chain Working Group

Mitsui Chemicals has been associated with the initiatives of the Global Compact Network Japan (local network for the UN Global Compact in Japan). We have been participating in supply chain working group since fiscal 2013. As part of its efforts 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. As the questionnaires were established based on the following concepts, the Group has taken the initiative in adopting the SAQs to improve sustainable procurement not only in its own supply chain but along with other participating companies throughout society.

- Hold discussions on equal treatment for companies that comprise our supply chains regardless of the size of their management resources (personnel, assets, funds); sustainable procurement is becoming an important step in building 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.

CERTIFICATE

CU-RSPO SCC-842870

Based on an audit according to the requirements stated in the RSPO Supply Chain Certification Systems, version November 2014 (revised June 2017) and a signed contract, Control Union (Malaysia) Sdn Bhd herewith certifies that the site(s) listed below are found to be in compliance with the RSPO Supply Chain Certification Standard, version November 2014 (revised June 2017). 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	6, Takasago 1-chome 592-0001 Takaishi Osaka JAPAN
RSPO Number (if applicable)	2-1139-20-000-00
Other sites certified (see annex 1)	<input type="checkbox"/>
RSPO registered parent company (if applicable)	
RSPO member number parent company	
Scope of Certification	Procurement and processing of Fatty Acid Methyl Ester, including storage and selling as nonionic surfactant.

Certificate Start Date	21-12-2020
Certificate Expiration Date	20-12-2025
Date of first RSPO certification	21-12-2015
Certificate number	CU-RSPO SCC-842870
Supply chain model	<input type="checkbox"/> Identity Preserved (IP) <input type="checkbox"/> Segregated (SG) <input checked="" type="checkbox"/> Mass Balance (MB)

Authorised signatory name

Ms. N Hanida Binti Ismail

Date of issue: 15-12-2020

On behalf of the Managing Director

Authorised signature



Issued by

Control Union (Malaysia) Sdn Bhd
B-3-1 Block B, Pusat Perniagaan Prima Klang,
Jalan Kota/KS 1,
41000 Klang
Selangor
MALAYSIA
0060-3-33771600/1700
certifications@controlunion.com

Control Union (Malaysia) Sdn Bhd is accredited by ASI for certification against voluntary sustainability standards for scope of RSPO Supply Chain Certification on 05-11-2014 (ASI-ACC-069).

This certificate including the annex remains the property of Control Union (Malaysia) Sdn Bhd 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 Control Union (Malaysia) Sdn Bhd immediately of any changes in the above mentioned data.
Only an original and signed certificate is valid.

Certificate version: C842870CU-RSPO SCC-02.2020



RSPO 8-0184-16-100-00

Human Resources Management

Management System	Talent Management	Diversity
Compensation & Benefit	Talent acquisition	Talent and Organization Development
Employee-friendly Working Environment and Labor Productivity	HRIS and People Analytics	

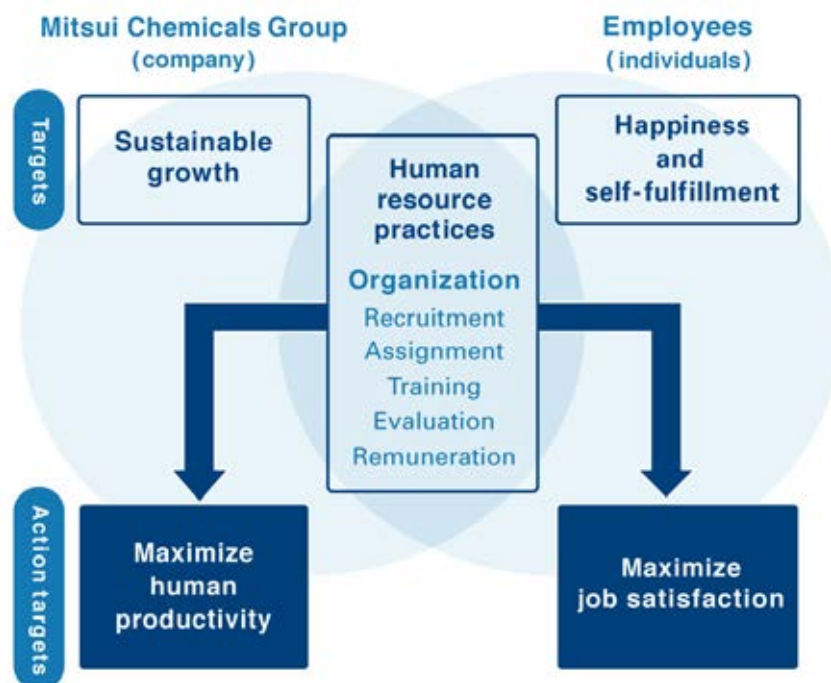
Management System



Policy and Basic Approach

Corporations today are questioned about how they can contribute to building a sustainable society. The Mitsui Chemicals Group is committed to creating the values that society requires, and the key to achieve this is human resources. Valuing individual employees is also important so that the company and employees each inspire the other on an equal relationship to create a better future together. Aiming to realize this, we set the simultaneous goals of “Sustainable growth of the Mitsui Chemicals Group” and “The happiness and self-fulfillment of our employees.” We plan to build an organization that always keeps learning and pushing its boundaries, driven by the full exertion of individual employees’ potential abilities. In this way, we will create our long-term competence.

The Mitsui Chemicals Group set out its Human Resources Management Policy to demonstrate its approach to both employees and stakeholders. Based on [the Action Guidelines](#), this Policy states our principles which are positioned and applied as the foundation of human resources measures across the entire Group. The Human Resources Management Policy is disseminated across the Group in Japanese, English, and Chinese.



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"

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.

We established Core Values* as leading action guidelines to capture the spirit of all employees working at Mitsui Chemicals Group sites all around 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 Mitsui Chemicals Group
Organization	We flexibly design and form organizations to achieve our management and business strategies, appropriately allocating jobs (positions).
Recruiting	We employ human resources with diverse expertise and values who can contribute to the sustainable development of the organization.
Assignment	We actively employ human resources who have high potential to achieve fruitful results (the right person in the right position).
Human Development	With a long-term perspective, we develop global experts and managerial human resources.
Evaluation	We appropriately evaluate each individual's achievement and encourage their further growth through timely feedback.
Compensation (Remuneration)	We aim to achieve a competitive compensation standard in the global market.

	Toward the happiness and self-fulfillment of employees
Organization	We form organizations and allocate people to make the best of each individuals' motivation, competency, and capability.
Recruiting	We offer job opportunities equally to individuals who have the work motivation, capability, and diverse values sought by the Group.
Assignment	We allocate employees to maximize their motivation, career ambitions, and expertise.
Human Development	We offer various constructive training opportunities to develop employees' expertise and management literacy globally, and support their self-reliant career development.
Evaluation	We evaluate employees in a fair and objective manner to enhance their motivation and capabilities.
Compensation (Remuneration)	We aim to achieve a competitive compensation standard in the global market 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.

* Core value:

Core value is to capture the spirit of all employees working at the Mitsui Chemicals Group sites across the world and to act as a unifying force, ensuring that we are all working toward the same goals.

Challenge	To encourage employees to challenge the status quo actively and openly.
Diversity	To learn about the cultures and histories of others to deepen understanding of each person's personality and ethnicity and make the most of this understanding for Mitsui Chemicals Group's growth.
One Team	To unite our minds and efforts regardless of different positions, generations, genders, nationalities, organizations, and regions.

System and Responsible Officers

The Managing Executive Officer of the Human Resources (HR) Division is responsible for creating the global Group-wide HR strategy and leading the HR measures. The HR Division plays a central role in creating the HR strategy corresponding to the long-term business plan and the HR measures required to address priority issues. The measures critical to business are discussed by the Company-wide and divisional Key Talent Management Committees. The Key Talent Management Committees develop future management candidates, as stipulated by the Management Committee and detailed in the Corporate Governance Guidelines. The measures are shared and implemented by the management and HR department in each business site, domestic and overseas subsidiary, and affiliates. HR managers in the business sites, domestic and overseas subsidiaries, and affiliates, and HR managers from the overseas regional headquarters periodically share and discuss the progress of such measures, and draft and implement related plans.

Furthermore, in order to draft and implement the global Group-wide HR strategies/policies, the Mitsui Chemicals Group has established the HR Development Advisory Committee (HRDAC), a virtual global HR organization under the general manager of the Global HR Division that incorporates our HR managers together in Japan, Europe, the Americas and Asia. This organization is addressing a range of issues, such as (1) talent management, (2) employer branding (HR recruit marketing), (3) global mobility (strategic personnel change across the countries and companies), (4) global compensation/evaluation systems, and (5) global HRIS*.

* HRIS (Human Resources Information System):

A data management system for human resources, including core human resources.

Human Resources Management System

Diversity

KPI		Scope	FY2020			FY2021	FY2025 (Medium to Long-term)
			Goals	Results	Level Achieved	Goals	Goals
Percentage of women among regular hires	Career-track administrative positions	Mitsui Chemicals, Inc. registered employees	40%	50%	○	40%	—
	Career-track technical positions	Mitsui Chemicals, Inc. registered employees	20%	14%	×	20%	—
	General positions	Mitsui Chemicals, Inc. registered employees	7%	7.1%	○	7%	—
Ratio of women in management positions (manager-level or above)		Mitsui Chemicals, Inc. registered employees	4%	4%	○	5%	10%
Ratio of employees with disabilities		Mitsui Chemicals, Inc. registered employees	2.3%	2.4%	○	2.4%	—

Employee Engagement

KPI	Scope	FY2020			FY2021	Medium to Long-term
		Goals	Results	Level Achieved	Goals	Goals
Increase employee engagement	Mitsui Chemicals Group	Formulate the action plans	Action plan registration rate 96%	○	Global engagement score 36% or more (FY2018:31%)	Conduct the regular survey and implement action plans

Human Resources Management

Management System	Talent Management	Diversity
Compensation & Benefit	Talent acquisition	Talent and Organization Development
Employee-friendly Working Environment and Labor Productivity	HRIS and People Analytics	

Talent Management

Human Resource Strategy

VISION 2025, the long-term business plan created in 2016, set us the tasks of reforming our business portfolio and implementing a range of measures to expand the business globally. As a result, from the founding of Mitsui Chemicals in 1997, the Group's consolidated subsidiaries now total 154, and the number of their employees (as of March 31, 2021, excluding contract employees) has increased to 18,051 persons. Further, the overseas sales revenue ratio has expanded to 47%.

Along with VISION 2025, we have strategically and steadily managed our human resources and structured organizations from the viewpoint of global Group-wide.

VISION 2030, announced in 2021, stipulates further corporate reform as its basic strategy, and the HR strategy in particular has prime importance as people are indispensable to achieving this new long-term business plan.

HR strategy covers the following priority issues: (1) Acquire, develop, and retain human resources; (2) Improve employee engagement; and (3) Reinforce Group management. There are nine measures in place to address these aims. Acknowledging the environmental changes surrounding our business—digitalization, an aging society, changes in career ambitions, new ways of working, obligatory disclosure of information on intangible human capital and investment in human capital—we are accelerating the implementation of HR-related measures across the global Group-wide.

Priority Issues and Measures in HR Strategy

Priority issues	Actions		
1. Acquire, develop, and retain human resources	Disclose career opportunities in the group	Offer development opportunities	Competitive compensation standard
2. Improve employee engagement	Share missions, visions, and values	Cultivate self-reliant career ambitions	Strengthen dialogue between the organization and employees
3. Reinforce Group management	Optimum HR plan	Improve M&A readiness	Dialogue with employees and investors

In order to promptly create and implement HR measures corresponding to the above actions across the Group, we will reinforce regional HR functions, setting the Global Human Resource Division—established in April 2019—as the heart of CoE functions, including talent management, talent development, total rewards, and the Human Resources Information System (HRIS) & People Analytics, etc.

Key Talent Management and Strategically Critical Position Successor Plan

“Acquire, develop, and retain human resources” is an urgent issue in terms of our HR strategy to achieve the Mitsui Chemicals Group VISION 2030. This issue includes securing next-generation management candidates who will reform our business portfolio from the viewpoint of resolving social issues, and path finders who can reform businesses with novel ideas that bring solutions-based business models in view of global expansion and M&As. To acquire and develop such human resources strategically, we implement and operate the Key Talent Management scheme across the global Group-wide.

The Corporate Governance Guidelines position Key Talent Management in the center of the scheme to secure senior management successors (Sector Presidents and Managing Executive Officers). The scheme is designed to select future management candidates at an early stage and strategically train them according to the clearly defined credentials required of a management executive. We hold Divisional and Company-wide Key Talent Management Committee meetings between August and October every year. Through these meetings, we select next-generation management candidates and create development plans tailored to individuals, including assessments, creating skill development opportunities, and strategic appointments. The group-wide Key Talent Management Committee identifies the strategically critical positions (Mitsui Chemicals Business Sector Presidents and General Managers or higher positions, and presidents of major subsidiaries) to achieve VISION 2030 and the strategically critical positions to train such future management candidates. The committee also creates career development plans concerning these positions. We have identified some 120 strategically critical positions and training positions across the world and are actively acquiring suitable human resources from inside and outside the Group to fit into these positions. The progress made in Key Talent Management and the Strategically Critical Position Successor Plan is reported to the Board of Directors every year. We ensure the practicality of the schemes by regularly and objectively monitoring the progress of building this “human resource pipeline” towards the future.

Key Talent Management Process



Key Talent Management System

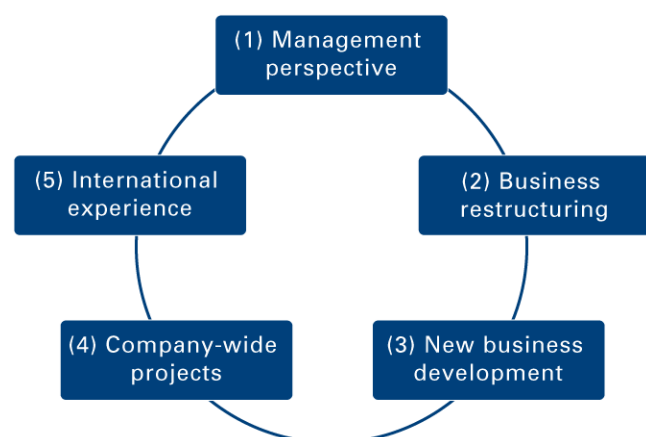


Qualification and experience required for management candidates

Two HR requirements for management candidates:

1. Must possess knowledge and experience to manage the business accurately and fairly towards achievement of the business vision.
2. Must possess keen insight, a wide view, ethics, fairness, and honesty.

Experience required of a management executive



Five axes	Description
(1) Management perspective	<ul style="list-style-type: none"> - PL in multiple business divisions (business responsibility in different areas) - Management of subsidiaries, etc.
(2) Business restructuring	<ul style="list-style-type: none"> - Restructuring of at-risk businesses
(3) New business development	<ul style="list-style-type: none"> - Planning and execution of new business models - Novel business creation (market, products, or customers) etc.
(4) Company-wide projects	<ul style="list-style-type: none"> - Staff management in relation to company-wide issues - Creating long-term plans - Major M&A and alliance management, etc.
(5) International experience	<ul style="list-style-type: none"> - Managing overseas companies

Progress and Future Prospects

FY2020 progress

- Divisional Key Talent Management Committee meetings (8 times)**
 Managing Executive Officers and General Managers etc. participated in the meetings and selected key talents from across the group. Created a tailored development plan (appointments & training) for each talent.
- Company-wide Key Talent Management Committee meeting (once)**
 CEO and Managing Executive Officers participated in the meeting and selected management candidates from the key talents nominated by the Divisional Key Talent Management Committee. Confirmed and approved the tailored development plans (appointments & training).
 Also, confirmed the direction of development and appointment of key talents who will take the rank of Head Office Team Leader or lower in the global Group-wide.
 Confirmed and approved the revised Strategically Critical Positions, created based on VISION 2030 and FY2020 business strategies.
- Created the tailored development plans for female management candidates as a part of diversification in the organizations.**
- Introduced the skill development program to confirm the direction of medium- to long-term development of management candidates as phase 1 of the key talent management assessment.**

Future prospects

- Redefine the requirements for future management (associated with VISION 2030)
Clarify the competencies, skills, experience, and credentials required for each management position to elaborate the successor plan and the selection process of candidates for strategically critical positions.
- Hold an action plan meeting to follow up and ensure implementation of the key talent development plans.
- Establish the Departmental Key Talent Management Committee to reinforce career pathways for specialists.

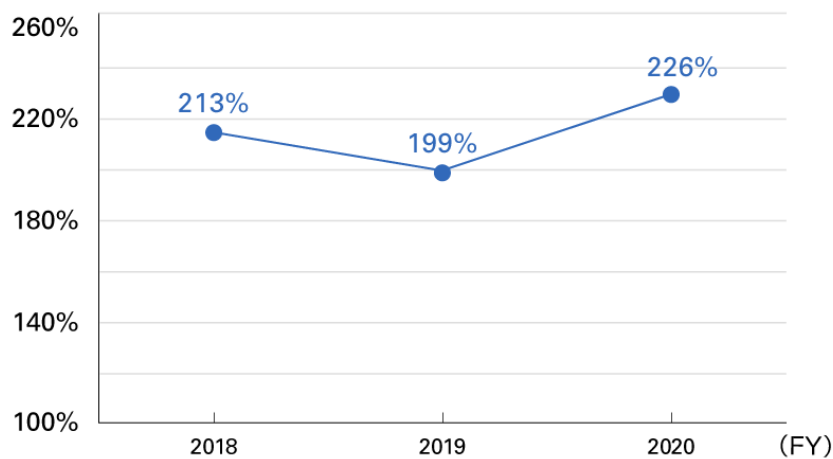
Successor Coverage Rate

The Successor Candidate Pool Occupancy Rate* shows the percentage of secured successor candidates against the number of positions strategically critical to achieving the Company-wide strategies. The Rate is regularly monitored.

* Successor Coverage Rate:

The number of successor candidates for strategically critical positions / The number of strategically critical positions.

Strategically Critical Positions



Management System	Talent Management	Diversity
Compensation & Benefit	Talent acquisition	Talent and Organization Development
Employee-friendly Working Environment and Labor Productivity	HRIS and People Analytics	

Diversity



* Just Joined [Facebook](#) !

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 listed diversity as one of our core values. 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. We also believe that promoting diversity is an important business strategy. The Mitsui Chemicals Group is resolute in not permitting any 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 as stated in [the Mitsui Chemicals Group Human Rights Policy](#). Aiming to adapt to the diversifying career ambitions of our employees and the changing values perceived for each work style, we are working to implement various diversity promotion measures.

Diversity Promotion Structure

The Mitsui Chemicals Group was focusing its efforts on proactively leveraging the capabilities of female employees in its operations by establishing the Promotion and Development of Women Team in 2006 according to management instructions. In fiscal 2015, the Diversity Promotion Office was established in the HR Division to boost the recruitment, training and promotion of women in response to the passing of the Act on the Promotion of Female Participation and Career Advancement in the Workplace. In fiscal 2016, the division became responsible not only for the advancement of women but also for the advancement of minorities in general within the Group. In fiscal 2019, the division was renamed the Diversity and Inclusion Group. We are establishing a structure that promotes further diversity under the leadership of the senior managing executive officer responsible for the HR Division and the Global HR Division and the general managers of the HR Division.

Encouraging Women's Advancement

Mitsui Chemicals has been actively encouraging the advancement of women in the workplace, such as by assigning female employees in plants and employing women in career-track positions. Since the establishment of the Promotion and Development of Women Team in 2006, we have been building a corporate culture to enable women to keep working over the years by organizing a range of flexible working schemes. These efforts are now firmly incorporated in our work practices and have received a favorable reputation from external parties. The Long-term Business Plan VISION 2025 set a target ratio of women in management positions (manager level or above) of 10% or more (among Mitsui Chemicals, Inc. registered employees) with the aim of diversifying our business decision-makers. However, there are a number of obstacles to overcome to achieve the set target, partly because the percentage of female employees is small compared to the total number of employees. We are employing practical long-term solutions to address this issue, such as setting the target ratio of new female employees in the periodic recruitment for different job types, including career-track technical position, career-track administrative position, and general staff (mainly factory operators) to match the varying employment situations of the differing roles.



CEO Message for Women's Empowerment

Mitsui Chemicals is aiming to change its business model by transforming the business portfolio. Understanding of diverse values and tastes is required to reach out to markets closer to customers. We must create an environment where a diverse group of people can make the most of their unique talents and potential, and expect ever more opportunities for women to fulfill their potential. We provide a better work environment for employees with family responsibilities such as childcare and nursing care, as our employees have been using our teleworking program more effectively since the COVID-19 pandemic. Such a work environment will also create promotion opportunities for women. We will continue to implement initiatives that encourage the recruitment of talented people.



A Message from the Outside Director

Promotion of workplace diversity—the source of innovation and reform—is indispensable for Mitsui Chemicals to build a sustainable society and create corporate value through its business model conversion and business portfolio reform. The Company lists “Diversity” as one of its Core Values, and is committed to permeating the true value of diversity throughout its organizations to further improve its capabilities as a whole. Women’s advancement is the first step to achieve this diversification and its progress is clearly visible and monitorable.

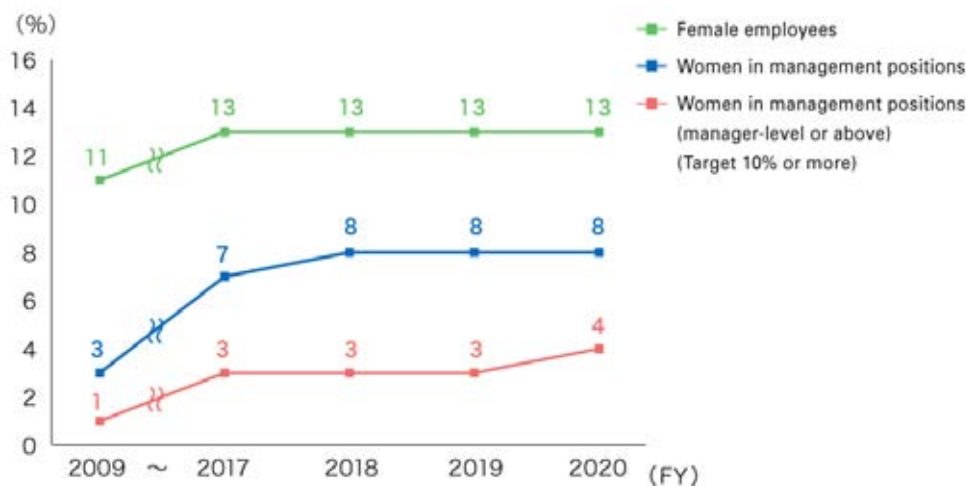
Women advancement plays a key role in Mitsui Chemicals’ sustainable growth and can provide a significant impact on its medium- to long-term business results. Therefore, this progress can serve as an indicator of Mitsui Chemicals’ commitment.

I will continue advising on and supervising this progress as an outside director.

YOSHIMARU Yukiko
Outside Director

- * To secure diversity in the Board of Directors, we try to appoint more than one female director since 2006.
- * Each affiliation is from the time when the article was created.

Ratio of Female Employees (Mitsui Chemicals, Inc. registered employees)



Percentage of Women among Regular Hires (Mitsui Chemicals, Inc. registered employees)

	FY2017	FY2018	FY2019	FY2020	FY2021 Goals
Career-track Administrative Positions	46%	47%	52%	50%	40% or more
Career-track Technical Positions	11%	16%	16%	15%	20% or more
General Positions (mainly factory operators)	3%	5%	11%	7%	7% or more

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. In addition to supporting trouble-free work and life styles, we are committed to maintaining a workplace that provides non-Japanese employees with a good work environment and employing 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 consultations from non-Japanese employees (assigned staff in charge to each business site)

Number of Non-Japanese Employees (Mitsui Chemicals, Inc. registered employees)

FY2016	FY2017	FY2018	FY2019	FY2020
55	57	54	54	53

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 is committed to maintaining an environment in which people with disabilities can play an active role while accumulating their skills, and feel accepted as members of the organization.

Before assigning an employee with disability to a certain position, we select the most appropriate place for the employee, taking into account not only their job role, but also the work environment and workplace members, to avoid putting under pressure on the employee to adapt to the work environment. In addition to conducting training sessions at sites that accept employees with disabilities to help other employees understand what a disability entails, we set incubation periods and adaptation/learning periods for a certain period after hiring and introduce measures suited to the employee's particular disability to enable them to work smoothly. We also provide regular interviews for both employees with disabilities and their superiors to help to retain employees with disabilities in the workplace. Listening to difficulties and issues from both sides helps to improve the workplace environment and work styles and creates a comfortable work environment.

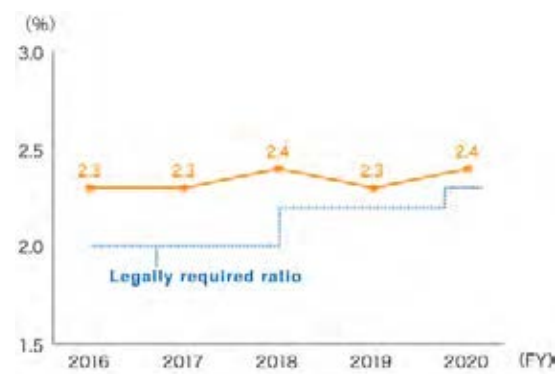
We also offer subsidies for learning skills that are useful to employees with disabilities in their work, such as language and computer skills, to help improve their skills in a way that is suited to their individual talents. We also hold inclusion lecture meetings that employees with disabilities or illnesses speak about their own disabilities and experiences, to foster a climate that accepts into the organization not only people with disabilities but also people with diverse personalities and characters and people receiving medical treatment.

Mitsui Chemicals has endorsed and signed on to "The Valuable 500" in October 2019. Launched at the World Economic Forum's Annual Summit, the Valuable 500 is an initiative created to promote the participation of disabled people in the workforce. The initiative looks for business leaders to carry out reform that allows disabled people to fulfil their potential in business, society and the economy.

Mitsui Chemicals Group Signs on to "The Valuable 500" Initiative



Ratio of Employees with Disabilities (Mitsui Chemicals, Inc. registered employees)



Employee Comments

Workplace Where I Feel Reassured

The main impression of Mitsui Chemicals that I gained through my job is "I'm in safe hands." I have mobility restrictions due to my visual impairment. When I visited the company for my job application, they kindly guided me from the closest station to the office. They also changed the interview and the hands-on training session from face-to-face to online because of the

COVID-19 pandemic restriction. The training was also carefully tailored for me to work around my disability. My current role is an officer for the employment of disabled people. Because the colleagues in my job group instruct me in a straightforward manner and support me for anything I cannot do because of my condition, I can work with a feeling of reassurance. Also, my colleagues are working actively making the best of their respective strengths, which inspires me to follow their path.

I would like to play my part in our efforts to help create a workplace where people can work and continue building their skills with an easy mind.

Joined in fiscal 2020 (Visual disability)

Retired Employees' Active Participation in the Workplace

Mitsui Chemicals is moving forward in making use of 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 presented by the shortage of human resources associated with our expanding business operations and the generational retirement of whole generations of employees who were recruited 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 the level of compensation offered when rehiring to increase the numbers of employees who wish to continue working.

Ratio of Re-employment for Retired Employees (Mitsui Chemicals, Inc. registered employees)

FY2016	FY2017	FY2018	FY2019	FY2020
81.3%	76.7%	87.6%	85.5%	87.1%

LGBT Awareness

The Mitsui Chemicals Group Human Rights Policy prohibits all forms of discrimination whatsoever, including sexual orientation and gender identity. The harassment lecture in the compliance e-learning program targeting all employees covers topics such as prohibition of discrimination and harassment over sexual orientation, in addition to conventional topics on sexual and power harassment. The New Line Manager Training Program also includes a diversity seminar, which provides a group workshop to teach new line managers about Sexual Orientation Gender Identity (SOGI) harassment and actions to take when they are consulted by their subordinates about gender issues.

In November 2020, we endorsed the LUX Social Damage Care Project announced by Unilever Japan Customer Marketing K.K., by abolishing the requirement for gender description, photo submission, and dressing in a standard recruitment suit at the time of job application. This is our effort to employ people with motivation and skills regardless of their gender or appearance.

In fiscal 2021, we started a project across multiple business sites to discuss what we can change to make the workplace more LGBT-friendly.

History of LGBT Efforts

FY2016	Voluntary learning session inviting a transgender person (head office)
FY2017	LGBT awareness training for harassment contact officers in domestic Mitsui Chemicals Group

FY2018	Lecture by a transgender person
	LGBT awareness-raising lecture as a part of New Line Manager Training Program (held annually since then)
FY2019	A movie to encourage understanding of sexual minorities
FY2020	LGBT lecture as a part of new employee training (introducing the consultation contact, etc.)
	Study group on the Act on Comprehensive Promotion of Labor Measures and SOGI harassment for the Mitsui Chemicals Group HR officers
	SOGI harassment lecture to General Managers and Group Leaders across the Company (450 persons)
FY2021	SOGI harassment lecture to Team Leaders across the Company (to be provided)

Understanding Multiculturalism

Since fiscal 2014 we have provided the Global Business Skill Training, to teach the skills needed when working with multicultural teams. This training program is targeted specifically at employees who have been assigned abroad and engaged in overseas business, that involves managing multicultural teams and negotiating with business partners from different cultural backgrounds. About 30 employees are selected to participate in this program each year. The participants learn about religions, cultures, and ways of thinking in different countries and regions through concrete case studies of business communication, in addition, the program aims to improve employees' language ability by learning how to give presentations and case studies and hold meetings in English. In fiscal 2021, we plan to invite an external lecturer to hold a non-mandatory online seminar for employees to acquire the knowledge and attitude needed for good multicultural communications.

Training and Lectures Related to Diversity Promotion

Diversity Seminar in the New Line Manager Training Program

New Line Manager Training Program is mandatory for all newly-appointed line managers who will be responsible for subordinates. It aims to raise managers' awareness through study of management roles and essential skills.

Diversity Seminar (2 hours)

Program	Details
Why diversity is necessary in an organization	An explanation is given, including social trends and well-known corporate presidents' comments. The program also notes that advancement of women is a key to progressing diversity in an organization and the importance of increasing the number of women among decision-makers.
Obstacles to diversity (unconscious bias)	Concrete examples of unconscious bias from past documents are introduced. An e-learning program is also available, and many participants said they realized that they had more unconscious bias than they had thought.

Harassment

The program explains about possible workplace harassments.

Participants discuss in a group how they should handle SOGI and paternity harassments as managers using concrete examples. The FY2020 program was given as an online seminar.



Training program at Omuta Works and Osaka Works

Sales Women Career Training

The percentage of women as new employees in administrative positions in Mitsui Chemicals, Inc. remains at around a half in recent years. At the same time, the number of women who are appointed as sales persons in different business sectors has been increasing. We have received comments such as “It is difficult to know how to balance job and child rearing as there are only a few role models.” This prompted us to hold an online workshop for female sales staff to discuss the issues that arise in pursuing a career and possible solutions to address them. This workshop was held jointly with Mitsubishi Chemical Corporation, which is experiencing a similar situation.



Joint online workshop with Mitsubishi Chemical

Women's Careers and Health

It is now common that women work throughout their lives, yet it is still true that there are events in their lives when they may find it difficult to continue working, such as during pregnancy, childbirth, menopause, or when facing female-specific diseases. Since fiscal 2017, we have been holding a lecture entitled “Women's Careers and Health” to help women to continue working by teaching them about specific health issues and how to manage them in a way that minimizes their impact. The fiscal 2017 lecture, given by a gynecologist, for younger employees focused on how women can manage their physical condition, and for older employees, on the menopause. We have been providing information concerning gynecological diseases and health to our employees. In fiscal 2020, we invited Mamiko Abe, Deputy General Manager, Corporate Communication Department, Corporate Strategy Planning Division, Chukyo TV to provide an online seminar on breast cancer.

Dispatching Female Employees to External Career Training Programs

We dispatch 10 to 20 female employees to external career training programs every year. Such programs include those to motivate female employees who aim at managerial careers and improve their management skills, and programs designed for prospective general managers to impart business management skills and establish a human network outside the company. Exchanges with other business women in similar positions from different companies give employees an opportunity to meet women who can become a role model and raise their career awareness.

Participant's Comments

Learning Business Management and Leadership with women in management positions in Different Industries

I participated in the "Inspired Women" Support Seminars hosted by Nippon Keidanren. I learned a lot over the three days of the seminars that were held online. Some of my realizations include: "There are various types of leaders and the leader has to be flexible according to the situation (as the same kind of leadership may not fit for everything)"; "Define what kind of leader you wish to be, identify the skills required to be such a leader, and clarify the actions to take to develop those skills"; and "You do not need to do everything. You can cover your shortcomings with other people who are good at it." It was shame that I could not exchange opinions with other participants for later communications as the course was online, however, it was encouraging to learn that women of my age face similar problems, regardless of their jobs. A variety of experience-based advice from women who are working as leaders in the seminars made me think that I would like to take up more challenges in the future to achieve productive results. I really appreciate the opportunity to attend such interesting seminars.



FUNAKI Setsuko
Strategy Planning Staff,
Process Technology Laboratory,
R&D Center

* Each affiliation is from the time when the article was created.

Training and lectures for diversity promotion

Fiscal 2020 Results (Cumulative total number of participants: 1,097)

Theme	Lecturer	Target audience
Working together with visually disabled people	Expert outside the company, employees	employees
Learning about prosthetic legs and feet	Employees	employees
Learning about being color blind	Expert outside the company, employees	employees
Event to encourage men to participate in child rearing Child rearing seminar for Dads - Do not give up career, children, nor good marital relations -	Expert outside the company	employees

Seminar on balancing job and family nursing	Expert outside the company	employees
Seminar on women's careers and health "Do you really know to detect breast cancer at an early stage?"	Expert outside the company	employees (including men)
Training program on sexual minority harassment	Expert outside the company	HR member Line managers
Organization management respecting diversity for line managers	Internal lecturer	Management staff (line managers or higher positions)
SAP learning program	Internal lecturer	Sales assistant, delivery staff, contract workers
Training program on work style reform for career-track technical employees (jointly with Sumitomo Chemical Co., Ltd.)	Expert outside the company	Production technology employees
Training program on work style reform for sales women in different business divisions (jointly with Mitsubishi Chemical Corporation)	Expert outside the company	Sales women in business divisions
Seminar "Eliminating the worries of teleworking"	Expert outside the company	Employees with Disabilities and their superiors
Development of Various Capabilities (Computer skills, languages, others)	Expert outside the company	Employees with Disabilities

Human Resources Management

Management System	Talent Management	Diversity
Compensation & Benefit	Talent acquisition	Talent and Organization Development
Employee-friendly Working Environment and Labor Productivity	HRIS and People Analytics	

Compensation & Benefit

We believe that compensation in line with proper appraisal is an important system that improves employee motivation, acquires and develops talented human resources, and is closely related to the Group's development.

Setting Goals and Appraising Performance

At all employee levels, Mitsui Chemicals has systemized annual interviews and meetings to set goals with superiors. Setting job goals is organized as a scheme in which individuals attaining their job goals leads to achievement of group-wide targets. The policy at each worksite and the priority issues used to set the job goals for each individual are decided according to our business plan, which is in turn based on our Group's vision. In addition to setting job goals, we have started to assess the actions taken (global core competency assessment) to help spread and instill our Group Action Guidelines by examining whether the actions of each employee comply with the Guidelines and assessing individual's actions based on concrete evidence.

In goal-setting interviews, we set not only performance targets for a single fiscal year but at the same time conduct a "capability/career development interview" to confirm the business tasks the employee would like to experience as well the skills they would like to acquire in the short term (within three years) and long term. Employees are thus able to use their own initiative in setting their own career paths. In addition, the superior reviews the career perspectives, strengths and weaknesses as well as the future goals of their workers and obtain their support.

Mitsui Chemicals has been using its Talent Management System (Success Factors) to manage activities from setting goals to evaluating performance, and this has improved the accuracy and efficiency of HR management. Employee's performance achievements are updated on the system either by the employees themselves or by the superiors to enable effective management of the employee's goals. In addition, the employee and their superior are able to use the system to review the employee's performance history, which enables consistent development of the employee's talents.

Evaluation Feedback

Mitsui Chemicals has introduced an annual interview with their superior for employees at all levels to give feedback on their performance assessment. The interview is designed not only to discuss the assessment results but also to share areas in which the employee can make improvements and the superior's expectations from the perspective of the employee development. Moreover, the Mitsui Chemicals Labor Union conducts a survey on the rate of these feedback meetings 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.

The conducting rate of feedback meetings and Degree of Satisfaction(Mitsui Chemicals Labor Union Registered Members)

	FY2017	FY2018	FY2019	FY2020
The conducting rate of feedback meetings in the Previous Fiscal Year	98%	98%	94%	94%
Degree of Satisfaction over Evaluation Feedback	90%	86%	91%	89%

Complying with the Legal Wage and Establishing Compensation Levels that are Both Attractive and Competitive

In step with the globalization of its business operations, the Mitsui Chemicals Group has organized its standards and schemes for employee compensation not only in accordance with the laws and regulations of each country and region but also at levels that are both attractive and competitive in each labor market. The fundamental approach to defining compensation standards is to set the levels in accordance with Mitsui Chemicals' business position vis-à-vis its competitors in human resources recruitment. We regularly review wage levels based on statistical data on wages from administrative organizations and compensation databases offered by external research firms.

Global Evaluation Guidelines

Global evaluation guidelines were formulated in May 2016 to organize the Mitsui Chemicals Group's evaluation mechanisms, approaches, and design, and have been distributed to all Group companies. These guidelines consist of two concepts: (1) management by objectives (MBO), (2) global core competencies. These guidelines are enabling the HR sections of four regional headquarters (the Americas, Europe, Asia-Pacific and China) to support the development, revision, and operation of evaluation systems for companies in their respective regions.

Specifically, global core competences are used as a shared index within the Mitsui Chemicals Group's Key Talent Management system, and they are used as the basis for the 360-Degree feedback and assessments provided in tandem with [the leadership development program](#).

Improving assessment and training has become an urgent issue in finding and utilizing talented group-wide human resources in the years ahead. We are strengthening our cooperation with Group companies in applying shared Group evaluation indices broadly and fairly.

Position Management

A global policy on "position management" was implemented in fiscal 2020 to build the foundations for appropriate job placements across the entire Mitsui Chemicals Group.

In 2004 we introduced a job evaluation system to establish a job description format for our management staff and to provide compensation in accordance with the importance of each position. At present, there are approximately 18,000 job positions in the Group, of which roughly 40% are overseas-based positions. As the Group grows in global scale, to ensure organizational and job

designs across the entire Group that are appropriate and in agreement with our Long-Term Business Plan and its basic principles and systems, decision-making authority and processes have been established explicitly for the creation of new positions and the elimination of obsolete positions within the Group. This policy has allowed us to introduce global job grades. We are currently working to ensure visibility and transparency for job positions within the Group based on standardized job evaluation criteria. By accelerating the appropriate placement of human resources throughout the Group and creating a transnational job relocation mechanism, we are encouraging growth in employee opportunities for self-reliant career development and improvements in employee engagement.

Example of Activity: Global position management in action

With the accelerating global expansion of Mitsui Chemicals, employees will get more and more opportunities to move within the organization and to take on new responsibilities in different countries. In 2013, I was recruited by Mitsui Chemicals at its first overseas R&D site in Singapore, and I was in charge of some of the customer oriented R&D activities, as well as some of the technical assistance to our local affiliates. During these five rewarding years, I worked in a stimulating environment consisting of co-workers from many different cultural backgrounds and it has proven to be the most invaluable experience in my life. In 2018, I joined a team of world-leading researchers on the vision care materials to create new products and services for our customers. I am now glad in having great careers in Japan. That said, I could always count on the advices from my managers, and the support from HR Division to tackle any difficulties of this move. I am confident global mobility will follow suit together with the global presence of the Mitsui Chemicals Group.



Optical Function Design
Department, Synthetic
Chemicals Laboratory, R&D
Center
Nigel Ribeiro

* Each affiliation is from the time when the article was created.

Policy on Executive Appointments, Dismissal and Compensation at Subsidiaries and Affiliates

The Mitsui Chemicals Group is planning to implement a new global policy on executive human resources governance for Group companies in fiscal 2021. It sets out explicitly the decision-making processes on (a) executive appointments and dismissals, (b) policy on compensation criteria and structure and (c) executive compensation for more than 120 consolidated subsidiaries and affiliates of the Mitsui Chemicals Group in Japan and other countries. In the face of changes in the Group's business portfolio and our rapidly growing overseas business activities, acquisition, development and retention of human resources in business management and in specialized fields showing great potential for leadership in our various business operations and regions have become one of its top priority issues. With the application of a group-wide policy, we aim to introduce greater transparency in the appointment and dismissal procedures for executives and to determine compensation levels that are appropriate and synchronized with the business performance of the entire Group. From now on, we will implement consolidated executive compensation management across the entire Group based on this policy.

Human Resources Management

Management System	Talent Management	Diversity
Compensation & Benefit	Talent acquisition	Talent and Organization Development
Employee-friendly Working Environment and Labor Productivity	HRIS and People Analytics	

Talent acquisition

Basic Policy on Recruitment

The basic policy is to engage in fair recruitment activities free from discrimination based on gender, race, nationality, age, religion, disability, etc. In the actual screening process, we have removed items not related to job competency, and employees responsible for screening candidates receive training to ensure fair screening. We believe that acquiring talent that offers diversity in values, backgrounds and skills will lead to new innovation and sustainable growth of the Group within society.

Initiatives and Results

Recruitment data (Mitsui Chemicals, Inc.)

	FY2018	FY2019	FY2020
Total regular recruitment	265	245	195
Career-track administrative positions (number of women)	106 (23)	105 (27)	82 (17)
General positions (number of women)	159 (8)	140 (16)	113 (8)
Total midcareer recruitment	101	66	68
Career-track administrative positions (number of women)	88 (12)	39 (7)	37 (5)
General positions (number of women)	13 (2)	27 (11)	31 (11)

Concrete Measures to Ensure Fairness in Recruitment Activities

For greater fairness and equity in recruitment and to promote diversity, we have implemented the following actions starting in 2021.

Future recruitment activities will be based on fairness and impartiality to assist in creating a work environment that encourages active participation of diverse human resources.

1. Students engaged in job hunting can choose not to answer gender questions in line with diversity requirements.
2. They are no longer required to submit photo IDs, except for certain job types, to strengthen our efforts to recruit talented and motivated people regardless of gender or appearance.
3. They are not required to conform with recruitment-oriented dress code at interviews to eliminate gender-based discrimination based on clothing.

Training Programs for Career Development

We offer training programs for university students in their first and second years designed to cultivate career awareness and an understanding of work. Students are invited to business offices to participate in workshops offering hands-on experience in business activities and to take part in exchanges with employees, offering opportunities to gain an understanding of what self-fulfillment at work means and to show them a wide range of options for their future careers. We believe that promoting a greater understanding of what it means to work in the Group will lead to greater opportunities to acquire talent in the future.

	FY2018	FY2019	FY2020
Number of participants	22	40	33

Recruitment Marketing with LinkedIn

We are conducting recruitment marketing on LinkedIn to promote greater global recognition of the Group and to recruit from a wide range of human resources. We continuously publish news releases on the Mitsui Chemicals Group and profiles of our employees and products. As of June 2021, we have gained more than 20,000 followers. In addition, job offerings have been published in Asia, Europe and other regions, resulting in the recruitment of 24 employees in 2019. We plan to reinforce our global recruitment by coordinated action through the entire Group.

Human Resources Management

Management System	Talent Management	Diversity
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Employee-friendly Working Environment and Labor Productivity	HRIS and People Analytics	

Talent and Organization Development

Based on the Human Resources Management Policy of the Mitsui Chemicals Group, the Group is, from a long-term perspective, developing human resources who are able to work on the world stage. Human resources are regarded as the key to creating corporate value, in line with the Group's basic approach to encouraging its employees to develop self-reliant, independent thinking and collaboration. We are communicating daily with colleagues and markets around the world to develop talent capable of creating the values that will be required by society in the future.

Management Personnel Development (global Group-wide action)

Executive Coaching

This coaching program based on strategic dialogue is targeted at people who make management decisions, and is designed to create positive change in management activities over a span of roughly 10 months (12 hours of coaching per person). Before starting the program, specific tools are used to make the impact that the participant is unconsciously having on the organization more visible, how managers and members feel about their current conditions and the ideals that they aspire to. The theme for the program is decided based on the organizational issues and leadership issues that have been identified. A professional coach accompanies the participants in executing a hands-on strategy.

Global Leadership Program

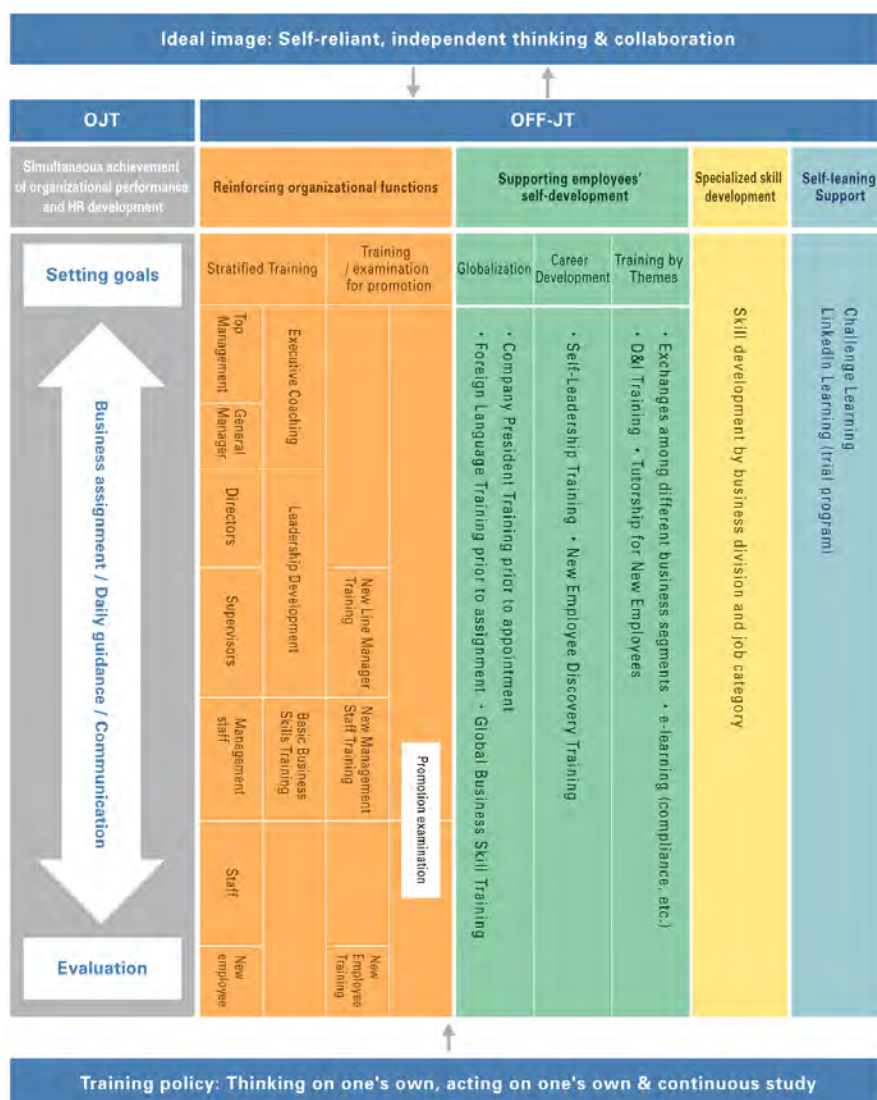
To train future management candidates who are expected to be active in the Group on a global scale, the program is aimed at the acquisition of management literacy and development of a global network. Top management candidates are selected from the Group's business sites around the world to undergo the Group's own unique training program, including strategic thinking, global leadership skills and action learning in cooperation with the Mannheim Business School and the Hitotsubashi Business School, the top business schools in Germany and Japan. In fiscal 2021, more effective training opportunities are likely to be provided, to enable candidates to respond under any conditions, triggered by the COVID-19 pandemic, and to build a training model that combines training content with a remote program under Mitsui Chemicals Long-term Business Plan VISION 2030.

Name of Training Program	Number of Attendees FY2020	Cumulative Total
Executive Coaching (For General Managers and higher positions of Mitsui Chemicals Group)	7 Males: 7 Females: 0	53 (From FY2011)
Global Leadership Program (For future management candidates of Mitsui Chemicals Group)	— * Every two years. Not held in FY2020	80 (From FY2012)

Programs in Line with Stages in Development Based on a Leadership Pipeline Concept (Japan)

To support Group-wide/business strategies, we are organizing training programs that focus on leadership development. The training program is based on the skills and job function awareness required in the exercise of leadership at various organizational levels. Minimizing knowledge-cramming-style training, we expect our employees themselves to repeat cycles of experience and introspection, while acting proactively to meet their higher-level job requirements, and will support them in changing their behavior in ways that will produce results.

Training system (Japan)



Leadership Development Program

Allowing talented human resources to demonstrate their abilities—despite time constraints caused by life-changing events, such as childcare and family care, and regardless of differences in nationality, ethnicity, and religion—requires improvements in line managers' management capabilities. Mitsui Chemicals focuses on developing leadership skills to lead the organization toward an even better direction by incorporating coaching methods into training programs for each level of line manager training and by encouraging core leaders in each division to take specific and innovative action in their daily business activities. With the various training programs conducted online in fiscal 2020, participation grew among employees with time restrictions due to childcare, family care and other life events or constrained by business site location, creating a training system that places emphasis on diversity.

Number of Leadership Development Program Participants (Mitsui Chemicals, Inc. registered employees)

Name of Training Program	Number of Attendees FY2020	Cumulative Total
Leadership Development Program (For Directors and Managers)	17 Males: 16 Females: 1	283 (From FY2013)
Leadership Development Program (For Supervisors)	84 Males: 82 Females: 2	342 (From FY2016)

Key Achievements of Stratified Training (Mitsui Chemicals, Inc. registered employees in FY2020)

New Employee Training (Online and on site program)	
Contents	Corporate Mission, core values, business strategy, ESG promotion, social contribution, IR training, self-leadership, team building, compliance, diversity, safety/quality, HR system/ functions of each business divisions and departments, basic business skills, business manners & literacy
No. of Trainees	79 (Males: 60, Females: 19)
Total Training Hours	10,210 hrs.
Basic Business Skills Training Programs (Online)	
Contents	Trainees aim to develop the qualities required to become a manager. This is an optional program and its timing is based on the needs of individual staff and the workplace. Self-Leadership—the 7 Habits of Highly Effective People, Logical Thinking 1 & 2, project management, interpersonal skills, accounting and business management skills “Apples & Oranges” (cancelled in fiscal 2020 and planned to be online program in fiscal 2021)
No. of Trainees	177 (Males: 139, Females: 38)
Total Training Hours	8,172hrs
Training for Newly-promoted Management Staff (Online)	
Contents	Message from the Management, Understanding each role, Strength finder (Leadership development utilizing strength)

No. of Trainees	123 (Males: 110, Females: 13)
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Total Training Hours	15,129hrs
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New Line Manager Training Program (Online)

Contents	① Understanding each role, labor management, mental health management, compliance, and diversity (understanding of diversity—such as LGBT; harassment; and women’s empowerment) , ② Skills to develop subordinates, ③ Assessment skills
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No. of Trainees	① 127 (Males: 113, Females: 14), ② 119 (Males: 106, Females: 13), ③ 299 (Including non-new line manager. Males: 276, Females: 23)
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Total Training Hours	119,691 hrs. in total of ①-③
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Global Business Skill Training (Online)

Contents	① Common program: Understanding cultural differences and putting the knowledge into practice, communication skills, ② Meeting/Presentation.
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No. of Trainees	① 27(Males: 22, Females: 5), ② Meeting 26 (Males: 26, Females: 5), ③ Presentation 15 (Males: 12, Females: 3)
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Total Training Hours	① 1,118hrs., ② Meeting 676 hrs., ③ Presentation 225 hrs.
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Regional Training

Global Manager Seminar

This program provides knowledge of Mitsui Chemicals business strategy, cultural understanding, and leadership skills, in order to develop local leaders from different Group companies. Manager candidates from major sites around the world work together through discussions. In fiscal 2021, we are planning to provide more effective training opportunities by establishing training models which utilize remote programs together with normal discussion. We will arrange this seminar program responding to “new working styles” which were triggered by the COVID-19 pandemic.

Mitsui Chemicals Competency Development Program

This is a program for future generation leaders to help them understand their roles as leaders and acquire the necessary knowledge and skills. Selected candidates from young employees from the Asia-Pacific and other regions work through this 5-day program, including business simulations.

Global Employee Engagement Survey

To raise the level of our Group employee engagement, we conducted the first global employee engagement survey for all group employees in June 2018. This survey is conducted regularly every two to three years. The second global employee engagement survey is scheduled for fiscal 2021.

The survey is designed to determine the improvement in engagement factor scores in the previous survey conducted in fiscal 2018 and to establish long-term KPIs that are decided based on the corporate culture required to achieve the goals of VISION 2030,

ultimately leading to improvements in the engagement level for the entire Group.

The survey results are being used to improve engagement for the entire Group. To improve learning and self-development, topics that had been identified as one of the three problem areas in the previous survey, an online LinkedIn learning program was introduced on a trial basis for roughly 1000 global group employees from August 2020. Survey results are being used by headquarters and the separate business divisions and companies to identify issues specific to each organization. After establishing priority issues, a range of post-survey actions have been implemented. The implementation rate for these actions has been 96%.

Engagement Factor Score (FY2018 Results)

Mitsui Chemicals Group top factors = **3** areas in which we are strong



Mitsui Chemicals Group bottom factors = **3** areas in which we face challenges



Training style in the age of the New Normal

The Mitsui Chemicals Group places priority on reducing the risk of COVID-19 infection, the health and safety of its employees, their families, business partners and other affiliated parties and to this end has introduced a telework scheme and staggered working hours. In view of these changes, a study has been conducted on moving training to online programs. In the training program for main career path employees at all Mitsui Chemicals business sites, preliminary orientation in online training programs for first-time participants was introduced in fiscal 2020 to facilitate the transition process.

Our Stance on Online Training

- We divide our training programs into four types: self-contained programs, mutual engagement, teaching, and learning. Depending on the desired training outcome, the programs will be taken online, via a mix of online and face-to-face training, via face-to-face training, or postponed during the COVID-19 pandemic.
- When it is decided to move a training program online, we redesign it taking advantage of the characteristics of appropriate tools: knowledge input will be achieved through prior individual study; those that require mutual engagement through dialogue will be offered via online sessions; and e-learning will be used for iterative learning after the completion of the training.

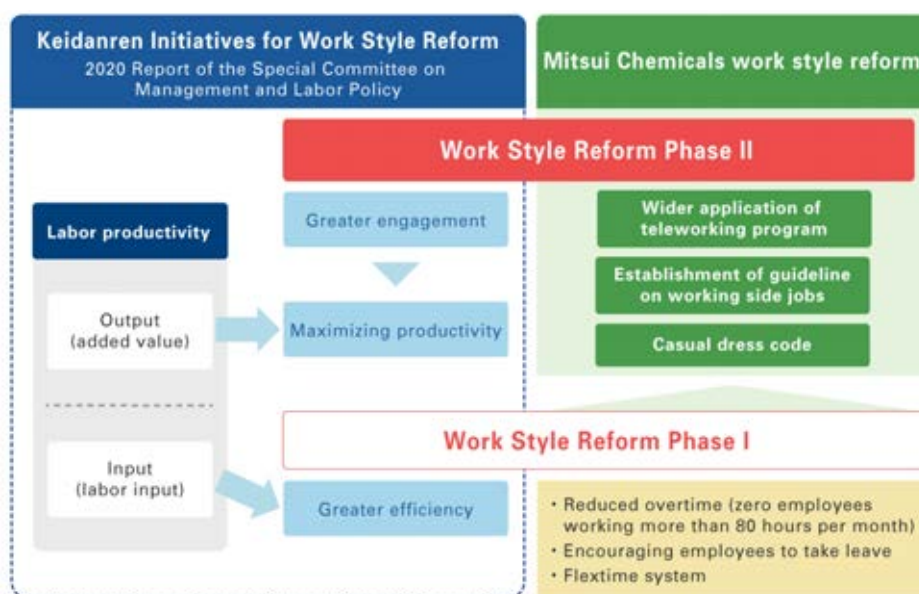
Management System	Talent Management	Diversity
Compensation & Benefit	Talent acquisition	Talent and Organization Development
Employee-friendly Working Environment and Labor Productivity	HRIS and People Analytics	

Employee-friendly Working Environment and Labor Productivity

In addition to pursuing sustainable growth for the Mitsui Chemicals Group and the happiness and self-fulfillment of our employees, we are working to develop better, more motivating working environments that will lead to greater labor productivity.

Work Style Reform

To date, Mitsui Chemicals has made steady progress in Work Style Reform Phase I, including improving the work scheme to reduce overtime work and develop a more efficient work style, with the emphasis chiefly on improving efficiency in labor input. In the age of VUCA, however, changes in society are rapid, and the future is difficult to foresee. In the face of these developments, we are directing our energies into Work Style Reform Phase II, which involves taking immediate action to improve engagement and maximize productivity while continuing to be oriented to diverse work styles, based on an understanding that initiative and independence for each employee and working together as one organization will become increasingly important in the years ahead.



Teleworking Program

Mitsui Chemicals introduced a teleworking program in April 2019. However the number of days allowed was limited to two days a week, with very few employees using the program. Since the outbreak of COVID-19, however, the limit on the number of days of teleworking has been temporarily abolished as an emergency measure, which prompted rapid growth in the number of employees using the program. This also resulted in broader application of IT tools and improvements in IT literacy, establishing a recognition that work can be done effectively under our teleworking program. In view of these developments, the rules for the teleworking program were revised as of July 1, 2021, dramatically expanding the number of days allowed for teleworking, provided that employees report to their respective work sites at least four days a month. In response to the resulting increased freedom to combine working at work sites with teleworking, we anticipate that employees and organizations will take a more independent view of their work styles and improve productivity.

Establishing Guidelines on Working Side Jobs

Guidelines on Working Side Jobs were established in January 2021 to create a system in which employees are able to work side jobs provided they report to or obtain the approval of the Company. In the period of six months until the end of June 2021, roughly 20 employees have side jobs while working full-time at Mitsui Chemicals. These employees work in jobs in which they can use their respective expertise in consulting and technical guidance (experience, knowledge and qualifications) to teach at educational institutions and work as translators. They have expanded their horizons by gaining experience outside the Company and are actively utilizing the experience and knowledge gained through such occupations in their duties with the Company.

Effects anticipated from side jobs

Experience outside the Company

Broader view and knowledge

Contribution to duties with the Company

Casual dress code

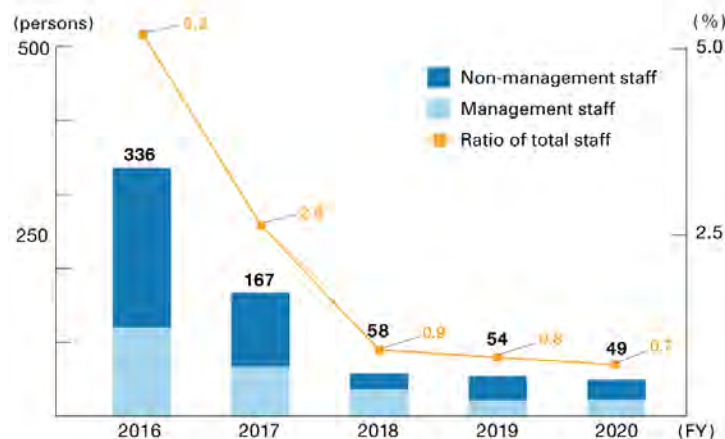
In August 2020, the guidelines on the dress code for employees at head office and branch offices has been revised to clarify the rules on dress that is acceptable while working, whether in workplaces or under the teleworking program, and to scrap and replace gender-based bans with rules common to both genders in line with diversity. The revision allows employees to make their own decisions on the appropriate apparel, provided that they remain aware of the need for safety, workability and cleanliness and that their dress is always appropriate to the occasion and corresponds with social practices, especially when meeting clients and outside business partners. By increasing the options available to employees, we anticipate greater tolerance for change and development of a corporate culture founded on self-reliance and independent thinking.



Reducing Overtime

The Mitsui Chemicals Group is striving to ensure that the total number of overtime hours and hours worked on designated holidays for each employee is less than 80 hours for each month. Recently, the results of these efforts have significantly reduced the number of employees with overtime.

Number of Employees whose Overtime Hours Exceeded 80 Hours/Month
(Mitsui Chemicals, Inc. registered employees)



Reviewing Tasks and Strengthening Human Resources

In general, chemical plants operate continuously for long periods of time, but when it is necessary to carry out periodic maintenance, the entire plant is shut down for a specific limited period to allow repairs and inspections to both minimize the effect on production and ensure that the equipment is safe. To avoid work being concentrated in specific periods due to periodic maintenance, we have been working to review tasks and strengthen human resources.

Visualizing Overtime and Hours Worked on Designated Holidays

To visualize overtime and hours worked on designated holidays, the line managers share the monthly records of overtime and hours worked on designated holidays for each division and each employee. Each line manager is working to establish a comfortable working environment by comparing overtime and hours worked on designated holidays of other divisions and their own division, and by confirming work is not concentrated on a specific employee. When an employee is found to have worked more than 80 hours of overtime each month, the HR Division conducts an interview with the workplace manager, and reviews and implements specific measures to identify the cause of the overtime and make improvements for the individual employee.

Skill Development Training Aimed at Reducing Overtime

We have provided skill development training aimed at reducing overtime. Non-management staff are provided with time management training, in which they acquire specific approaches to reviewing working habits, scheduling and handling e-mail. Management staff are provided with organizational management workshop training, in which they learn specific approaches to efficiently managing their organization.



Time Management Training

Work-Life Balance Measures

Mitsui Chemicals has put in place various systems that exceed statutory requirements in response to employees' circumstances outside of work, including child and family care.

We have introduced systems to support greater flexibility in work styles, including teleworking and the flextime system, and modified our leave system to enable employees to make use of expired annual (special) leave not only for hospitalization but also for medical treatment to support employees' work-life balance.

We reformed the leave system so that unused annual (or special) leave that has already expired can be used as leave for hospitalization or visiting a doctor, thereby offering better support for our employees' work-life balance. Please refer [here](#) for the benefit programs and measures.

Principal Employee Benefit Programs and Measures (Mitsui Chemicals, Inc.)

Annual paid leave	Twenty days per year in units of 0.5 days, starting from the second year of employment.
Refreshment leave	Two consecutive days paid leave per year.
Special leave	Paid leave taken from any unused annual paid leave (up to 60 days), granted when the employee is unable to work for more than three days due to illness or injury, family care, childcare or social contribution activities. It may be granted in units of 0.5 days for disease treatment or infertility treatment.
Flextime system	No core working hours. Hours worked are counted not in terms of days but over the whole month.
Teleworking	Allowed for childcare and family care provided that the employee attends the workplace for at least four days per month.
Ban on side jobs lifted	To enable employees to take side jobs with the approval of the Company, rules on side jobs and how such work is approved have been reviewed.
Community service leave	Two days paid leave per year.
Leave of absence to accompany spouse's overseas assignment	Leave of absence for up to three years.
Childcare leave	Leave of absence for up to four years, paid for the first five days. Male employees are encouraged to take childcare leave.

Short working hours (childcare leave)	Up to three hours per day to care for a child in sixth grade or younger.
Company childcare center	Established in 2009 near the Ichihara Works & Sodegaura Center.
Family medical leave	Up to 20 days paid leave per year for medical care, etc. of a family member.
Family care leave	Up to one year for each family member who requires nursing care or support.
Paid family care leave	Up to 20 days paid leave per year for nursing care of a family member who requires nursing care or support.
Short working hours (family care leave)	Up to three hours per day for nursing care of a family member. Up to one year for the same reason.

Childcare Leave Usage Rate (Mitsui Chemicals, Inc. registered employees)



Please refer [here](#) for details of the usage status of other systems.

Program That Supports Employees Returning to Work after Taking Childcare Leave

Mitsui Chemicals has introduced a program that supports employees returning to work. The principal goal is to create an environment that allows employees bringing up young children to return to work smoothly after giving birth to their child or taking childcare leave and to help maintain a high degree 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, the employee and their manager engage in a one-on-one interview to discuss the handover of duties, contact while they are on leave, necessary procedures, and other important issues. Meetings between employees and their managers are also conducted while they are on leave to share details of work styles that will ensure the work environment will accept the employee and details of their duties when they return to work and to ensure mutual understanding. After returning to work, the Company provides an explanation of the procedures and support available from its various programs for employees.

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 of Employees from Childcare Leave

(Mitsui Chemicals, Inc. registered employees)

	FY2017	FY2018	FY2019	FY2020
Males	97%	99%	100%	100%
Females	100%	100%	100%	100%
Total	98%	99%	100%	100%

Employee Retention Rate Three Years after Childcare Leave

(Mitsui Chemicals, Inc. registered employees)

	FY2017	FY2018	FY2019	FY2020
Males	91%	94%	83%	99%
Females	96%	93%	93%	94%
Total	92%	94%	86%	98%

Job Evaluations for Persons Taking Childcare/Family Care Leave

Mitsui Chemicals has a program designed to prevent childcare or family care leave from affecting promotion or assessments for payments, bonus payments, etc.

Under the company's employee evaluation system, the ceiling for job evaluations for the fiscal year is determined by the work attendance rate. However, an evaluation ceiling is not set for persons on childcare or family care leave as long as they meet a specified attendance rate for the evaluation period. Their job performance while at work is evaluated fairly, and if their attendance rate is lower than certain standard, they are exempted from the job evaluation (no rating), so as not to affect their job evaluation or promotion.

Greater Participation by Men in Childcare

Mitsui Chemicals promotes greater participation by men in childcare. We encourage male employees to take childcare leave, with the first five days of leave with pay. In addition to childcare leave, we offer other programs that can be used with childcare, such as paid annual leave, the flextime system, shorter working hours and paid leave for nursing care. Male employees are encouraged to be actively involved in child care by combining these programs.

In fiscal 2020, we invited Mr. Manabu Tsukagoshi, director of the NPO Fathering Japan, to speak at an online seminar titled "Want to See and Hear: Childcare Seminar for Fathers." The guest speaker presented ways in which men can be involved in child care and household chores with data and case studies. Additionally, a guidebook offering information on our childcare



programs and practical examples of how to use them has been produced in response to requests from male employees who wished to get concrete examples of how fathers can handle both childcare and work and information on our programs supporting work-life balance. The guidebook has been designed to draw the interest of a wide range of employees and features messages from top management and interviews with male employees who are actively involved in childcare and with managerial employees whose subordinates are actively involved in childcare, as well as conversation between the seminar speaker and the human resources development manager and results of the employee questionnaire.

Improving the Acquisition of Paid Leave

In the drive to work style reform, Mitsui Chemicals is working to raise the rate of annual paid leave (20 days). We are taking the following actions to improve the acquisition of paid leave, to support the physical and mental health of employees.

Measures to Promote Work Style Reforms

- Recommendations for the planned acquisition of extended leave and continuous leave
- Designation of workdays that fall between holidays as days to support the acquisition of paid leave
- Tabulation of paid leave acquisition rates by worksite and report and guidance based on the findings
- Review of the concentration of workloads on specific employees
- Schedule sharing within the worksite

Paid Leave Usage Rate

(Mitsui Chemicals, Inc. registered employees)

	FY2017	FY2018	FY2019	FY2020
Non-management staff	79%	83%	86%	77%
Management staff	56%	62%	70%	60%
Total	69%	74%	79%	70%

Response to COVID-19

In the face of the explosive spread of COVID-19, the limit on the number of teleworking days allowed was temporarily abolished at the end of February 2020. Subsequently, the teleworking program has continued to be popularized throughout the Group, alongside efforts to improve the teleworking environment.

During state of emergency period

- Teleworking program implemented as the basic work scheme for all business sites
- No domestic or overseas business travel
- Development and dissemination of infectious diseases countermeasures at the Works
- Cancellation of all internal and external social gatherings and receptions organized for business purposes

Lifting of the state of emergency

- Teleworking recommended (work scheme adjusted to keep employees working in offices to less than 50%)
- No domestic business travel unless absolutely necessary
- Internal and external social gatherings and parties organized for business purposes to be kept to the minimum

Labor-management Relations Based on Frank Dialog and Mutual Understanding

In the collective labor agreement, we have established "achieving the Corporate Mission" and "the happiness and self-fulfillment of employees" as goals to be shared by both labor and management and are working on developing labor-management relations that are both constructive and stable. 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 2020)

- Revision of human resources system
- Bonus amounts and profit sharing
- Revision of the increase in wages
- Explanation of the management conditions
- Revision of teleworking program

Mitsui Chemicals has adopted a union shop system; all employees that are eligible to join a labor union under the labor-management 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 to all non-management staff without any conditions. According to the labor-management agreement, management staff and other employees at or above the management level are not eligible to join the union.

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.

List of Support Measures in Consideration of Work-Life Balance (Mitsui Chemicals, Inc.)

Holidays and Leave

	Permanent Employees	Contract Employees		
		Re-employment	Indefinite-term contract and part-time	Fixed-term contract and part-time
Five-day workweek (Saturday and Sunday are holidays)	○	○	○	○
Public holidays and New Years Holidays (company holidays)	○	○	○	○
Annual paid leave (20 days/year, start from the second year of employment*)	○	○	○	○
Leave for employees who visit home from an unaccompanied posting*	○		○	○
Marriage leave (eight consecutive days)*	○		○	○
Refreshment leave (two consecutive days off/year)*	○		○	○
Family medical leave (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 considered 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, community service leave)*	○		○	○
Leave of absence to accompany spouse's overseas assignment*	○		○	
Community service leave (paid leave)*	○		○	○

Work Patterns

	Permanent Employees	Contract Employees		
		Re-employment	Indefinite-term contract and part-time	Fixed-term contract and part-time
Short working hours (childcare/family care leave)*	○	○	○	○
Short working hours (medical treatment leave)*	○		○	
Restrictions on overtime (childcare/family care leave)	○	○	○	○

Restrictions on late night work (childcare/family care leave)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Company childcare center*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flextime system (without core time)*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teleworking*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Income

	Permanent Employees	Contract Employees		
		Re- employment	Indefinite-term contract and part-time	Fixed-term contract and part-time
Maternity benefits*	<input type="radio"/>		<input type="radio"/>	
Childbirth benefits*	<input type="radio"/>		<input type="radio"/>	
Childcare leave benefits*	<input type="radio"/>		<input type="radio"/>	
Family care leave benefits*	<input type="radio"/>		<input type="radio"/>	
Subsidies for home-care services*	<input type="radio"/>		<input type="radio"/>	
Subsidies for babysitting services*	<input type="radio"/>		<input type="radio"/>	
Retirement allowance*	<input type="radio"/>		Dealing with each case individually	Dealing with each case individually
Employee stock ownership*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* Measures marked with an asterisk (*) exceed statutory requirements

Human Resources Management

Management System	Talent Management	Diversity
Compensation & Benefit	Talent acquisition	Talent and Organization Development
Employee-friendly Working Environment and Labor Productivity	HRIS and People Analytics	

HRIS and People Analytics

Mitsui Chemicals uses its Human Resources Information System (HRIS) to manage its employees and to place human resources in appropriate jobs globally and maximize labor productivity.

Using People Analytics

The Mitsui Chemicals Group plans to use statistical data analysis methods, including regression analysis, analysis of data from employee engagement surveys, overtime hours worked, competency evaluations, recruitment data and other data on its human resources to strengthen its organizational power and make organizational issues more visible so that they can be used to find solutions. We have used the correlations between labor productivity and overtime hours worked and between competency and performance to deduce cause-and-effect relationships and form and verify hypotheses that will maximize employee productivity. In the area of recruitment, exploratory AI-based data analysis is being used to establish quantitative and objective recruitment decision-making indicators, and eliminate possible human biases that have emerged to refine our recruitment processes. From the standpoint of human capital, we are extracting and analyzing data related to the 11 items and 58 indicators set out in ISO 30414. Productivity is included in the indicators, and internally we are monitoring our EBIT, sales and profit per employee and human capital ROI over time to improve the Group's employee productivity.

Use of the Talent Management System (Success Factors)

The Mitsui Chemicals Group uses Success Factors (talent profiling) from SAP to manage the headcount for the entire global Group-wide. We are collecting data from our consolidated subsidiaries have already collected talent data from more than 90% of our subsidiaries for use in the system. We are using Robotics Process Automation (RPA) to collect basic monthly personnel data from each company to analyze changes in job turnover by business organization, job function and region.

This system gives stakeholders access to this analytic data as and when needed. Even in the event of drastic changes in the external environment, represented by the COVID-19 pandemic in fiscal 2020, we used the tool to assess and analyze the human resources measures being implemented by each company and each region and to monitor their conformity with our group-wide business strategies. The information is then reported to senior management at the Company-wide Key Talent Management Committee.

Introduction of a Group-wide Integrated Human Resources Platform (Workday)

To incorporate these measures in our human resources strategy effectively, the Mitsui Chemicals Group plans to introduce Workday Human Capital Management provided by U.S.-based Workday, Inc., simultaneously at all the business sites of Mitsui Chemicals and its consolidated subsidiaries and affiliates. The platform is scheduled to be implemented by 2023, and system startup has been underway since April 2021. In addition to the talent management system (Success Factors) already in place for the entire global Group-wide, the platform is expected to increase the visibility of the organization (job functions, capabilities, talent, compensation, etc.) and human capital data (expertise/orientation, experience, diversity, etc.) so that the benefits can be used to upgrade our corporate value as shown below.

Advantages of introducing the platform

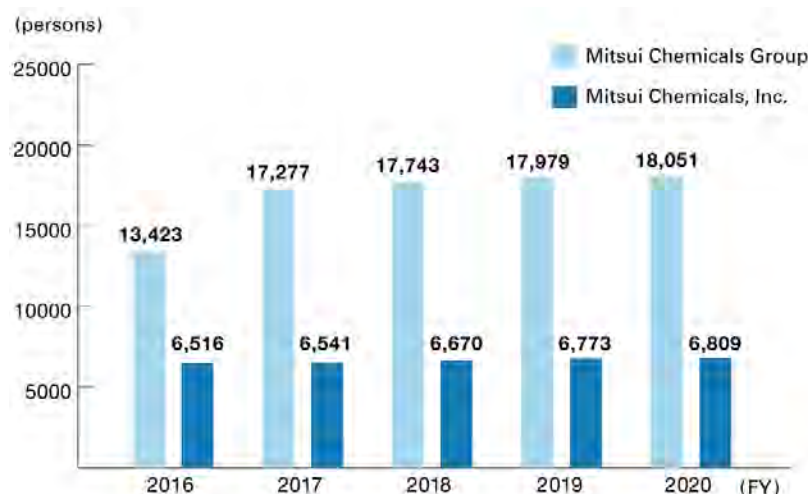
1. As everything will be managed on a single platform, existing disparate talent management processes at Group companies and organizational and HR information within the Group will be organized on the basis of standardized criteria.
2. Leveraging Workday HCM's digital technology, Mitsui Chemicals will be able to provide each and every Group employee with the optimal content for that individual in a timely manner and in an appropriate communication style.
3. Integrated Group-wide management of organizational and HR information will facilitate the formulation of strategic staffing plans with a view to the transformation of the Group's business portfolios and will also bolster efforts to promote the use of people analytics.
4. Mitsui Chemicals will be able to be more proactive in disclosing the information about human capital required by stakeholders from the view point of ESG.

Human Resources Information

The global business that Mitsui Chemicals Group conducts is based on its business strategies, including its Long-term Business Plan. Alongside, we are also monitoring the status of our Group employees.

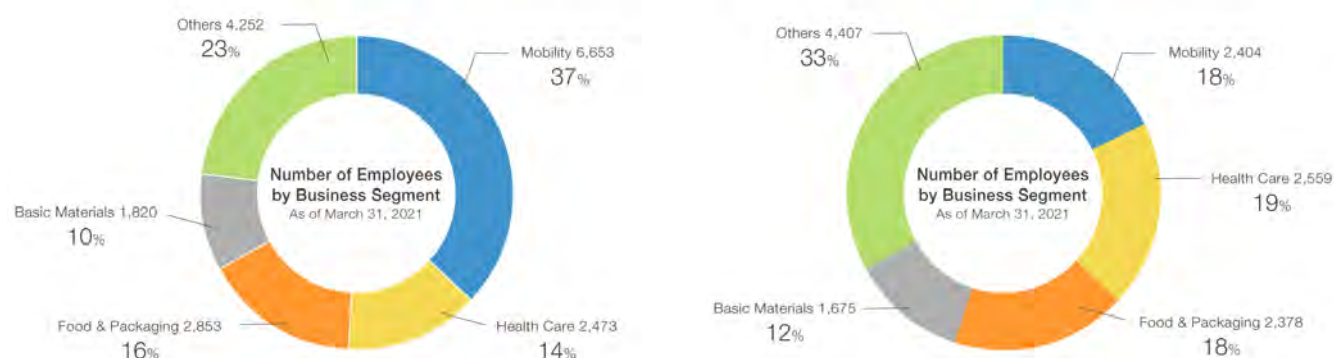
Number of Employees in the Mitsui Chemicals Group

The number of employees in the Mitsui Chemicals Group as of the end of fiscal 2020 was roughly the same as in fiscal 2019. Likewise, there has been little change in the number of employees at Mitsui Chemicals compared with the previous fiscal year.



Number of Employees in the Mitsui Chemicals Group by Business Segment

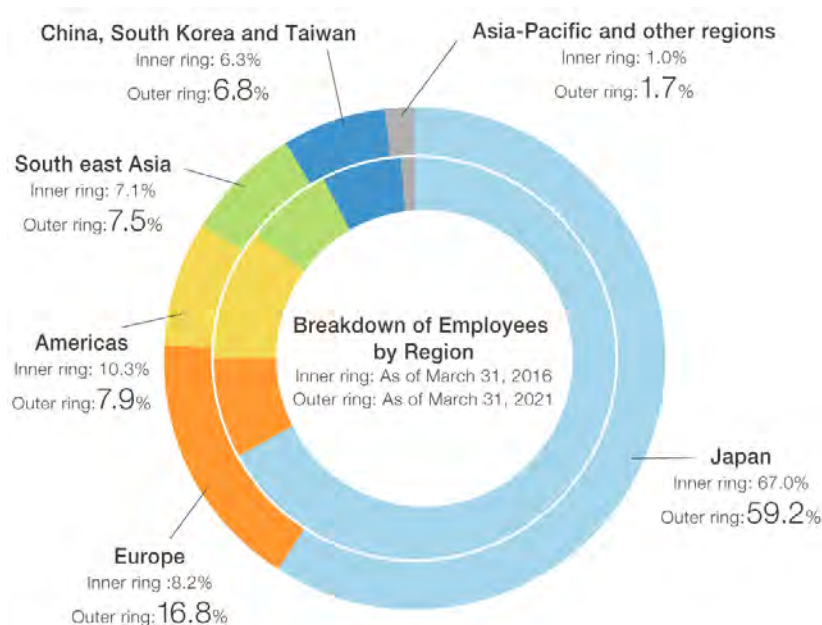
A breakdown of the number of employees by business segment at the end of fiscal 2020 shows that the highest number is in Mobility, with 6,653 employees accounting for 37% of the all the Group's employees. With the acquisition of the ARRK Group, the number of employees increased 2.5-fold compared to the end of fiscal 2016. The number of employees in each business segment, in descending order, is 2,853 in Food & Packaging, 2,473 in Health Care and 1,820 in Basic Materials. The number of employees belonging to other business segments was 4,252 or 23% of the workforce.



Employees of the Mitsui Chemicals Group by Region

A breakdown of the Group's employees by region shows that globalization is growing rapidly, with progress in changes to our business portfolio under VISION 2030, Mitsui Chemicals Long-term Business Plan and development of a solution-based business model. In particular, the number of employees has grown dramatically over the past 10 years in North America and Europe, aimed at developing new markets, reinforcing manufacturing, marketing and research functions and creating new trade flows.

A breakdown of the Group's employees by region at the end of fiscal 2020 showed that Japan accounts for the largest number at 59.2%. The percentage dropped by roughly 8% compared with the end of fiscal 2016. Of the 40.8% of employees located overseas the largest number is in Europe, accounting for 16.8%, mainly in the ARRK Group's engineering company, ARRK Engineering, which is part of Mitsui Chemicals' Mobility business segment, and Kulzer GmbH, part of the Health Care segment.



Social Activities

Management System

Laboratory Classes on the Wonders of Chemistry

Nurturing Future Generations

Environment

Support for Employees' Participation in Social
Activities

Disaster Relief

Working in Harmony with Local Communities

Management System



Policy and Basic Approach

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 develop the future generation and 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.

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

System and Responsible Officers

With the responsible director in charge of the Corporate Communications Division, the Corporate Communications Division develops and implements annual social activity plans. In addition, each business site enacts voluntary and ongoing efforts while coordinating with the Corporate Communications Division.

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.

Management System

Laboratory Classes on the Wonders of Chemistry

Nurturing Future Generations

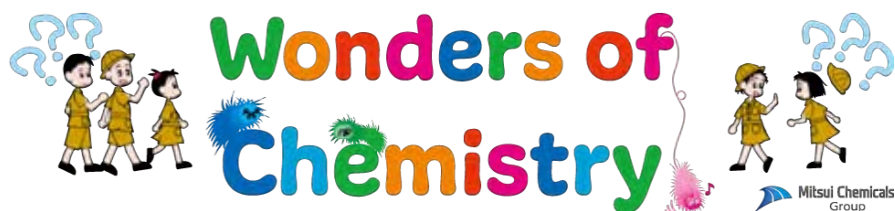
Environment

Support for Employees' Participation in Social Activities

Disaster Relief

Working in Harmony with Local Communities

Laboratory Classes on the Wonders of Chemistry



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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.

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. Relevant business divisions at Head Office are producing manuals on laboratory content and management and providing support for events organized at various Group sites in Japan and other countries. Additionally, leaflets that encourage children who have participated in laboratory experiments to take a more in-depth look at chemicals used at home have been published in response to external expert recommendations and these are being distributed to participants.

The program has also been registered as a group supporting Saturday Educational Activities Program sponsored by the Ministry of Education, Culture, Sports, Science and Technology.

Donation of children's experiment kits

Although we had to refrain from holding our annual experiments and classes both at our sites and elsewhere due to the COVID-19 pandemic, experiment kits have been donated to local schools to offer children the experience of conducting in a new experiment style.



Children's experiment kits being donated

Laboratory Classes on the Wonders of Chemistry Experiments

* Experiment titles are subject to change.

Experiment title	Description
Foamy urethane experiment	<div>Field</div> <div>Chemical reactions</div> <div>Related Group products</div> <div>Isocyanate, Polyol</div> <p>Participants watch urethane, the uses of which include cushion materials, pillows and refrigerator insulation, being foamed and experience reaction heat and differences in hardness</p>
Slime <ul style="list-style-type: none"> - Making your own slime - Making jumbo slime together - Shiny slime - Slime ball 	<div>Field</div> <div>Polymer properties</div> <p>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</p>
Light experiments with polarizing plate	<div>Field</div> <div>Light</div> <p>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</p>
Chromatography art	<div>Field</div> <div>Adsorption and separation</div> <p>Participants learn that the ink in a water-based pen contains a mixture of various different colors (pigments)</p>
Plastic board	<div>Field</div> <div>Polymer properties</div> <p>Participants learn about the properties and separation of plastics, by using the heat shrinkable properties of polystyrene to make their own original accessories</p>
Let's make Cartesian divers!	<div>Field</div> <div>Buoyancy</div> <p>Participants learn about buoyancy and pressure, by making a Cartesian diver from a PET bottle and a plastic soy sauce container</p>
Let's investigate the properties of aqueous solutions using red cabbage	<div>Field</div> <div>Acids and alkalis</div> <p>Using anthocyanin extracted from red cabbage, participants investigate the properties of everyday liquids and learn about acids and alkalis</p>

Let's make an air freshener using spongy polymers	<div>Field</div> Polymer properties <div>Related Group products</div> Nonwoven fabrics <p>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</p>
Let's make a rainbow tower	<div>Field</div> Specific gravity <p>Participants learn about the specific gravity (relative density) of fluids, by pouring colored waters with varying concentrations together to make a tower</p>
Let's make a freezer!	<div>Field</div> Heat of solution <div>Related Group products</div> Urea <p>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</p>
Learn how bubble bath works!	<div>Field</div> Reaction of acid and salt <p>Participants learn about how carbon dioxide is produced, by making bubble bath from baking soda and citric acid</p>
Learn about acid rain!	<div>Field</div> Acids and alkalis, Oxidation / reduction <p>Participants learn about acid rain and what causes it, by measuring the pH using red cabbage extract and conducting a bleaching experiment using iodine</p>
Let's make paper!	<div>Field</div> Recycling / Making paper <div>Related Group products</div> Acrylamide <p>Using everyday implements, participants experience paper recycling from old paper and learn about papermaking and recycling</p>
Let's make small objects from melted plastic!	<div>Field</div> Polymer properties <div>Related Group products</div> General thermoplastics <p>Participants learn about the properties of thermoplastics, which melt when heated, by using a glue gun to melt resin and make small objects</p>
Experience the wonders of shrinking films!	<div>Field</div> Polymer properties <div>Related Group products</div> Films, PET, etc. <p>Participants learn about the principle of heat shrinkage, by using shrinkable film to attach labels and make their own PET bottle</p>
See the power of air!	<div>Field</div> Hydrodynamics <p>Participants learn about air resistance, by observing air rings emitted from an air cannon</p>
Let's make snow on pine cones!	<div>Field</div> Crystals <div>Related Group products</div> Urea <p>Participants learn about crystal deposition, by observing dissolved urea being sprayed onto pinecones and drying</p>
	<div>Field</div> Enzymes <p>Participants learn about the difference between bioluminescence and chemiluminescence</p>

Let's make light like a firefly!	by making light using each of luciferase enzymes taken from fireflies and using mineral-based chemicals
Let's try and absorb oil!	<div>Field</div> Polymer properties <div>Related Group products</div> TAFNEL™ 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
Expand? Shrink? Disappear?! Let's look into the properties of mystery plastics!	<div>Field</div> Polymer properties <div>Related Group products</div> 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

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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 cosponsors the Japanese championship of **FIRST LEGO League* (FLL)**, one of the world's largest robotics competition. Mitsui Chemicals supports FLL's idea of providing children with an opportunity to experience the excitement of solving issues in the real world while applying STEM concepts and active learning.

We participated in the booth exhibition in fiscal 2019. In line with the FLL 2019–2020 theme of City Shaper, Mitsui Chemicals ran a booth exhibiting Toughness coat™, a polyurea resin produced and sold by Mitsui Chemicals Industrial Products Ltd. that helps to extend the life of concrete structures such as tunnels. The booth also served to showcase a power assist suit produced and sold by Power Assist International Corp. that uses Mitsui Chemicals components to achieve light weighting. In addition, Mitsui Chemicals ran activities as part of its **Laboratory Class on the Wonders of Chemistry** program. This included pouring colored water of different densities into test tubes to create colorful layers – an experiment that served as a lesson on the specific gravity of liquids and attracted many children to the booth. By teaching these children about the existence of resins that can improve the lifespan of structures, as well as the fact that liquids with the same volume can have different weights depending on their density, Mitsui Chemicals hopes that the day will have served to pique their interest in science further.

Although the fiscal 2020 competition unfortunately had to be held online due to COVID-19 pandemic and we were unable to run exhibition booths, etc., we continue to sponsor the online competition.

* FIRST LEGO League (FLL):

FLL 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 98 countries around the world, and the number of students participating in FLL is more than 320,000. 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.





Children enjoying a Mitsui Chemicals experiment



Robotics competition

Receiving Internship Trainees

The Mitsui Chemicals Group accepts internship trainees at each of its offices and business affiliates.

Sun Medical Co., Ltd. participates in the All Shiga de Internship program* since fiscal 2018. Held by Shiga Prefecture, this program is designed to help university students living in the prefecture develop a clearer idea about their future career through internships as well as spark the interest of students in local companies. Due to COVID-19 pandemic, from September to October in fiscal 2020 only one trainee was accepted for the online internship from Kyoto Koka Women's University and one from the University of Shiga Prefecture, with the schedule reduced to five days. In the presentation meeting held on the last day, the students gave their reports on how the appeal of Sun Medical can be communicated effectively in the drive to recruit talented students. There were proposals unique to young people, such as the effective use of social media, that inspired new ideas among employees attending and helped them re-examine their own work performances. This program is expected to continue in fiscal 2021.

* All Shiga de Internship program:

A program to support corporations and agricultural organizations in the prefecture to secure human resources by promoting their businesses among candidates and advising on recruitment strategies. This internship program is managed by the Shiga Internship Promotion Council to cultivate a practical viewpoint in students about employment and develop an understanding of local companies through prefectural internships, thereby encouraging students to choose to work in Shiga and matching the needs of students and corporations.

Cooperation in Experiential Study Programs for Teachers

Mitsui Chemicals accepts teachers as participants in Experiential Study Programs. 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.

At the Program, the educators had the opportunity to learn about the Mitsui Chemicals Group's corporate mission, corporate sustainability management, Responsible Care initiatives, and human resources development. They also saw a demonstration of [the Laboratory Class on the Wonders of Chemistry](#). In addition to classroom lectures, they visited the production site and participated in hands-on laboratory training at the Mitsui Chemicals Plant Operation Technology Training Center. The educators 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."

In fiscal 2020, we were not able to hold the programs due to COVID-19 pandemic; however, we will coordinate to restart the program with relevant parties.



An educator training session at the Plant Operation Technology Training Center

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Toward the goal of achieving harmony with the global environment, the Mitsui Chemicals Group engages in a variety of environment communication activities.

Mitsui Chemicals Group Clean-up Caravan

To tackle the problem with plastics, the Mitsui Chemicals Group aims to encourage the recycling of resources and promote a circular economy model by implementing [our plastics strategies](#) and measures to address the marine plastic waste issues. The problem of marine plastic waste owes to plastics that have escaped from the process for recycling resources and ended up in marine environments due to inappropriate waste management. Stopping waste from flowing into rivers and the sea is of utmost importance.

Mitsui Chemicals has undertaken clean-up activities in areas around our sites. In fiscal 2019, we launched a group-wide initiative, the Mitsui Chemicals Group Clean-up Caravan, calling on our affiliates in Japan and overseas to join in these activities. Going beyond the range of activities around our sites, the scope of the activities was broadened to allow for more employee initiatives, now including participation in clean-up activities organized by nonprofit and governmental bodies as well as clean-ups following community events. A total of 4,913 people have participated in the Caravan campaign, collecting 36,344 kg of waste since fiscal 2019.

Mitsui Chemicals Group Clean-up Caravan



Activities at Kugenuma Beach, Kanagawa Prefecture in Head Office



Activities at Pasir Ris Park by six affiliated companies in Singapore



Activities at Bruce Park Woods Road Picnic Area in Mitsui Chemicals America



Activities at Shanghai Beijing Forest Park in Mitsui Chemicals China

Donating NONROT™ Tree Decks to Shiretoko Nature Foundation

Third round of the Protecting Our World Natural Heritage Project.

In the third round of the Mitsui Chemicals Group's Protecting Our World Natural Heritage Project series, Mitsui Chemicals, Inc. and Mitsui Chemicals Industrial Products Ltd.) have donated three tree decks to mark the 40th anniversary of the Shiretoko Nature School, a project organized by [Shiretoko Nature Foundation](#), which is based in Shari, Hokkaido Prefecture.



The World Natural Heritage Site of Shiretoko was the birthplace of Japan's first national trust movement, the Shiretoko 100 Square-Meter Movement Trust. Today, the Shiretoko Nature Foundation works to protect Shiretoko's natural splendor through activities centered on the approach of learning, protecting and educating, including environmental education and awareness activities; wildlife conservation, management and research; and forest development. Since 1980, the Shiretoko Nature School Initiative has been held week-long courses, in which children from across Japan spend a week camping outdoors in Shiretoko National Park. The Shiretoko Nature School aims to ensure that Shiretoko's magnificent natural environment can be passed on to the next generation. Since that first course, more than 1,900 children have spent a week at Shiretoko during summer. To mark the 40th anniversary of the Shiretoko Nature School, Mitsui Chemicals Group donated three tree decks for the Ponhoro Forest, where Nature School courses take place. The tree decks were made between July and October 2019 with the help of children attending the Nature School, as well as by Nature School alumni, members of Shari Town and the Shiretoko Nature Foundation and many others. The decks were treated with NONROT™*, a wood protective coating supplied by Mitsui Chemicals Industrial Products.

* **NONROT™:**

NONROT™ is a highly safe timber coating that makes full use of wood's natural breathability. It offers outstanding water-repellency, UV resistance and protection against rot, fungus and insects. NONROT™ has become the wood protective coating of choice for many architects, designers and their clients, as it allows the wood to breathe, enabling users of products treated with the coating to enjoy the pleasant scent of the timber itself.

Rice Paddy Organism Surveys Providing Opportunities to Learn about Biodiversity

Mitsui Chemicals Agro, Inc. has taken elementary school students on rice paddy organism surveys across two locations in Miyagi Prefecture.

The rice paddy organism survey held for third-grade students from Tsurusu Elementary School in Taiwa-cho has been hosted by JA Asahina (Taiwa-cho, Kurokawa-gun, Miyagi Prefecture) since 2015*. Mitsui Chemicals Agro's Sendai branch office assists community coordinators, teachers and JA ZEN-NOH staff with the survey, which is conducted within the context of Community Cooperation Activities for Learning and Education promoted by the Ministry of Education, Culture, Sports, Science and Technology (MEXT).

In fiscal 2019, the rice paddy organism survey was held for third- and fourth-grade students from Kami-Ayashi Elementary School, Sakunami Elementary School and Okura Elementary School in Sendai, coming at the behest of former Tohoku University Science Coordinator Tomiichiro Ishigaki and with the cooperation of Mitsui Chemicals Agro's Sendai branch office.

* The activities were not held due to COVID-19 pandemic in fiscal 2020.



Tsurusu Elementary School

Date: June 11, 2019

Location: Taiwa-cho, Kurokawa-gun, Miyagi Prefecture

Number of participants: 35



Kami-Ayashi Elementary School, Sakunami Elementary School, Okura Elementary School

Date: June 20, 2019

Location: Sendai, Miyagi Prefecture

Number of participants: 22

Not only involved in sales of agrochemicals, the Mitsui Chemicals Agro surveys the effects of agrochemical use on wildlife in rice paddies, which is useful for the improvement and development of agrochemical products. Further, the Mitsui Chemicals Agro conducts surveys, and we publish results summaries of these 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.

Mitsui Chemicals Agro Takes Schoolchildren on Exploration of Rice Paddy Organisms

Raising awareness of biodiversity conservation in rice cultivation

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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 salaries or bonuses, which is used to fund donations to organizations involved in social activities. The One-Coin Club Management Committee, formed by volunteer members, specifies the priority areas for support, and reviews and selects which organizations donations should be made to.

Priority Areas of Support

- (1) Activities aimed at nurturing future generations/saving lives and protecting the livelihoods of children
- (2) Activities aimed at supporting people with disabilities/contributing to patients with intractable diseases
- (3) Activities that contribute to medical/maintenance disaster response systems
- (4) Activities that protect the global environment

As of October 2020, the Club had 729 members, who between them contributed approximately ¥4.0 million to the fund in fiscal 2020.

In fiscal 2020, we donated a total of ¥6.4 million – ¥3.2 million from the One-Coin Club and a matching gift* of the same amount from the Company – to a total of 16 organizations involved in a range of social activities. The Club also donated ¥500,000 from its fund to support those who suffered from the heavy rains by 2020 Kyushu floods.



* Matching gifts:

A program that supports employees' social contribution activities whereby a company provides a matching donation of the same amount when an employee donates to a social or environmental organization.

Organizations That Benefited from Donations in Fiscal 2020

Organization Name (In random order)	Priority Areas of Support	Past Donation History (Years)
United Nations World Food Programme (Japan)	(1)	2008-2020
Japan Committee, Vaccines for the World's Children	(1)	2008-2020
Nanbyo Network	(1) (2)	2009-2020
Guide Dog & Service Dog & Hearing Dog Association of Japan	(2)	2008-2020
Japan Marrow Donor Registry Promotion Conference	(2)	2008、2010-2020
Helicopter Emergency Medical Network (HEM-Net)	(3)	2010-2020
team RESCUE	(3)	2012-2020
Peace Winds Japan (PWJ)	(1) (3)	2009、2012、2017、2019-2020
MEDECIN SANS FRONTIERES	(3)	2014-2020
Japan Environmental Action Network	(4)	2015-2020
Chance for Children	(1)	2017-2020
Kamonohashi Project	(1)	2015、2018-2020
5years	(2)	2018-2020
Coal Mine Train Preservation Society	(1)	2020
The Association for the Prevention of Child Abuse & Neglect	(1)	2020
WaterAid Japan	(1) (3)	2020

Community Service Leave Program

In August 2008, we introduced a community service 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. Starting in fiscal 2020, half-day leave was introduced, resulting in 41 instances of leave being taken (of which one was half-day leave).

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.

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As part of its social contributions, Mitsui Chemicals Group is actively involved in providing its own technologies and products as aid and relief for natural disasters. We are 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 tarpaulin sheets (to cover buildings damaged by water or landslides), air cushions^{*2} (for use at evacuation shelters), and FASTAID™ Virus Sweeper Towel^{*3} at both of these warehouses.

In fiscal 2020, we offered relief supplies to those areas affected by the 2020 Kyushu floods and 2021 Fukushima earthquake. We also donated ten million yen to the Japanese Red Cross Society to support the people and areas affected by those disasters.

^{*1} Contact partners:

Team Rescue, [Peace Winds Japan](#)

^{*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.

^{*3} FASTAID™ Virus Sweeper Towel:

This concept was created by More Impact, a disaster relief innovation and creation initiative promoted jointly with the specified nonprofit organizations Japan Platform and CWS Japan and others. This disaster relief innovative product utilizes the Lock & Peel™ technology of the Group's affiliate, Dow-Mitsui Polychemicals Co., Ltd., which enables a compressed towel and sodium hypochlorite to be preserved separately in a single package.



Relief supplies at Iwakuni-Ohtake Works



Urethane mattresses carried by an NPO to an evacuation center

Distribution of Disaster Relief Supplies in Fiscal 2020

2020 Kyushu floods

Location	Contact	Details of Relief Supplies Provided
Hitoyoshi Dai-ichi Junior High School, Kumamoto Prefecture	SEMA	- Urethane mattresses 130
Taragi High School, Kuma District, Kumamoto Prefecture	SEMA	- Urethane mattresses 50

2021 Fukushima earthquake (by Mitsui Fine Chemicals, Inc.)

Location	Contact	Details of Relief Supplies Provided
Operation Blessing Japan	Japan Platform	FASTAID™ Virus Sweeper Towel 720

Establishment of SEMA, Japan's First Private-led Disaster Response Alliance

Alongside 17 other private companies and six non-profit organizations 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 (62 companies and 6 civil groups, as of September 1st, 2021)

Assistance through business operations linked to COVID-19

The Mitsui Chemicals Group is contributing to curbing the global COVID-19 pandemic through its business activities.

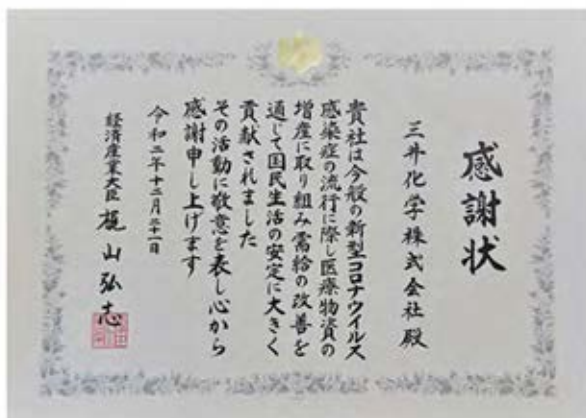
Social contributions through business activities

Emergency supply of nonwoven fabric for medical-use gowns & increased production of TEKNOROTETM, mask nose clamps.
(Received certificate of gratitude from the Ministry of Economy, Trade and Industry in December 2020 for increasing the production of medical supplies.)

Development and donation of θ (Theta), 3D-printed masks.

Himilan™ face shields donated to local governments, medical institutions, etc.

[Unistole™ selected as frame coding agent for Siemens' 3D-printed medical face shields.](#)



Certificate of gratitude



Isolation gowns

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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 have. The comments and opinions received through communications with neighborhood communities are reflected in the management of our business sites as appropriate.

Examples of community exchange

Ichihara Works		
Name (Number of Events)	Those for Whom Events Organized	Details
Autumn Festival*	Local residents	<ul style="list-style-type: none"> Laboratory Class on the Wonders of Chemistry Events on the stage Kids Corner (playground equipment)
Works Tour*	Local women's association	<ul style="list-style-type: none"> Summarized explanation of the Works Works tour
Opinion Exchange Meeting (Once)	Local neighborhood town council officers	<ul style="list-style-type: none"> Summarized explanation of the Works Works tour A meeting to exchange opinions
Publication of Local Communication Magazine "Chigusa" (Twice)	Local residents	<ul style="list-style-type: none"> Introduction of initiatives conducted in the Works Gathering voices (opinions) from local residents and introducing them

* Not held in fiscal 2020 due to the COVID-19 pandemic.

Mobara Branch Factory		
Name (Number of Events)	Those for Whom Events Organized	Details
Fureai Park*	Local neighborhood council officers	<ul style="list-style-type: none"> • Various stage shows • A meeting to exchange opinions
Opinion Exchange Meetings*	Local neighborhood council officers	<ul style="list-style-type: none"> • Summarized explanation of the Works • Works and Technology Training Center tours • A meeting to exchange opinions (About environmental protection and process safety as well as disaster prevention initiatives, dialogue with local communities, etc.)

* Not held in fiscal 2020 due to the COVID-19 pandemic.

Nagoya Works		
Name (Number of Events)	Those for Whom Events Organized	Details
Works Tour* ¹	Children's clubs from neighboring school districts, officers from neighboring school districts	<ul style="list-style-type: none"> • Works tour • Laboratory Class on the Wonders of Chemistry
Autumn Festival* ¹	Local residents	<ul style="list-style-type: none"> • Laboratory Class on the Wonders of Chemistry • Events on the stage
Publication of Local Communication Magazine "Tango Dohri" (Twice)	Local residents	<ul style="list-style-type: none"> • Introduction of initiatives conducted in Works • Gathering voices (opinions) from local residents and introducing them
Environmental Dialogue with Local Residents (Once)* ²	Officers from neighboring school districts Minami Ward Office, Nagoya	<ul style="list-style-type: none"> • Environmental Dialogue with Local Residents

*¹ Not held in fiscal 2020 due to the COVID-19 pandemic.

*² Replaced with written forms in fiscal 2020 due to the COVID-19 pandemic.

Osaka Works		
Name (Number of Events)	Those for Whom Events Organized	Details
Works Tour*	Children's clubs from neighboring school districts, officers from neighboring school districts, local elementary schools	<ul style="list-style-type: none"> • Summarized explanation of the Works • Explanation on such matters as environmental protection and disaster prevention initiatives • Works tour • A meeting to exchange opinions • Fire fighting facility and Works tour • Simple hands-on laboratory class on chemistry

Local dialogue on Responsible Care*	Related parties of local government and various organizations	<ul style="list-style-type: none"> Local dialogue on Responsible Care Summarized explanation of the Works Explanation on initiatives for Responsible Care Works tour A meeting to exchange opinions
Publication of Local Communication Magazine "Takashinohama" (Twice)	Local residents	<ul style="list-style-type: none"> Introduction of initiatives conducted in the Works Gathering voices (opinions) from local residents and introducing them

* Not held in fiscal 2020 due to the COVID-19 pandemic.

Iwakuni-Ohtake Works		
Name (Number of Events)	Those for Whom Events Organized	Details
Opinion Exchange Meetings* ¹	Heads of local neighborhood councils and those in charge of volunteer disaster response organizations	<ul style="list-style-type: none"> Sending materials on Works Topics, environmental protection and disaster prevention initiatives Received opinions and requests for the Works and reviewed in the Company. After the review, sending the result as a report
Laboratory Class on the Wonders of Chemistry* ²	Local elementary schools	<ul style="list-style-type: none"> Laboratory Class on the Wonders of Chemistry
Autumn Festival* ²	Local residents	<ul style="list-style-type: none"> Laboratory Class on the Wonders of Chemistry Events on the stage
Publication of Local Communication Magazine "Ozegawa" (Twice)	Local residents	<ul style="list-style-type: none"> Introduction of initiatives conducted in the Works Gathering voices (opinions) from local residents and introducing them

*¹ Replaced with written forms in fiscal 2020 due to the COVID-19 pandemic.

*² Not held in fiscal 2020 due to the COVID-19 pandemic.

Omuta Works		
Name (Number of Events)	Those for Whom Events Organized	Details
Opinion Exchange Meetings (4 times in August)	Related parties of local government	<ul style="list-style-type: none"> Works overview and explanation on social contribution activities Explanation on initiatives against natural disasters Explanation of Technology Training at the Works and participation in hands-on training A meeting to exchange opinions
Laboratory Class on the Wonders of Chemistry (Once)	Local elementary schools	<ul style="list-style-type: none"> Laboratory Class on the Wonders of Chemistry*

Publication of Local Communication Magazine "Toukayama" (Twice)	Local residents	<ul style="list-style-type: none"> • Introduction of initiatives conducted in the Works • Gathering voices (opinions) from local residents and introducing them
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* Held in an environment fully protected against COVID-19.

Sodegaura Center		
Name (Number of Events)	Those for Whom Events Organized	Details
Summer Festival*	Related parties of local neighborhood council, neighborhood companies, municipal office	<ul style="list-style-type: none"> • Laboratory Class on the Wonders of Chemistry • Events on the stage
Opinion Exchange Meetings (Twice)	Related parties of municipal office and police station	<ul style="list-style-type: none"> • Explanation of Center and tour • A meeting to exchange opinions

* Not held in fiscal 2020 due to the COVID-19 pandemic.



Meeting to exchange opinions at Mobara Branch Factory



Meeting to exchange opinions at Nagoya Works



Meeting to exchange opinions at Iwakuni-Ohtake Works



Autumn Festa at Omuta Works



Meeting to exchange opinions at Sodegaura Center

Local Contribution by Business Sites

Each of our business sites is actively involved in local community activities as a corporate citizen.



Junior rubber baseball tournament at Osaka Works



Clean-up activities around Ichihara Works (FY2019)

Donating beach wheelchairs to a tourist site

Aiming to achieve MCRC 2030 Goals*, Chemours-Mitsui Fluoroproducts Co., Ltd. has taken on a new challenge to constantly increase its corporate value. Towards achieving this goal, the Company donated two beach wheelchairs to MIHO SHIRUBE, the Miho no Matsubara Culture & Creativity Center in Shizuoka City. The Company's Shimizu Works is located in the vicinity of a World Heritage Site, Miho-no-Matsubara, a pine grove on the Miho Peninsula. Elderly people and wheelchair users could visit only a limited area in the grove as it is situated on a sandy beach. Our beach wheelchairs offer an opportunity for a greater number of visitors to enjoy the scenic views from various seaside locations.

* MCRC 2030 Goals:

Mitsui-Chemours Corporate Responsibility Commitment (MCRC) 2030 Goals are the ESG-related goals that Chemours-Mitsui Fluoroproducts Co., Ltd. is committed to achieving by fiscal 2030.

Improving the Educational Environment for Children in India (Mitsui Chemicals India and Mitsui Prime Advanced Composites India)

Aiming to cultivate future talents in local communities, Mitsui Chemicals India (MCIND) is continuously working to improve the educational environment for local children, such as by providing clean drinking water and various educational programs, and promoting sports and culture. In fiscal 2019, the Company offered CCTV cameras in a primary school to improve the safety of children and women in the area. One of our affiliates, Mitsui Prime Advanced Composites India (ACI) directly delivered a blackboard, clothes, and shoes to a local agricultural village after studying their educational needs. The company deepened exchanges with the community residents and children who gathered to receive the goods.



ACI's business manager talking with local children

Cultural Preservation through the Farewell Project for Coal Railway

Mitsui Chemicals held the Farewell Project for Coal Railway as a part of our cultural preservation activities. The project was organized to celebrate the century-long service of the Mitsui Chemicals Exclusive Railway (formerly the Miike Coal Mine Railway), which was used to convey raw materials to Omuta Works until the railway's closure in May 2020. With this project, we worked to capture the legacy of the trains for the future.

The former Miike Coal Mine Railway was familiarly known as the "coal mine train" to people living in Omuta City, Kumamoto Prefecture. Its service, lasting more than 100 years, is well remembered as a part of the scenery of the town, running through the streets carrying goods and people. A large part of the railway became disused following the closure of the Mitsui Miike Coal Mine in 1997. Only one section that spanned 1.8 km and the cars in use at that time remained in operation as an industrial railway for Mitsui Chemicals. The remains of the Miike Coal Mine Railway was registered as one of the Sites of Japan's Meiji Industrial Revolution under UNESCO World Cultural Heritage in 2015.

In the Farewell Project for Coal Railway, films were created to memorialize the railway as an asset to the local landscape and were donated to Omuta City and related bodies. Also, the sounds of the working train were recorded and archived as ASMR* sound generator and made publicly available to a wide range of audience. Unfortunately, the ceremony planned to celebrate the train's final run and the movie premiere had to be cancelled due to the COVID-19 pandemic. On the last day of the railway's operation, we presented a bouquet of flowers to Miike Port Logistics Corporation's staff, who have been carefully maintaining the trains and rails and ensuring safe operations, to thank them and the trains that worked over such a long time. The ceremony to mark the final run was rescheduled as a smaller scale event on July 31, 2021, with a limited number of attendees as a precaution against risks from COVID-19.

Aiming to be a corporation open to local communities, the Mitsui Chemicals Group values the culture built together in harmony with people in the neighborhood.

* ASMR (Autonomous Sensory Meridian Response) is a response or sensation that a person feels from audio or visual stimulation, resulting in a pleasant or positive feeling in the brain.



Presentation of a memorial video to the Mayor of Omuta



The last day of operation

ESG Performance Data

Environment

Society

Governance

Environment

Input ⇒ Output Data (FY2020)

Greenhouse Gas (GHG) Energy

GHG

	Scope	2017	2018	2019	2020
GHG emissions (Scope1) / thousand tons	Mitsui Chemicals, Inc.	3,570	3,450	3,540	3,498
	Domestic subsidiaries & affiliates	270	110	66	64
	Overseas subsidiaries & affiliates	260	220	163	178
	Global	4,100	3,780	3,770	3,740
GHG emissions (Scope2) / thousand tons	Mitsui Chemicals, Inc.	750	720	615	514
	Domestic subsidiaries & affiliates	180	160	142	150
	Overseas subsidiaries & affiliates	550	560	538	530
	Global	1,480	1,440	1,295	1,193
GHG emissions (Scope1, Scope2) / thousand tons	Global	5,580	5,220	5,060	4,933
GHG emissions (Scope3) / thousand tons	Mitsui Chemicals, Inc.	11,080	11,666	10,177	—
GHG emissions intensity per unit of sales / tons · billion yen ⁻¹	Global	420	352	378	407
GHG emissions reduction rate (compared with fiscal 2005, operating at full capacity) / %	Mitsui Chemicals, Inc.	24.5	27.3	27.7	29.0

Energy

	Scope	2017	2018	2019	2020
Energy consumption / PJ	Mitsui Chemicals, Inc.	76.2	75.1	75.5	72.9
	Domestic subsidiaries & affiliates	4.2	3.9	3.5	3.8
	Overseas subsidiaries & affiliates	14.6	13.9	10.3	10.4
	Global	94.9	92.9	89.3	87.1
Energy intensity index (FY2009=100)	Mitsui Chemicals, Inc.	93.4	94.6	94.9	96.6
Five-year annual energy intensity reduction rate / %	Mitsui Chemicals, Inc.	1.3	△0.3	△0.4	△0.7

Industrial Waste

	Scope	2017	2018	2019	2020
Waste generated / thousand tons	Mitsui Chemicals, Inc.	125.8	127.1	117.6	115.5
	Domestic subsidiaries & affiliates	54.0	50.1	48.4	53.5
	Overseas subsidiaries & affiliates	56.0	58.6	47.3	37.1
	Global	235.7	235.8	213.3	206.1
Hazardous waste / thousand tons	Mitsui Chemicals, Inc.	1.2	1.3	0.7	0.5
Waste sent off-site / thousand tons	Mitsui Chemicals, Inc.	94.9	102.0	92.1	89.1
	Domestic subsidiaries & affiliates	34.3	32.4	31.8	33.1
	Overseas subsidiaries & affiliates	42.9	47.2	34.7	27.2
	Global	172.1	181.7	158.6	149.5

Recycling

	Scope	2017	2018	2019	2020
Amount recycled externally / thousand tons	Mitsui Chemicals, Inc.	61.4	68.0	60.9	67.2
	Domestic subsidiaries & affiliates	31.1	28.8	27.5	29.2
	Overseas subsidiaries & affiliates	32.3	34.7	24.3	19.1
	Global	124.8	131.7	112.7	115.6
Recycling rate / %	Domestic	71.6	72.1	71.4	78.9
	Overseas	75.3	73.5	69.9	70.2

Landfill

	Scope	2017	2018	2019	2020
Landfill / thousand tons	Mitsui Chemicals, Inc.	0.5	0.4	0.4	0.5
	Domestic subsidiaries & affiliates	0.1	0.1	0.2	0.1
	Overseas subsidiaries & affiliates	0.1	0.2	0.2	0.1
	Global	0.7	0.7	0.8	0.7
Landfill rate for industrial waste / %	Domestic	0.3	0.3	0.4	0.4
	Oversea	0.3	0.4	0.5	0.3
	Global	0.3	0.3	0.4	0.3

Substances Subject to the PRTR Act

	Scope	2017	2018	2019	2020
Substances subject to the PRTR Act emissions / tons	Mitsui Chemicals, Inc.	766	816	768	808

Air

	Scope	2017	2018	2019	2020
Volatile organic compound (VOC) emissions / tons	Mitsui Chemicals, Inc.	1,574	1,621	1,575	1,537
	Domestic subsidiaries & affiliates	395	350	405	434
	Overseas subsidiaries & affiliates	62	64	58	80
	Global	2,031	2,035	2,038	2,051
NOx emissions / tons	Mitsui Chemicals, Inc.	2,311	2,110	2,311	2,186
	Domestic subsidiaries & affiliates	295	253	108	107
	Overseas subsidiaries & affiliates	203	195	254	201
	Global	2,809	2,558	2,673	2,494
SOx emissions / tons	Mitsui Chemicals, Inc.	273	223	368	303
	Domestic subsidiaries & affiliates	131	97	42	43
	Overseas subsidiaries & affiliates	41	67	62	43
	Global	444	387	472	389
Soot and dust emissions / tons	Mitsui Chemicals, Inc.	114	101	88	93
	Domestic subsidiaries & affiliates	18	13	7	11
	Overseas subsidiaries & affiliates	30	90	60	60
	Global	162	204	155	164
Emissions of hazardous air pollutants / tons	Mitsui Chemicals, Inc.	15	13	15	43
Fluorocarbons emissions / tons	Mitsui Chemicals, Inc.	4	5	8	5
	Domestic subsidiaries & affiliates	0	0	0	103
	Overseas subsidiaries & affiliates	11	10	2	6
	Global	15	15	10	114

Efficient Use of Water

	Scope	2017	2018	2019	2020
Total volume of water withdrawal (tap water, groundwater, industrial water, and seawater) / million m ³	Mitsui Chemicals, Inc.	460.4	507.1	492.7	505.3
	Domestic subsidiaries & affiliates	21.6	20.1	19.9	20.3
	Overseas subsidiaries & affiliates	11.8	11.4	3.4	3.2
	Global	493.8	538.6	516.1	528.8
Tap water / million m ³	Mitsui Chemicals, Inc.	0.8	0.8	0.8	0.9
	Domestic subsidiaries & affiliates	0.3	0.3	0.3	0.3
	Overseas subsidiaries & affiliates	0.6	0.5	0.4	0.4
	Global	1.7	1.6	1.5	1.5
Groundwater / million m ³	Mitsui Chemicals, Inc.	0.6	0.7	0.6	0.5
	Domestic subsidiaries & affiliates	2.5	1.0	1.2	1.2
	Overseas subsidiaries & affiliates	0.2	0.2	0.0	0.0
	Global	3.3	1.8	1.8	1.7
Industrial water / million m ³	Mitsui Chemicals, Inc.	83.5	83.0	81.9	81.8
	Domestic subsidiaries & affiliates	10.3	9.7	9.3	9.9
	Overseas subsidiaries & affiliates	11.0	10.7	3.0	2.9
	Global	104.8	103.4	94.1	94.6
Seawater / million m ³	Mitsui Chemicals, Inc.	375.5	422.7	409.5	422.0
	Domestic subsidiaries & affiliates	8.4	9.1	9.2	8.9
	Overseas subsidiaries & affiliates	0.0	0.0	0.0	0.0

	Global	384.0	431.8	418.7	431.0
Recycled water / million m ³	Mitsui Chemicals, Inc.	1,692.4	1,667.1	1,686.2	1,625.6
	Domestic subsidiaries & affiliates	101.2	100.9	101.5	101.1
	Overseas subsidiaries & affiliates	39.0	40.0	36.9	36.5
	Global	1,832.6	1,808.1	1,824.5	1,763.3
Water recycling ratio / %	Domestic	78.8	77.0	77.7	76.7
	Overseas subsidiaries & affiliates	76.8	77.8	91.5	91.5
	Global	78.8	77.0	78.0	76.9
Discharge water volume / million m ³	Mitsui Chemicals, Inc.	436.6	491.3	473.8	485.5
	Domestic subsidiaries & affiliates	21.4	19.8	19.6	20.1
	Overseas subsidiaries & affiliates	4.8	4.8	1.2	1.1
	Global	462.9	515.9	494.6	506.7
Water consumption / million m ³	Mitsui Chemicals, Inc.	23.8	15.9	18.9	19.8
	Domestic subsidiaries & affiliates	0.2	0.3	0.3	0.2
	Overseas subsidiaries & affiliates	7.0	6.6	2.2	2.1
	Global	30.9	22.8	21.4	22.1

Emissions of Water Pollutants

	Scope	2017	2018	2019	2020
COD, BOD emissions / tons	Mitsui Chemicals, Inc.	889	888	884	836
	Domestic subsidiaries & affiliates	68	72	68	65
	Overseas subsidiaries & affiliates	2,944	2,601	1,676	1,274
	Global	3,901	3,561	2,628	2,176
Total nitrogen emissions / tons	Mitsui Chemicals, Inc.	1,053	1,138	1,269	1,072

Total phosphorous emissions / tons	Mitsui Chemicals, Inc.	33	41	27	26
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Environmental Accounting

	Scope	2017	2018	2019	2020
Environmental preservation costs (Investment) / billion yen	Mitsui Chemicals, Inc.	13	19	19	14
Environmental preservation costs (Expenditure) / billion yen		212	217	222	217
Economic impact of environmental initiatives / billion yen		13	12	11	16

Visualization of Contributions to the Environment

	Scope	2017	2018	2019	2020
Blue Value™ products sales ratio / %	Global	17	16	18	15

Others

	Scope	2017	2018	2019	2020
Number of environment-related accidents	Global	0	0	0	0
Number of violations to environmental laws and regulations	Global	0	0	0	0
Purchased raw materials / thousand tons	Mitsui Chemicals, Inc.	5,122	4,721	4,597	4,398
	Domestic subsidiaries & affiliates	534	519	477	462
	Overseas subsidiaries & affiliates	2,809	2,432	1,520	1,450
	Global	8,465	7,672	6,594	6,310
Purchased materials / thousand tons	Mitsui Chemicals, Inc.	25	22	24	38
	Domestic subsidiaries & affiliates	20	23	18	19

	Overseas subsidiaries & affiliates	89	77	25	20
	Global	134	122	66	77
Products shipped / thousand tons	Mitsui Chemicals, Inc.	5,189	4,789	4,573	4,475
	Domestic subsidiaries & affiliates	575	537	539	498
	Overseas subsidiaries & affiliates	3,009	2,775	1,530	1,462
	Global	8,773	8,100	6,642	6,435

INPUT⇒OUTPUT Data (FY2020)

Mitsui Chemicals Group

INPUT		Mitsui Chemicals Group	OUTPUT	
Energy			Products, etc.	
Energy consumption (PJ)	87.1		Products shipped (thousand tons)	6,435
Purchased materials			Atmospheric emissions	
Raw materials (thousand tons)	6,310		GHG (thousand tons)	4,933
Purchased materials (thousand tons)	77		Scope1	3,740
			Scope2	1,193
Water resources			Fluorocarbons (tons)	114
Water withdrawal (million m ³)	528.8		NOx (tons)	2,494
Tap water (million m ³)	1.5		SOx (tons)	389
Ground water (million m ³)	1.7		Hazardous air pollutants (tons)	43
Industrial water (million m ³)	94.6		VOC (tons)	2,051
Seawater (million m ³)	431.0		Soot and dust (tons)	164
(Recycled water) (million m ³)	1,763.3		Industrial waste	
			Waste sent off-site (thousand tons)	149.5
			Amount recycled externally (thousand tons)	115.6
			Off-site landfill (thousand tons)	0.7
			Wastewater	
			COD、BOD (tons)	2,176
			Total nitrogen (tons)	1,072
		Total phosphorous (tons)	26	
		Effluent (million m ³)	506.7	
		Wastewater treatment (million m ³)	51.6	

Mitsui Chemicals, Inc.

INPUT		Mitsui Chemicals, Inc.	OUTPUT	
Energy			Products, etc.	
Energy consumption (PJ)	72.9		Products shipped (thousand tons)	4,475
Purchased materials			Atmospheric emissions	
Raw materials (thousand tons)	4,398		GHG (thousand tons)	4,012
Purchased materials (thousand tons)	38		Scope1	3,498
			Scope2	514
Water resources			Fluorocarbons (tons)	5
Water withdrawal (million m ³)	505.3		NOx (tons)	2,186
Tap water (million m ³)	0.9		SOx (tons)	303
Ground water (million m ³)	0.5		Hazardous air pollutants (tons)	43
Industrial water (million m ³)	81.8		VOC (tons)	1,537
Seawater (million m ³)	422.0		Soot and dust (tons)	93
(Recycled water) (million m ³)	1,625.6		Industrial waste	
			Waste sent off-site (thousand tons)	89.1
			Amount recycled externally (thousand tons)	67.2
			Off-site landfill (thousand tons)	0.5
			Wastewater	
			COD、BOD (tons)	836
			Total nitrogen (tons)	1,072
		Total phosphorous (tons)	26	
		Effluent (million m ³)	485.5	
		Wastewater treatment (million m ³)	51.6	

Domestic Subsidiaries & Affiliates

INPUT		Domestic Subsidiaries & Affiliates	OUTPUT	
Energy			Products, etc.	
Energy consumption (PJ)	3.8		Products shipped (thousand tons)	498
Purchased materials			Atmospheric emissions	
Raw materials (thousand tons)	462		GHG (thousand tons)	214
Purchased materials (thousand tons)	19		Scope1	64
			Scope2	150
Water resources			Fluorocarbons (tons)	103
Water withdrawal (million m³)	20.3		NOx (tons)	107
Tap water (million m³)	0.3		SOx (tons)	43
Ground water (million m³)	1.2	VOC (tons)	434	
Industrial water (million m³)	9.9	Soot and dust (tons)	11	
Seawater (million m³)	8.9	Industrial waste		
(Recycled water) (million m³)	101.1	Waste sent off-site (thousand tons)	33.1	
		Amount recycled externally (thousand tons)	29.2	
		Off-site landfill (thousand tons)	0.1	
		Wastewater		
		COD、BOD (tons)	65	
		Wastewater discharge (million m³)	20.1	

Overseas Subsidiaries & Affiliates

INPUT		Overseas Subsidiaries & Affiliates	OUTPUT	
Energy			Products, etc.	
Energy consumption (PJ)	10.4		Products shipped (thousand tons)	1,462
Purchased materials			Atmospheric emissions	
Raw materials (thousand tons)	1,450		GHG (thousand tons)	708
Purchased materials (thousand tons)	20		Scope1	178
			Scope2	530
Water resources			Fluorocarbons (tons)	6
Water withdrawal (million m ³)	3.2		NOx (tons)	201
Tap water (million m ³)	0.4		SOx (tons)	43
Ground water (million m ³)	0.0		VOC (tons)	80
Industrial water (million m ³)	2.9		Soot and dust (tons)	60
Seawater (million m ³)	0.0		Industrial waste	
(Recycled water) (million m ³)	36.5		Waste sent off-site (thousand tons)	27.2
			Amount recycled externally (thousand tons)	19.1
			Off-site landfill (thousand tons)	0.1
			Wastewater	
			COD, BOD (tons)	1,274
			Wastewater discharge (million m ³)	1.1

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

INPUT		Ichihara Works	OUTPUT	
Energy			Products, etc.	
Energy consumption (PJ)	28.8		Products shipped (thousand tons)	1,772
Purchased materials			Atmospheric emissions	
Raw materials (thousand tons)	1,863		GHG (thousand tons)	1,431
Purchased materials (thousand tons)	5.6		Scope1	1,402
			Scope2	29
Water resources			Fluorocarbons (tons)	0.6
Water withdrawal (thousand m ³)	360,334		NOx (tons)	850.9
Tap water (thousand m ³)	0		SOx (tons)	157.7
Ground water (thousand m ³)	149		Hazardous air pollutants (tons)	0.8
Industrial water (thousand m ³)	21,134		VOC (tons)	344.7
Seawater (thousand m ³)	339,051		Soot and dust (tons)	35.0
(Recycled water) (million m ³)	388,137		Industrial waste	
			Waste sent off-site (thousand tons)	14.3
			Amount recycled externally (thousand tons)	14.3
			Off-site landfill (thousand tons)	0.0
			Wastewater	
			COD、BOD (tons)	56.5
			Total nitrogen (tons)	22.0
			Total phosphorous (tons)	1.9
			Wastewater discharge (thousand m ³)	344,502
			Wastewater treatment (thousand m ³)	5,940

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

INPUT		Mobara Branch Factory	OUTPUT	
Energy			Products, etc.	
Energy consumption (PJ)	0.7		Products shipped (thousand tons)	46
Purchased materials			Atmospheric emissions	
Raw materials (thousand tons)	50		GHG (thousand tons)	35
Purchased materials (thousand tons)	1.2		Scope1	22
			Scope2	13
Water resources			Fluorocarbons (tons)	0.0
Water withdrawal (thousand m ³)	780		NOx (tons)	17.8
Tap water (thousand m ³)	13		SOx (tons)	0.0
Ground water (thousand m ³)	368		Hazardous air pollutants (tons)	0.0
Industrial water (thousand m ³)	399		VOC (tons)	12.7
Seawater (thousand m ³)	0		Soot and dust (tons)	0.1
(Recycled water) (million m ³)	30,500		Industrial waste	
			Waste sent off-site (thousand tons)	2.0
			Amount recycled externally (thousand tons)	0.9
			Off-site landfill (thousand tons)	0.0
			Wastewater	
			COD、BOD (tons)	8.7
			Total nitrogen (tons)	4.2
			Total phosphorous (tons)	2.2
			Wastewater discharge (thousand m ³)	629
			Wastewater treatment (thousand m ³)	372

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

INPUT		Nagoya Works	OUTPUT	
Energy			Products, etc.	
Energy consumption (PJ)	0.7		Products shipped (thousand tons)	44
Purchased materials			Atmospheric emissions	
Raw materials (thousand tons)	50		GHG (thousand tons)	34
Purchased materials (thousand tons)	3.2		Scope1	10
			Scope2	24
Water resources			Fluorocarbons (tons)	0.6
Water withdrawal (thousand m ³)	1,559		NOx (tons)	3.5
Tap water (thousand m ³)	3		SOx (tons)	0.0
Ground water (thousand m ³)	0		Hazardous air pollutants (tons)	0.2
Industrial water (thousand m ³)	1,556		VOC (tons)	5.0
Seawater (thousand m ³)	0		Soot and dust (tons)	0.1
(Recycled water) (million m ³)	16,977		Industrial waste	
			Waste sent off-site (thousand tons)	5.9
			Amount recycled externally (thousand tons)	5.7
			Off-site landfill (thousand tons)	0.0
			Wastewater	
			COD、BOD (tons)	0.0
			Total nitrogen (tons)	0.0
			Total phosphorous (tons)	0.0
			Wastewater discharge (thousand m ³)	2,057
			Wastewater treatment (thousand m ³)	0

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

INPUT		Osaka Works	OUTPUT	
Energy			Products, etc.	
Energy consumption (PJ)	28.3		Products shipped (thousand tons)	1,954
Purchased materials			Atmospheric emissions	
Raw materials (thousand tons)	1,822		GHG (thousand tons)	1,551
Purchased materials (thousand tons)	20		Scope1	1,425
			Scope2	126
Water resources			Fluorocarbons (tons)	2.6
Water withdrawal (thousand m ³)	73,924		NOx (tons)	648.4
Tap water (thousand m ³)	66		SOx (tons)	68.2
Ground water (thousand m ³)	0		Hazardous air pollutants (tons)	37.8
Industrial water (thousand m ³)	20,591		VOC (tons)	107.7
Seawater (thousand m ³)	53,267		Soot and dust (tons)	13.9
(Recycled water) (million m ³)	734,158		Industrial waste	
			Waste sent off-site (thousand tons)	9.8
			Amount recycled externally (thousand tons)	7.0
			Off-site landfill (thousand tons)	0.1
			Wastewater	
			COD、BOD (tons)	238.1
			Total nitrogen (tons)	511.7
			Total phosphorous (tons)	5.8
			Wastewater discharge (thousand m ³)	61,792
			Wastewater treatment (thousand m ³)	10,125

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

INPUT		Iwakuni-Ohtake Works	OUTPUT	
Energy			Products, etc.	
Energy consumption (PJ)	7.2		Products shipped (thousand tons)	416
Purchased materials			Atmospheric emissions	
Raw materials (thousand tons)	365		GHG (thousand tons)	475
Purchased materials (thousand tons)	2.0		Scope1	267
			Scope2	208
Water resources			Fluorocarbons (tons)	0.7
Water withdrawal (thousand m ³)	58,551		NOx (tons)	188.5
Tap water (thousand m ³)	131		SOx (tons)	72.3
Ground water (thousand m ³)	0		Hazardous air pollutants (tons)	3.3
Industrial water (thousand m ³)	28,692		VOC (tons)	652.5
Seawater (thousand m ³)	29,727		Soot and dust (tons)	15.0
(Recycled water) (million m ³)	260,867		Industrial waste	
			Waste sent off-site (thousand tons)	5.8
			Amount recycled externally (thousand tons)	5.7
			Off-site landfill (thousand tons)	0.0
			Wastewater	
			COD、BOD (tons)	191.9
			Total nitrogen (tons)	25.9
			Total phosphorous (tons)	9.4
			Wastewater discharge (thousand m ³)	58,517
			Wastewater treatment (thousand m ³)	15,292

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

INPUT		Omuta Works	OUTPUT	
Energy			Products, etc.	
Energy consumption (PJ)	6.9		Products shipped (thousand tons)	243
Purchased materials			Atmospheric emissions	
Raw materials (thousand tons)	249		GHG (thousand tons)	472
Purchased materials (thousand tons)	6.2		Scope1	370
			Scope2	102
Water resources			Fluorocarbons (tons)	0.5
Water withdrawal (thousand m³)	10,047		NOx (tons)	477.0
Tap water (thousand m³)	589		SOx (tons)	5.0
Ground water (thousand m³)	0		Hazardous air pollutants (tons)	0.5
Industrial water (thousand m³)	9,458		VOC (tons)	414.0
Seawater (thousand m³)	0		Soot and dust (tons)	29.0
(Recycled water) (million m³)	194,958		Industrial waste	
			Waste sent off-site (thousand tons)	50.5
			Amount recycled externally (thousand tons)	33.3
			Off-site landfill (thousand tons)	0.4
			Wastewater	
			COD、BOD (tons)	341.0
			Total nitrogen (tons)	508.0
			Total phosphorous (tons)	6.3
			Wastewater discharge (thousand m³)	17,931
			Wastewater treatment (thousand m³)	19,762

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

INPUT		Sodegaura Center (R&D Center)	OUTPUT	
Energy			Products, etc.	
Energy consumption (PJ)	0.2		Products shipped (thousand tons)	0
Purchased materials			Atmospheric emissions	
Raw materials (thousand tons)	0		GHG (thousand tons)	11
Purchased materials (thousand tons)	0		Scope1	3
			Scope2	8
Water resources			Fluorocarbons (tons)	0.0
Water withdrawal (thousand m ³)	83		NOx (tons)	0.0
Tap water (thousand m ³)	61		SOx (tons)	0.0
Ground water (thousand m ³)	22		Hazardous air pollutants (tons)	0.0
Industrial water (thousand m ³)	0		VOC (tons)	0.0
Seawater (thousand m ³)	0		Soot and dust (tons)	0.0
(Recycled water) (million m ³)	50		Industrial waste	
			Waste sent off-site (thousand tons)	0.8
			Amount recycled externally (thousand tons)	0.3
			Off-site landfill (thousand tons)	0.0
			Wastewater	
			COD、BOD (tons)	0.2
			Total nitrogen (tons)	0.3
			Total phosphorous (tons)	0.0
			Wastewater discharge (thousand m ³)	69
			Wastewater treatment (thousand m ³)	69

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Employees

	Scope	2017	2018	2019	2020
Number of employees	Global	17,277	17,743	17,979	18,051
	Mitsui Chemicals, Inc.*	6,541	6,670	6,773	6,809

Region

	Scope		2017	2018	2019	2020
Ratio of region / %	Global	Japan	57.5	57.0	57	59
		China	6.6	6.6	5	5
		Asia	9.7	9.8	11	11
		Europe	17.0	17.5	18	17
		North, Central, and South America	9.2	9.1	9	8
		Others	0.0	0.0	0	0

Gender

	Scope		2017	2018	2019	2020
Number of employees	Mitsui Chemicals, Inc.*	Male	5,720	5,827	5,892	5,916
		Female	821 (12.6%)	843 (12.6%)	881 (13.0%)	893 (13.1%)
		Total	6,541	6,670	6,773	6,809

Age

	Scope	2017	2018	2019	2020
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Average age / age	Mitsui Chemicals, Inc.*	Male	42.3	41.9	41.8	42.0
		Female	44.6	44.5	44.0	44.0
		Total	42.5	42.2	42.1	42.2
Number of employees	Mitsui Chemicals, Inc.*	10s (Ages 18 or older)	116	136	114	99
		20s	1,015	1,112	1,201	1,220
		30s	1,128	1,204	1,243	1,284
		40s	2,254	2,079	1,928	1,800
		Over 50s	2,028	2,139	2,287	2,406
		Total	6,541	6,670	6,773	6,809

Nationality

	Scope	2017	2018	2019	2020
Number of non-Japanese employees	Mitsui Chemicals, Inc.*	57	54	54	53

Disabilities

	Scope	2017	2018	2019	2020
Ratio of employees with disabilities / %	Mitsui Chemicals, Inc.*	2.3	2.4	2.3	2.4

Management Positions

	Scope		2017	2018	2019	2020
Number of management staff	Mitsui Chemicals, Inc.*	Male	2,777	2,801	2,815	2,817
		Female	223 (7%)	234 (8%)	247 (8%)	249 (8%)
		Total	3,000	3,035	3,062	3,066
Number of management staff (manager-level or above)	Mitsui Chemicals, Inc.*	Male	1,561	1,543	1,530	1,535
		Female	43 (3%)	46 (3%)	47 (3%)	58 (4%)
		Total	1,604	1,589	1,577	1,593

Number of management staff (general manager-level or above)	Mitsui Chemicals, Inc.*	Male	400	402	423	430
		Female	5 (1%)	6 (2%)	6 (1%)	7 (2%)
		Total	405	408	429	437
Number of new management staff (manager-level or above)	Mitsui Chemicals, Inc.*	Male	100	84	91	89
		Female	9 (8%)	5 (6%)	3 (3%)	14 (14%)
		Total	109	89	94	103

Labor union members

	Scope	2017	2018	2019	2020
Ratio of labor union members / %	Mitsui Chemicals, Inc.*	53.7	54.0	54.5	54.7

Employee-friendly Working Environment

Service and Turnover

	Scope		2017	2018	2019	2020
Average length of service / years	Mitsui Chemicals, Inc.*	Male	19.2	18.8	18.8	19.0
		Female	21.1	21.0	20.4	20.4
		Total	19.5	19.1	19.1	19.2
Employee turnover rate / %	Mitsui Chemicals, Inc.*	Male	4.75	3.68	3.10	3.07
		Female	2.42	3.29	2.80	3.40
		Total	4.46	3.63	3.06	3.12
Total number of employee turnover	Mitsui Chemicals, Inc.*	Male	—	218	186	185
		Female	—	28	25	31
		Total	—	246	211	216
Voluntary turnover rate / %	Mitsui Chemicals, Inc.*	Male	0.91	0.86	1.07	1.21
		Female	0.85	1.76	1.23	1.54
		Total	0.90	0.97	1.09	1.25
		Male	—	51	64	73

Number of voluntary turnover	Mitsui Chemicals, Inc.*	Female	—	15	11	14
		Total	—	66	75	87
Ratio of re-employment for retired employees / %	Mitsui Chemicals, Inc.*		76.7	87.6	85.5	87.1

Overtime

	Scope		2017	2018	2019	2020
Number of employees whose overtime hours exceeded 80 hours / month	Mitsui Chemicals, Inc.*	Non-management staff	100	22	33	27
		Management staff	67	36	21	22
		Total	167 (2.6%)	58 (0.9%)	54 (0.8%)	49 (0.7%)
Average overtime hours / hours/month ¹	Mitsui Chemicals, Inc.*		21.4	21.1	20.9	20.2
Average overtime hours (statutory) / hours · month ⁻¹	Mitsui Chemicals, Inc.* (excluding shift workers)		0.5	1.9	1.1	0.2

Paid Leave

	Scope		2017	2018	2019	2020
Paid leave usage rate / %	Mitsui Chemicals, Inc.*	Non-management staff	79	83	86	77
		Management staff	56	62	70	60
		Total	69	74	79	70
Average number of days used for paid leave	Mitsui Chemicals, Inc.*	Total	—	14.8	15.8	13.9

Childcare

	Scope		2017	2018	2019	2020
Number of employees taking childcare leave	Mitsui Chemicals, Inc.*	Male	71	89	85	102
		Female	17	13	15	18
		Total	88	102	100	120

Childcare leave usage rate / %	Mitsui Chemicals, Inc.*	Male	40	56	48	56
		Female	100	100	100	100
		Total	45	59	52	60
Average number of days used for childcare leave	Mitsui Chemicals, Inc.*	Male	—	8.0	13.2	10.3
Return rate of employees from childcare leave / %	Mitsui Chemicals, Inc.*	Male	97	99	100	100
		Female	100	100	100	100
		Total	98	99	100	100
Employee retention rate three years after childcare leave / %	Mitsui Chemicals, Inc.*	Male	91	94	83	99
		Female	96	93	93	94
		Total	92	94	86	98
Number of employees using short working hours for childcare	Mitsui Chemicals, Inc.*	Male	3	1	4	5
		Female	91	85	88	85
		Total	94	86	92	90

Family Care

	Scope	2017	2018	2019	2020
Number of employees taking paid family care leave	Mitsui Chemicals, Inc.*	0	0	1	0
Number of employees using short working hours for family care	Mitsui Chemicals, Inc.*	1	0	1	0

Recruitment

	Scope		2017	2018	2019	2020
Total number of employees hired	Mitsui Chemicals, Inc.*	Male	298	333	250	222
		Female	35 (11%)	46 (12%)	61 (20%)	41 (16%)
		Regular recruitment	202	267	245	195
		Mid-career recruitment	131	112	66	68

		Total	333	379	311	263
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Number of Employees Hired through the Regular Recruitment

	Scope		2017	2018	2019	2020
Career-track administrative positions	Mitsui Chemicals, Inc.*	Male	12	10	14	7
		Female	10 (46%)	9 (47%)	15 (52%)	7 (50%)
		Total	22	19	29	14
Career-track technical positions	Mitsui Chemicals, Inc.*	Male	49	73	64	58
		Female	6 (11%)	14 (16%)	12 (16%)	10 (15%)
		Total	55	87	76	68
General positions	Mitsui Chemicals, Inc.*	Male	121	153	124	105
		Female	4 (3%)	8 (5%)	16 (11%)	8 (7%)
		Total	125	161	140	113

Number of Employees Hired through the Mid-career Recruitment

	Scope		2017	2018	2019	2020
Career-track administrative positions	Mitsui Chemicals, Inc.*	Male	35	41	22	18
		Female	2 (5%)	8 (16%)	6 (21%)	2 (10%)
		Total	37	49	28	20
Career-track technical positions	Mitsui Chemicals, Inc.*	Male	52	35	10	14
		Female	7 (12%)	3 (8%)	1 (9%)	3 (15%)
		Total	59	38	11	17
General positions	Mitsui Chemicals, Inc.*	Male	29	21	16	20
		Female	6 (17%)	4 (16%)	11 (41%)	11 (36%)
		Total	35	25	27	31

Human Resources Development

	Scope	2017	2018	2019	2020
Training hours per person / hours	Mitsui Chemicals, Inc.*	15	34	27	58
Training cost per person / million yen		0.29	0.27	0.20	0.13

Evaluation

	Scope	2017	2018	2019	2020
Conducting rate of feedback meetings in the previous fiscal year / %	Mitsui Chemicals Labor Union registered members	98	98	94	94
Degree of satisfaction over evaluation feedback / %		90	86	91	90

Safety and Prevention

	Scope	2017	2018	2019	2020
Number of major accidents / cases	Global	0	1	0	0
Number of abnormal conditions/accidents	Mitsui Chemicals, Inc.	4	7	12	21
	Domestic subsidiaries & affiliates	0	4	5	7
	Overseas subsidiaries & affiliates	2	0	1	1
	Global	6	11	18	29
Significant occupational injury frequency	Mitsui Chemicals, Inc.	0.42	0.19	0.00	0.10
	Domestic subsidiaries & affiliates	0.14	0.29	0.83	0.40
	Construction subcontractors	0.13	0.51	0.25	0.39
	Overseas subsidiaries & affiliates	0.00	0.51	0.62	0.21
	Global	0.24	0.33	0.31	0.22

Occupational Health

	Scope	2017	2018	2019	2020
Average rate of lifestyle-related disease (male) / %	Mitsui Chemicals, Inc.*	9.6	9.7	10.2	10.6
Frequency of absences from work due to health disorders	Mitsui Chemicals, Inc.*	0.60	0.78	0.87	0.78
Frequency of absences from work due to mental health disorders	Mitsui Chemicals, Inc.*	0.34	0.45	0.56	0.61
Ratio of smokers / %	Mitsui Chemicals, Inc.*	25.7	24.2	23.7	22.2
Harmful substance risk assessment implementation rate / %	Mitsui Chemicals, Inc.	100	100	100	100

Product Stewardship

	Scope	2017	2018	2019	2020
Product risk assessment implementation rate / %	Mitsui Chemicals, Inc.	36	100	100	100
Provision ratio of the latest safety information for all products / %	Mitsui Chemicals, Inc.	100	100	100	100
Number of legal and regulatory violations	Mitsui Chemicals, Inc.	0	0	0	0

Quality of Products and Services

	Scope	2017	2018	2019	2020
Number of PL accidents	Global	0	0	0	0
Number of major quality-related legal and regulatory violations	Global	0	0	0	0

Logistics

	Scope	2017	2018	2019	2020
Number of significant occupational injuries in logistics	Global	2	2	0	0
Number of major accidents in logistics	Global	0	0	0	0
Number of quality issues/ppm	Global	42	70	60	12
Number of legal and regulatory violations	Global	0	0	0	0

Sustainable Procurement

	Scope	2017	2018	2019	2020
Sustainable procurement ratio / %	Mitsui Chemicals, Inc.	39	44	44	45

Social Activities

	Scope	2017	2018	2019	2020
Social contribution expenditure / million yen	Global	152	214	246	123
Number of employees taking community service leave	Mitsui Chemicals, Inc.*	118	123	88	41

Visualization of Contributions to the Society

	Scope	2017	2018	2019	2020
Rose Value™ products sales ratio / %	Global	14	13	16	19

* Mitsui Chemicals, Inc. registered employees

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Board of Directors

	Scope		2017	2018	2019	2020
Number of members of the Board	Mitsui Chemicals, Inc.	Male	7	7	6	7
		Female	1 (12.5%)	1 (12.5%)	2 (25.0%)	1 (12.5%)
		Independent outside directors	3	3	3	3
		Total	8	8	8	8

Compensation of Members of the Board and Corporate Auditors

	Scope		2017	2018	2019	2020
Total compensation / million yen	Mitsui Chemicals, Inc.	Members of the Board (excluding outside directors)	360	371	369	365
		TANNOWA Tsutomu	(112)	(117)	(111)	—
		HASHIMOTO Osamu	—	—	—	(102)
		Corporate auditors (excluding outside auditors)	64	64	64	63
		Outside directors and corporate auditors	72	75	78	79
		Total	496	509	511	507

Compliance

	Scope	2017	2018	2019	2020
Number of major legal and regulatory violations	Global	1	0	1	1
Number of Risk Hotline Operations	Global	13	17	26	19
Number of exclusion recommendations from relevant authorities, such as Fair Trade Commission	Domestic	0	0	0	0
Number of operations / business suspensions due to misconduct	Domestic	0	0	1	0
Number of criminal charges in compliance-related accidents	Domestic	0	0	0	0
Number of cases detected by price cartel	Overseas	0	0	0	0
Number of cases detected due to bribery	Overseas	0	0	0	0
Number of cases detected due to other incidents	Overseas	0	0	0	0

Tax

	Scope	2017	2018	2019	2020
Sales Revenue ratio / billion yen	Domestic	—	—	—	8,034 (66%)
	Overseas	—	—	—	4,083 (34%)
	Total	—	—	—	12,117
Income before income taxes ratio/ billion yen	Domestic	—	—	—	357 (48%)
	Overseas	—	—	—	385 (52%)
	Total	—	—	—	742
Income tax expense ratio / billion yen	Domestic	—	—	—	47 (47%)
	Overseas	—	—	—	53 (53%)
	Total	—	—	—	100

Ratio of employees / %	Domestic	—	—	—	59%
	Overseas	—	—	—	41%
	Total	—	—	—	100%

Others

	Scope	2017	2018	2019	2020
Political donations / million yen	Mitsui Chemicals, Inc.	3.45	3.32	3.26	3.14

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100 series (Universal) 200 series (Economic topics)
300 series (Environmental topics) 400 series (Social topics)

100 series (Universal)

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102-3 Location of headquarters

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102-6 Markets served

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102-7 Scale of the organization

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102-8 Information on employees and other workers

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102-9 Supply chain

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102-10 Significant changes to the organization and its supply chain

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There were no applicable instances.

102-11 Precautionary Principle or approach

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102-12 External initiatives

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102-13 Membership of associations

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102-26 Role of highest governance body in setting purpose, values, and strategy	
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102-27 Collective knowledge of highest governance body	
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102-28 Evaluating the highest governance body's performance	
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102-30 Effectiveness of risk management processes

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102-31 Review of economic, environmental, and social topics

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102-32 Highest governance body's role in sustainability reporting

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102-33 Communicating critical concerns

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102-34 Nature and total number of critical concerns

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102-35 Remuneration policies

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102-36 Process for determining remuneration

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102-47 List of material topics

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102-48 Restatements of information

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There were no applicable instances.

102-49 Changes in reporting

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102-50 Reporting period

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102-51 Date of most recent report

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102-53 Contact point for questions regarding the report

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GRI 103: Management Approach 2016

103-1 Explanation of the material topic and its Boundary

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103-2 The management approach and its components

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Please refer to "Management System" in each reporting page.

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103-3 Evaluation of the management approach

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GRI 201: Economic Performance 2016

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201-2 Financial implications and other risks and opportunities due to climate change

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201-3 Defined benefit plan obligations and other retirement plans

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201-4 Financial assistance received from government

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GRI 202: Market Presence 2016

202-1 Ratios of standard entry level wage by gender compared to local minimum wage

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202-2 Proportion of senior management hired from the local community

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GRI 203: Indirect Economic Impacts 2016

203-1 Infrastructure investments and services supported

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203-2 Significant indirect economic impacts

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GRI 204: Procurement Practices 2016

204-1 Proportion of spending on local suppliers

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GRI 205: Anti-corruption 2016

205-1 Operations assessed for risks related to corruption

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Our corruption prevention perspective forms part of our human rights due diligence, and is included under "Assess actual and potential human rights impact." Assessments are conducted in each country where our Group's business sites are located.

205-2 Communication and training about anti-corruption policies and procedures

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205-3 Confirmed incidents of corruption and actions taken

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There was one applicable instance of major legal and regulatory violations.

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GRI 206: Anti-competitive Behavior 2016

206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices

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There were no instances where the Group was involved in legal action.

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GRI 207: Tax 2019

207-1 Approach to tax

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207-2 Tax governance, control, and risk management

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207-3 Stakeholder engagement and management of concerns related to tax

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207-4 Country-by-country reporting

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GRI 301: Materials 2016

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301-2 Recycled input materials used

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301-3 Reclaimed products and their packaging materials

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GRI 302: Energy 2016

302-1 Energy consumption within the organization

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302-3 Energy intensity

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302-5 Reductions in energy requirements of products and services

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GRI 303: Water and Effluents 2018

303-1 Interactions with water as a shared resource

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303-2 Management of water discharge-related impacts

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303-3 Water withdrawal

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303-4 Water discharge

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[Water-related Information \(CDP\)](#)

303-5 Water consumption

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GRI 304: Biodiversity 2016

304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas

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[Biodiversity](#)

304-2 Significant impacts of activities, products, and services on biodiversity

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304-3 Habitats protected or restored

Corresponding Sections

[Biodiversity](#)

304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations

Corresponding Sections

[Biodiversity](#)

GRI 305: Emissions 2016

305-1 Direct (Scope1) GHG emissions

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[Climate Change-Related Information \(CDP\)](#)

305-2 Energy indirect (Scope 2) GHG emissions

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305-3 Other indirect (Scope3) GHG emissions

Corresponding Sections

[GHG and Energy](#)

[Climate Change-Related Information \(CDP\)](#)

305-4 GHG emissions intensity

Corresponding Sections

[GHG and Energy](#)

[ESG Performance Data](#) > [Environment](#)

[Climate Change-Related Information \(CDP\)](#)

305-5 Reduction of GHG emissions

Corresponding Sections

[GHG and Energy](#)

[ESG Performance Data > Environment](#)

[Climate Change-Related Information \(CDP\)](#)

305-6 Emissions of ozone-depleting substances (ODS)

Corresponding Sections

[INPUT⇒OUTPUT](#)

[ESG Performance Data > Environment](#)

305-7 Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions

Corresponding Sections

[Environmentally Hazardous Substances](#)

[INPUT⇒OUTPUT](#)

[ESG Performance Data > Environment](#)

GRI 306: Waste 2020

306-1 Waste generation and significant waste-related impacts

Corresponding Sections

[Industrial Waste](#)

[INPUT⇒OUTPUT](#)

[ESG Performance Data > Environment](#)

306-2 Management of significant waste-related impacts

Corresponding Sections

—

Remarks

[Industrial Waste](#)

306-3 Waste generated

Corresponding Sections

[Industrial Waste](#)

[INPUT⇒OUTPUT](#)

[ESG Performance Data > Environment](#)

306-4 Waste diverted from disposal

Corresponding Sections

306-5 Waste directed to disposal

Corresponding Sections

[Industrial Waste](#)

INPUT⇒OUTPUT

[ESG Performance Data > Environment](#)

Remarks

Of the 115,500 tons of waste generated by Mitsui Chemicals, Inc. hazardous waste makes up 454.2 tons.

GRI 307: Environmental Compliance 2016**307-1 Non-compliance with environmental laws and regulations**

Corresponding Sections

[ESG Performance Data > Environment](#)[Environmental Compliance](#)**GRI 308: Supplier Environmental Assessment 2016****308-1 New suppliers that were screened using environmental criteria**

Corresponding Sections

—

Remarks

[Supplier Evaluation and Guidance for Improvement](#)**308-2 Negative environmental impacts in the supply chain and actions taken**

Corresponding Sections

[Supplier Evaluation and Guidance for Improvement](#)**400 series (Social topics)****GRI 401: Employment 2016****401-1 New employee hires and employee turnover**

Corresponding Sections

[Human Resources Management > Management System](#)[ESG Performance Data > Society](#)

401-2 **Benefits provided to full-time employees that are not provided to temporary or part-time employees**

Corresponding Sections

[Employee-friendly Working Environment and Labor productivity](#)

401-3 **Parental leave**

Corresponding Sections

[ESG Performance Data > Society](#)

[Employee-friendly Working Environment and Labor productivity](#)

GRI 402: Labor/Management Relations 2016

402-1 **Minimum notice periods regarding operational changes**

Corresponding Sections

[Labor-management Relations Based on Frank Dialog and Mutual Understanding](#)

GRI 403: Occupational Health and Safety 2018

403-1 **Occupational health and safety management system**

Corresponding Sections

[Responsible Care Management > Management System](#)

[Safety and Prevention > Management System](#)

[Occupational Health > Management System](#)

403-2 **Hazard identification, risk assessment, and incident investigation**

Corresponding Sections

[Safety and Prevention > Initiatives to Prevent Major Accidents](#)

[Product Stewardship > Providing Safe Products](#)

[Occupational Health > Preventing Exposure to Harmful Substances](#)

403-3 **Occupational health services**

Corresponding Sections

[Safety and Prevention > Initiatives to Prevent Major Accidents](#)

[Product Stewardship > Providing Safe Products](#)

[Occupational Health > Preventing Exposure to Harmful Substances](#)

403-4

Worker participation, consultation, and communication on occupational health and safety

Corresponding Sections

Safety and Prevention > Management System

Occupational Health > Management System

403-5

Worker training on occupational health and safety

Corresponding Sections

Safety and Prevention > Safety Education

Safety and Prevention > Plant Operation Technology Training Center

Product Stewardship > Training

Occupational Health > Health and Productivity Management

403-6

Promotion of worker health

Corresponding Sections

Occupational Health > Health and Productivity Management

403-7

Prevention and mitigation of occupational health and safety impacts directly linked by business relationships

Corresponding Sections

Safety and Prevention > Initiatives to Prevent Major Accidents

Product Stewardship > Providing Safe Products

Occupational Health > Preventing Exposure to Harmful Substances

403-8

Workers covered by an occupational health and safety management system

Corresponding Sections

Safety and Prevention > Management System

Occupational Health > Management System

403-9

Work-related injuries

Corresponding Sections

Safety and Prevention > Accidents and Occupational Injuries

Remarks

There have been no employee or contractor fatalities over the past three years.(As of March 2021)

403-10

Work-related ill health

Corresponding Sections

—

GRI 404: Training and Education 2016

404-1 Average hours of training per year per employee

Corresponding Sections

[ESG Performance Data > Society](#)

[Safety and Prevention > Safety Education](#)

[Talent and Organization Development](#)

404-2 Programs for upgrading employee skills and transition assistance programs

Corresponding Sections

[Talent and Organization Development](#)

404-3 Percentage of employees receiving regular performance and career development reviews

Corresponding Sections

[Compensation & Benefit](#)

[ESG Performance Data > Society](#)

GRI 405: Diversity and Equal Opportunity 2016

405-1 Diversity of governance bodies and employees

Corresponding Sections

[Corporate Governance](#)

[Diversity](#)

[ESG Performance Data > Society](#)

[ESG Performance Data > Governance](#)

405-2 Ratio of basic salary and remuneration of women to men

Corresponding Sections

—

GRI 406: Non-discrimination 2016

406-1 Incidents of discrimination and corrective actions taken

Corresponding Sections

There were no applicable instances.

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

Corresponding Sections

—

Remarks

We request our suppliers to comply with the contents of [the Mitsui Chemicals Group Sustainable Procurement Guidelines](#).

[Supplier Evaluation and Guidance for Improvement](#)

GRI 408: Child Labor 2016

408-1 Operations and suppliers at significant risk for incidents of child labor

Corresponding Sections

—

Remarks

We request our suppliers to comply with the contents of [the Mitsui Chemicals Group Sustainable Procurement Guidelines](#).

[Supplier Evaluation and Guidance for Improvement](#)

GRI 409: Forced or Compulsory Labor 2016

409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor

Corresponding Sections

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Remarks

We request our suppliers to comply with the contents of [the Mitsui Chemicals Group Sustainable Procurement Guidelines](#).

[Supplier Evaluation and Guidance for Improvement](#)

GRI 410: Security Practices 2016

410-1 Security personnel trained in human rights policies or procedures

Corresponding Sections

—

Remarks

[Respect for Human Rights](#)

GRI 411: Rights of Indigenous Peoples 2016

411-1 Incidents of violations involving rights of indigenous peoples

Corresponding Sections

—

GRI 412: Human Rights Assessment 2016**412-1 Operations that have been subject to human rights reviews or impact assessments**

Corresponding Sections

—

Remarks

[Respect for Human Rights](#)**412-2 Employee training on human rights policies or procedures**

Corresponding Sections

—

Remarks

[Consideration for Human Rights within Mitsui Chemicals](#)[Diversity](#)**412-3 Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening**

Corresponding Sections

—

Remarks

[Consideration for Human Rights in Investment Activities](#)**GRI 413: Local Communities 2016****413-1 Operations with local community engagement, impact assessments, and development programs**

Corresponding Sections

—

Remarks

[Social Activities](#)**413-2 Operations with significant actual and potential negative impacts on local communities**

Corresponding Sections

—

Remarks

[Initiatives to Prevent Major Accidents](#)**GRI 414: Supplier Social Assessment 2016****414-1 New suppliers that were screened using social criteria**

Corresponding Sections

—

Remarks

[Supplier Evaluation and Guidance for Improvement](#)
414-2 Negative social impacts in the supply chain and actions taken

Corresponding Sections

[Supplier Evaluation and Guidance for Improvement](#)
GRI 415: Public Policy 2016
415-1 Political contributions

Corresponding Sections

[ESG Performance Data > Governance](#)
GRI 416: Customer Health and Safety 2016
416-1 Assessment of the health and safety impacts of product and service categories

Corresponding Sections

—

Remarks

[Product Stewardship](#)
[Quality of Products and Services](#)
416-2 Incidents of non-compliance concerning the health and safety impacts of products and services

Corresponding Sections

—

Remarks

[Product Stewardship](#)
[Quality 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.

GRI 417: Marketing and Labeling 2016
417-1 Requirements for product and service information and labeling

Corresponding Sections

[Blue Value™ / Rose Value™](#)
[Product Stewardship](#)
[Quality of Products and Services](#)
[Logistics](#)

417-2 Incidents of non-compliance concerning product and service information and labeling

Corresponding Sections

[Product Stewardship](#)

[Quality 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.

417-3 Incidents of non-compliance concerning

Corresponding Sections

There were no applicable instances.

GRI 418: Customer Privacy 2016

418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data

Corresponding Sections

There were no applicable instances.

GRI 419: Socioeconomic Compliance 2016

419-1 Non-compliance with laws and regulations in the social and economic area

Corresponding Sections

There were no applicable instances.

ESG Indices

The Mitsui Chemicals Group is listed as a constitute company in the following ESG indices based on evaluations of its initiatives aimed at the sustainable development of society and the Mitsui Chemicals Group. (As of September 2021)

DJSI Asia/Pacific

DJSI (Dow Jones Sustainability Indices), the index developed by S&P Dow Jones Indices, United States, 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 158 companies have been selected in 2020.



Mitsui Chemicals Included on Dow Jones Sustainability Asia Pacific Index for Third Straight Year

FTSE4Good Index Series

FTSE4Good Global Index was developed by FTSE Russell of the London Stock Exchange Group. This index is designed to provide market participants with a tool to identify and measure the performance of companies that demonstrate strong environmental, social and governance (ESG) practices.



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).



MSCI ESG Leaders Index

The **MSCI ESG 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.



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).

2021 CONSTITUENT 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).

2021 CONSTITUENT MSCI JAPAN
EMPOWERING WOMEN INDEX (WIN)

SOMPO Sustainability Index

Launched in 2012, the **SOMPO Sustainability Index** is an investment index managed by Sompo Asset Management Co., Ltd.. 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.



Other Key External Assessments

Mitsui Chemicals Lands in Sustainability Ranking Selected as "Sustainability Yearbook Member" for RobecoSAM Sustainability Award 2021

Mitsui Chemicals, Inc. has been selected out of 114 global chemical companies as a "Sustainability Yearbook Member" in the RobecoSAM Sustainability Award 2021, a global sustainability ranking run by S&P Global Inc. and RobecoSAM. Each year, S&P Global and RobecoSAM rank companies from around the world on their sustainability from economic, environmental and social perspectives, publishing the results of this in **The Sustainability Yearbook**. In order to be listed in the Yearbook, companies must be within the top 15% of their industry and must achieve a score within 30% of their industry's top performing company. This year saw more than 7000 companies evaluated, with Mitsui Chemicals included among 631 companies from across 61 industries to be recognized as a Sustainability Yearbook Member.



Mitsui Chemicals Selected as Nadeshiko Brand for Fiscal 2020

Mitsui Chemicals, Inc. was selected by the Ministry of Economy, Trade and Industry (METI) and the Tokyo Stock Exchange (TSE) as a fiscal 2020 Nadeshiko Brand, an enterprise that excels at encouraging women's success in the workplace. METI and the TSE have been jointly undertaking the Nadeshiko Brand initiative since fiscal 2012, selecting TSE-listed companies that excel at encouraging women's success in the workplace. For fiscal 2020, the roughly 3,600 companies listed on the TSE were assessed for their pro-diversity management to raise enterprise value and their publicity of these projects. 45 companies in each industry were selected as Nadeshiko Brands, and 19 companies were selected as Semi Nadeshiko Brands.



Diversity

THE INCLUSION OF MITSUI CHEMICALS, INC. IN ANY MSCI INDEX, AND THE USE OF MSCI LOGOS, TRADEMARKS, SERVICE MARKS OR INDEX NAMES HEREIN, DO NOT CONSTITUTE A SPONSORSHIP, ENDORSEMENT OR PROMOTION OF MITSUI CHEMICALS, INC. BY MSCI OR ANY OF ITS AFFILIATES. THE MSCI INDEXES ARE THE EXCLUSIVE PROPERTY OF MSCI. MSCI AND THE MSCI INDEX NAMES AND LOGOS ARE TRADEMARKS OR SERVICE MARKS OF MSCI OR ITS AFFILIATES.



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 website, 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](#) by October in every year. This report is archived details on each fiscal year posted on the Company's Sustainability site in 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.

About the Mitsui Chemicals Group ESG Report 2021

Scope of Data

Taking the Mitsui Chemicals Group as its basis, any references in this report that fall outside that basis are stated in the text. The scope of environmental data is as follows.

Environmental Data Collection Sites (Random order)



Mitsui Chemicals, Inc.

- Mitsui Chemicals, Inc. (Ichihara Works, Ichihara Works Mobara Branch Factory, Nagoya Works, Osaka Works, Iwakuni-Ohtake Works, Omuta Works, Sodegaura Center)

Domestic subsidiaries & affiliates

- MT AQUAPOLYMER, INC. (Mobara Factory^{*1})
- SUN MEDICAL CO., LTD.
- SUNREX INDUSTRY CO., LTD.
- JAPAN COMPOSITE CO., LTD. (Shimizu Factory)
- UTSUNOMIYA CHEMICAL INDUSTRY CO., LTD. (Funaoka Factory, Shinshiro Factory, Utsunomiya Factory, Tosu Factory)

- SHIMONOSEKI MITSUI CHEMICALS, INC.
- MC BUSINESS SUPPORT, LTD. (Chiba Branch^{*1}, Osaka Branch^{*1}, Iwakuni Branch^{*1}, Omuta Branch^{*1})
- PRIME POLYMER CO., LTD.(Ichihara Works^{*1}, Osaka Works^{*1}, Automotive Materials laboratory, Packaging & Industrial materials laboratory^{*1*3})
- MITSUI CHEMICALS OPERATION SERVICES CO., LTD.(Ichihara Office^{*1}, Nagoya Office^{*1}, Nagoya Office^{*1}, Osaka Office^{*1}, Iwakuni-Ohtake Office^{*1}, Omuta office^{*1})
- MITSUI CHEMICAL ANALYSIS & CONSULTING SERVICE, INC.(Analysis & Support Department^{*1},(Ichihara, Nagoya, Osaka, Iwakuni, Omuta), Laboratory)
- TOYO BEAUTY SUPPLY CORPORATION
- SAXIN CORPORATION
- CHEMOURS-MITSUI FLUOROPRODUCTS CO., LTD. (Chiba Plant^{*1*4})
- DOW-MITSUI POLYCHEMICALS CO., LTD. (Chiba Plant^{*1*4}, Ohtake Plant^{*1*4})
- MITSUI CHEMICALS & SKC POLYURETHANES INC. (JAPAN) (Nagoya Factory^{*1}, Tokuyama Factory)
- MITSUI CHEMICALS AGRO, INC. ^{*3} (Agrochemicals Research Center/Production Technology Department (Yasu), Agrochemicals Research ^{*3} (Agrochemicals Research Center/Production Technology Department (Yasu), Agrochemicals Research Center (Mobara), Production Technology Department (Omuta)^{*1})
- MITSUI CHEMICALS MC, LTD. (Head Office, Shimizu Factory, Kaibara Factory, Kanto Factory^{*3})
- MITSUI CHEMICALS SUN ALLOYS CO., LTD.
- MITSUI FINE CHEMICALS, INC.(Omuta Center^{*1})
- MITSUI CHEMICALS INDUSTRIAL PRODUCTS LTD. (Saitama Factory, Ohtake Factory^{*1})
- MITSUI CHEMICALS TOHCELLO, INC.(Ibaraki Works, Koga Manufacturing Dept., Ibaraki Works, Hamamatsu Works, Katsuta Works, Anjo Works, Nagoya Works^{*1})
- SANSEIKAIHATSU CO., LTD. ^{*1}
- YAMAMOTO CHEMICALS, INC.(Yao Plant, Omuta Plant^{*2})
- CHIBA CHEMICALS MANUFACTURING LLP(Ichihara Factory^{*1*3})
- OSAKA PETROCHEMICAL INDUSTRIES, LTD.(Senboku Works^{*1})
- TAISHO MTC LTD. ^{*1}
- NIPPON ALUMINUM ALKYLs, LTD. (Osaka plant^{*1})
- NIPPON EPOXY RESIN MANUFACTURING CO., LTD. (Ichihara Plant^{*1})
- EVOLUE JAPAN CO., LTD. (Ichihara Works^{*1})
- HOKKAIDO MITSUI CHEMICALS, INC.

Overseas subsidiaries & affiliates

- Advanced Composites Mexicana, S.A. de C.V.
- Advanced Composites, Inc. (Ohio Plant, Tennessee Plant)
- Anderson Development Company
- Grand Siam Composites Co., Ltd.
- MCNS Polyurethanes Malaysia Sdn. Bhd.
- Mitsui Chemicals Scientex Sdn. Bhd.
- Mitsui Elastomers Singapore Pte. Ltd.
- Mitsui Hygiene Materials (Thailand) Co., Ltd.
- Mitsui Phenols Singapore Pte. Ltd.
- Mitsui Prime Advanced Composites India, Pvt. Ltd.
- P.T. PETnesia Resindo
- PT. MCNS Polyurethanes Indonesia
- Thai Mitsui Specialty Chemicals Co., Ltd.
- MITSUI CHEMICALS FUNCTIONAL COMPOSITES (SHANGHAI) CO., LTD
- Mitsui Chemicals Nonwovens (Tianjin) Co.,Ltd.
- MITSUI ADVANCED COMPOSITES (ZHONGSHAN) CO., LTD.
- ZHANG JIA GANG FREE TRADE ZONE MITSUI LINK-UPON ADVANCED MATERIALS, INC.
- TIANJIN COSMO POLYURETHANE CO., LTD.(Tianjin Plant, Suzhou Plant)
- FOSHAN MITSUI CHEMICALS & SKC POLYURETHANES CO., LTD.

- *1 Included in the data of Mitsui Chemicals, Inc. as it is located within the premises of Mitsui Chemicals, Inc.
- *2 Only GHG and energy data are included in the data of Mitsui Chemicals, Inc.
- *3 Not included in the environmental data other than GHG and energy.
- *4 Not included in the GHG and energy data.
- * The domestic non-production sites, which are not listed here, are also included in the scope of the GHG and energy data.

Safety and Prevention Data Collection Sites (Random order)



Mitsui Chemicals, Inc.

- Mitsui Chemicals, Inc.

Domestic subsidiaries & affiliates

- MT AQUAPOLYMER, INC.*
- SUN MEDICAL CO., LTD.
- SUNREX INDUSTRY CO., LTD.
- JAPAN COMPOSITE CO., LTD.
- UTSUNOMIYA CHEMICAL INDUSTRY CO.,LTD.
- SHIMONOSEKI MITSUI CHEMICALS, INC.
- ARRK CORPORATION
- MC BUSINESS SUPPORT, LTD.*
- PRIME POLYMER CO., LTD.*
- MITSUI CHEMICALS OPERATION SERVICES CO., LTD.*
- MITSUI CHEMICAL ANALYSIS & CONSULTING SERVICE, INC.*
- TOYO BEAUTY SUPPLY CORPORATION
- KYOWA INDUSTRIAL CO.,LTD.
- SAXIN CORPORATION
- MITSUI CHEMICALS & SKC POLYURETHANES INC. (JAPAN) (Nagoya Factory*, Tokuyama Factory)
- MITSUI CHEMICALS AGRO, INC.
- MITSUI CHEMICALS MC, LTD.
- MITSUI CHEMICALS SUN ALLOYS CO., LTD.
- MITSUI CHEMICALS INDUSTRIAL PRODUCTS LTD. (Saitama Factory, Ohtake Factory*)
- MITSUI CHEMICALS TOHCELLO, INC.(Ibaraki Works, Koga Manufacturing Dept., Ibaraki Works, Hamamatsu Works, Katsuta Works, Anjo Works, Nagoya Works*)
- SANSEIKAIHATSU CO., LTD.*
- YAMAMOTO CHEMICALS, INC.(Yao Plant, Omuta Plant*)
- OSAKA PETROCHEMICAL INDUSTRIES, LTD.*
- TAISHO MTC LTD.*
- NIPPON ALUMINUM ALKYLs, LTD.*
- NIPPON EPOXY RESIN MANUFACTURING CO., LTD.*
- EVOLUE JAPAN CO., LTD.*
- HOKKAIDO MITSUI CHEMICALS, INC.

Overseas subsidiaries & affiliates

- Advanced Composites Mexicana, S.A. de C.V.
- Advanced Composites, Inc.
- Anderson Development Company
- Grand Siam Composites Co., Ltd.
- MCNS Polyurethanes Malaysia Sdn. Bhd.

- Mitsui Chemicals Scientex Sdn. Bhd.
- Mitsui Elastomers Singapore Pte. Ltd.
- Mitsui Hygiene Materials (Thailand) Co., Ltd.
- Mitsui Phenols Singapore Pte. Ltd.
- Mitsui Prime Advanced Composites do Brasil Indústria e Comércio de Compostos Plásticos S.A.
- Mitsui Prime Advanced Composites Europe B.V.
- Mitsui Prime Advanced Composites India, Pvt. Ltd.
- Prime Evolve Singapore Pte. Ltd.
- PT. MCNS Polyurethanes Indonesia
- SDC Technologies Asia Pacific, Pte. Ltd.
- SDC Technologies, Inc.
- Thai Mitsui Specialty Chemicals Co., Ltd.
- MITSUI CHEMICALS FUNCTIONAL COMPOSITES (SHANGHAI) CO., LTD
- MITSUI ADVANCED COMPOSITES (ZHONGSHAN) CO., LTD.
- ZHANG JIA GANG FREE TRADE ZONE MITSUI LINK-UPON ADVANCED MATERIALS, INC.
- TIANJIN COSMO POLYURETHANE CO., LTD.
- FOSHAN MITSUI CHEMICALS & SKC POLYURETHANES CO., LTD.

* Included in the data of Mitsui Chemicals, Inc. as it is located within the premises of Mitsui Chemicals, Inc.

Reporting Period

Fiscal 2020(April 1, 2020 to March 31, 2021).

However, certain data that falls outside this coverage period has been included.

Reporting Cycle, Date of most Recent Report

Annually, October 2020

Referenced Guidelines

Global Reporting Initiative (GRI) Sustainability Reporting Standards

[GRI Standards Content Index](#)

Task Force on Climate-Related Financial Disclosures (TCFD)

[Implementing the recommendations of the TCFD](#)

External Assurance

Every year, we obtain the external assurance on each ESG data.

[Climate Change-related Verification Statement](#)

[ESG Information-related Verification Statement](#)

Verification Statement



12 January 2021
Statement No : SGS21/033

Mr. Osamu Hashimoto
President & CEO
Mitsui Chemicals, Inc.

Objective

SGS Japan Inc. (hereinafter referred to as "SGS") was commissioned by The 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 the scope of verification (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 Scope 1 and 2, and Scope3 (Category 12).
The period subject to report are from 1 April 2019 to 31 March 2020 (Scope 1, 2) and from 1 April 2018 to 31 March 2019 (Scope 3).
Refer to the attached sheet for the detailed scope of verification.

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 and review of vouchers conducted at the Ichihara Works. On-site verification and vouchers review carried out remotely by connecting the Head Office with the Nagoya Works via the Internet as special measures due to COVID-19 outbreak. Analytical procedures and interviews for the other sites within the scope of verification carried out at the Head Office.

The criteria for this review are based on the Act on the Rational Use of Energy, Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain (Ver. 2.3) and the Database of emissions unit values on the same Accounting (Ver. 2.5) and the protocol (Work flow for Scope 1, 2 and Calculation method for Scope 3) 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 & Director
Certification and Business Enhancement

Yuji Takeuchi



This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/terms_and_conditions.htm.
Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.
Any holder of this document is advised that information contained hereon reflects the Company's findings as the time of its intervention only and within the limits of Client's instruction, if any.
The Company's sole responsibility is to Client and this document does not exonerate parties to transaction from exercising all their rights and obligations under the transaction documents.
Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

The details of the scope of verification

The scope		The boundary	The assertion
1	Scope 1 and 2 (energy related CO ₂ emissions) and energy consumption, excluding the vehicles which run outside of the sites.	6 domestic works specified by the Organization.	Scope 1: 3,464,714 t-CO ₂ Scope 2: 603,977 t-CO ₂
2	Scope3 (Category 12)	Scope defined by the organization within the organization's product field (Mitsui Chemicals, Inc. brand).	Scope 3 Cat. 12: 2,431,551 t-CO ₂



ASSURANCE STATEMENT

SGS Japan's Report on Sustainability Activities in the Mitsui Chemicals Group ESG Report 2020 and available on the website.

NATURE AND SCOPE OF THE ASSURANCE

SGS Japan Inc. was commissioned by Mitsui Chemicals Group (hereinafter referred to as "the Organization") to conduct an independent assurance of its ESG Report 2020 and available on the website (hereinafter referred to as "the Report"). The scope of the assurance, based on the SGS Sustainability Report Assurance methodology, is limited to stakeholder management process, data on landfill waste, volatile organic compound (VOC) emissions, NOx emissions, SOx emissions, volume of water withdrawal (tap water, groundwater, industrial water, and seawater), COD/BOD emissions, ratio of employees with disabilities, ratio of women in management positions (manager-level or above), percentage of women among regular hires, significant occupational injury frequency and the stakeholder management systems supporting the reporting process. Refer to the attached sheet for the detailed scope of assurance.

The information contained in the Report and its presentation are the responsibility of the directors or governing body and the management of the Organization. SGS Japan Inc. has not been involved in the preparation of any of the material included in the Report.

Our responsibility is to express an opinion on the text, data, graphs and statements within the scope of assurance with the intention to inform all the Organization's stakeholders.

The SGS protocols are based upon internationally recognized guidance, including the Principles contained within the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines for accuracy and reliability and the guidance on levels of assurance contained within the AA1000 series of standards and guidance for Assurance Providers.

The Report has been assured at a moderate level of scrutiny using our protocols for:

- Evaluation of content veracity;
- AA1000 Assurance Standard (2008)+2018 addendum Type 2 evaluation of the report content and supporting management systems against the AA1000 Accountability Principles (2018);

The assurance comprised a combination of pre-assurance research, interviews with the management and the person in charge of producing the report, onsite visits, verification and confirmation of vouchers, review of related materials and records, and analytical procedures. On-site verification and vouchers review carried out remotely by connecting the Organization's Head office with Iwakuni-Ohtake Works and Nagoya Works via the Internet as special measures due to COVID-19 outbreak.

Financial data drawn directly from independently audited financial accounts has not been checked back to source as part of this assurance process.

STATEMENT OF INDEPENDENCE AND COMPETENCE

The SGS Group of companies is the world leader in inspection, testing and verification, operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; and environmental, social and sustainability report assurance. SGS Japan Inc. affirms our independence from the Organization, being free from bias and conflicts of interest with the Organization, its subsidiaries and stakeholders.

The assurance team was assembled based on the knowledge, experience and qualifications of each of the team members for this assignment, and comprised auditors registered with lead auditors of ISO9001, ISO14001, ISO45001, and lead verifiers of greenhouse gas emissions.

ASSURANCE OPINION

Within the scope of the assurance activities employing the methodologies described above, nothing has come to our attention that caused us to believe that the information and data contained within the Report does not

provide a fair and balanced description of the Organization's sustainability activities from 1 April, 2019 to 31 March, 2020.

The assurance team is of the opinion that the Report can be used by the Reporting Organization's Stakeholders. We believe that the Organization has chosen an appropriate level of assurance for this stage in their reporting.

AA1000 ACCOUNTABILITY PRINCIPLES (2018) CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

Inclusivity

The Organization has set five social contribution areas as its Corporate Mission to contribute broadly to society. In order to realize this mission, the Organization identifies key issues (Materiality) related to business activities that consider the various stakeholders. Furthermore, the Organization has established a multi-stakeholder participation process that is built into the business. This process is continuous and effective. Consequently, SGS Japan Inc. confirmed through the verification that the Organization supports the principle of Inclusivity.

Materiality

Key issues (Materiality) have been identified in consideration of the requirements of international guidelines and stakeholder engagement. The identified issues are deliberated on by external experts and the Corporate Sustainability Committee to confirm the validity. The Corporate Sustainability Committee also regularly reviews the process for identifying key issues. The identified issues are reflected in the environmental and social targets of the long-term business plan. Consequently, SGS Japan Inc. confirmed through the verification that the Organization has identified key issues (Materiality).

Responsiveness

Initiatives that address key issues (Materiality) are reported to stakeholders by disclosure in the report. The report also shows the relationship between these issues and the SDGs.

The targets and the results for identified issues are also disclosed in the report.

Consequently, SGS Japan Inc. confirmed through the verification that the Organization addresses these issues.

Impact

The performance results related to key issues (Materiality) are reported in the report, including detailed examples. The report also includes the position of health and safety in the industry and the compliance with ratio of employees with disabilities. Of the sustainability performances identified to be scope of assurance, for ratio of female, volume of water withdrawal, landfill waste, amount of air pollutants and amount of water pollutants have been disclosed changes in data over time, however, the impact on environment and society has not yet been disclosed. There is room for improvement in future disclosures.

Consequently, SGS Japan Inc. confirmed through the assurance that the Organization supports the principle of impact.

For and on behalf of SGS Japan Inc.

Senior Executive & Director

Certification and Business Enhancement

Yuji Takeuchi



AA1000

Licensed Assurance Provider
000-8

13 January, 2021

Signed:

The details of the scope of verification

The scope		The boundary	The assertion
1	Landfill waste *Limited to production and research site	①Mitsui Chemicals, Inc. 7 sites ②Domestic subsidiaries and affiliates 23 sites ③Overseas subsidiaries and affiliates 21 sites ④Global 51 sites	①0.4kt ②0.2kt ③0.2kt ④0.8kt
2	Volatile organic compound (VOC) emissions *Limited to production and research site	①Mitsui Chemicals, Inc. 7 sites ②Domestic subsidiaries and affiliates 23 sites ③Overseas subsidiaries and affiliates 21 sites ④Global 51 sites	①1,579t ②405t ③58t ④2,042t
3	NOx emissions *Limited to production and research site	①Mitsui Chemicals, Inc. 7 sites ②Domestic subsidiaries and affiliates 23 sites ③Overseas subsidiaries and affiliates 21 sites ④Global 51 sites	①2,311t ②108t ③254t ④2,673t
4	SOx emissions *Limited to production and research site	①Mitsui Chemicals, Inc. 7 sites ②Domestic subsidiaries and affiliates 23 sites ③Overseas subsidiaries and affiliates 21 sites ④Global 51 sites	①368t ②42t ③62t ④472t
5	Water withdrawal (tap water, groundwater, industrial water, and seawater) *Limited to production and research site	①Mitsui Chemicals, Inc. 7 sites ②Domestic subsidiaries and affiliates 23 sites ③Overseas subsidiaries and affiliates 21 sites ④Global 51 sites	①492.7M ³ ②19.9M ³ ③3.4M ³ ④516.1M ³
5-1	Tap water *Limited to production and research site	①Mitsui Chemicals, Inc. 7 sites ②Domestic subsidiaries and affiliates 23 sites ③Overseas subsidiaries and affiliates 21 sites ④Global 51 sites	①0.8M ³ ②0.3M ³ ③0.4M ³ ④1.5M ³
5-2	Groundwater *Limited to production and research site	①Mitsui Chemicals, Inc. 7 sites ②Domestic subsidiaries and affiliates 23 sites ③Overseas subsidiaries and affiliates 21 sites ④Global 51 sites	①0.6M ³ ②1.2M ³ ③0.0M ³ ④1.8M ³
5-3	Industrial water *Limited to production and research site	①Mitsui Chemicals, Inc. 7 sites ②Domestic subsidiaries and affiliates 23 sites ③Overseas subsidiaries and affiliates 21 sites ④Global 51 sites	①81.9M ³ ②9.3M ³ ③3.0M ³ ④94.1M ³
5-4	Seawater *Limited to production and research site	①Mitsui Chemicals, Inc. 7 sites ②Domestic subsidiaries and affiliates 23 sites ③Overseas subsidiaries and affiliates 21 sites ④Global 51 sites	①409.5M ³ ②9.2M ³ ③0.0M ³ ④418.7M ³
6	COD, BOD emissions *Limited to production and research site	①Mitsui Chemicals, Inc. 7 sites ②Domestic subsidiaries and affiliates 23 sites ③Overseas subsidiaries and affiliates 21 sites ④Global 51 sites	①884t ②68t ③1,676t ④2,628t
7	Ratio of employees with disabilities	Mitsui Chemicals, Inc. *Total for one year as of 1 March 2020	2.3%
8	Ratio of women in management positions (manager-level or above)	Mitsui Chemicals, Inc. *31 March 2020	3.0%
9	Percentage of women among regular hires	Mitsui Chemicals, Inc. *1 April 2019	Career-track administrative positions: 52% Career-track technical positions: 16% General positions: 11.4%
10	Significant occupational injury frequency	Global (By definition of organization: Mitsui Chemicals, Inc., domestic subsidiaries and affiliates, domestic construction subcontractors, and overseas subsidiaries and affiliates)	0.31