# Environment

# Promoting the Environmental Management

## Environmental Policy

Policy

### Guiding Principles

1. Mitsui & Co. believes that one of its most important management themes involves providing a positive response to environmental issues on a global group basis, in order to contribute to the creation of a future where the dreams of the inhabitants of our irreplaceable Earth can be fulfilled.
2. Mitsui & Co. will make every possible effort towards realizing a "sustainable development" which is aimed at creating a harmony between the economy and the environment on a global group basis.

In view of the above principles, and in accordance with the Action Guidelines shown below, Mitsui & Co. will design, periodically evaluate, and continually improve an adequate risk management system, including response to matters such as global warming, nature conservation with consideration given to biological diversity, and the prevention of pollution, which will cover the wide range of activities that it undertakes on a global scale. At the same time, we will strive to ensure the development and dissemination of earth–friendly technologies and further reinforce our responsibility with respect to the environment on a global group basis.

### Action Guidelines

| | |
|---|---|
| 1. Compliance with relevant environmental laws and regulations | We will comply with various relevant environmental laws and regulations, as well as all agreements signed by the company for promoting business activities. |
| 2. Efficient utilization of resources and energy* | We will strive to reduce the burden on the environment within each of our workplaces and in our business activities through the efficient utilization of resources and energy, as well as the reduction, reuse, and recycling of waste and its proper disposal. |
| 3. Environmental care for products and services offered, as well as existing and new businesses | We will give the utmost consideration to the environment to the extent technologically and economically feasible by exercising an appropriate degree of influence in enlisting the understanding and support of involved business partners, as well as evaluating the impact that we have on the environment, not only in the prevention of pollution, but on such issues as global warming and the conservation of biological diversity as well. |
| 4. Contribution to providing industrial solutions to environmental issues | We will engage in business activities with the goal of providing rational and permanent industrial solutions, and contribute to the realization of "sustainable development" by exploiting our individual abilities and the collective strengths of our organization in cooperation with our global partners. |

* This includes improvements in efficiency and reduction of the use of such resources and energy.

## Environmental Management System

System

### Environmental Management Philosophy

Mitsui & Co. maintains environmental management systems based on ISO14001 and various international guidelines as the basis for an active response to environmental and societal problems through the business activities of its global group. We acquired ISO14001 certification in 1999. Since the year ended March 2017, we have been working to strengthen our compliance with ISO14001: 2015, including integration with business processes, initiatives in response to business risks and opportunities, and an increased emphasis on stakeholder perspectives.

【Standards Covered】
ISO14001, ISO26000, the GRI Standards the Equator Principles, the World Bank Procurement Policies and Guidelines, and the IUCN Guidelines

### Environmental Management System

We have appointed an executive officer (Representative Director, Executive Vice President) who is responsible for overall environmental management, while the General Manager of the Corporate Sustainability Division supervises the operation of the Environmental Management system, including response to climate related risks including climate change. Under the oversight of the Board, other organizations, such as business units, each have their own environmental management structures established by the divisional/departmental general managers.

We set company-wide targets, and are continually improving our environmental and societal risk management framework by means of periodic reviews, including the Sustainability Committee meetings.

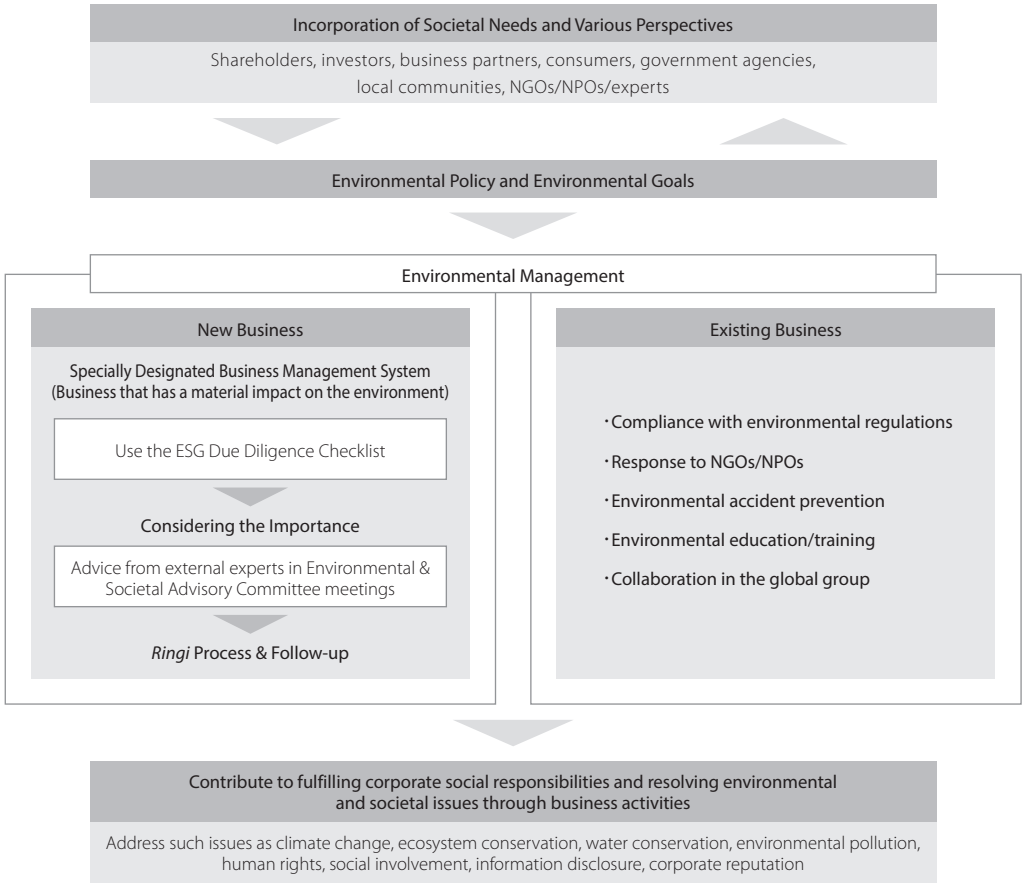
**Environmental Management System** (As of April 2019)

## Management of Environmental and Societal Risks

System

In conducting business, Mitsui has put in place company-wide system for ensuring, both at the stage of launching business as well as for projects that are already in operation, that the utmost consideration is given to the environment and society. As for the environmental and social risks, such as climate related risks, we discuss our policies and countermeasures at the Sustainability Committee, and report them to the Corporate Management Committee and the Board of Directors. After receiving approvals, the policies and countermeasures are implemented.

**Responding to Environmental and Social Risks** (as of April 2019)




## Environmental Management for New Business

System Activity

When we embark on new business investment projects, business divisions subject them to environmental, social, and governance (ESG) impact assessments, using ESG due diligence checklists that consider environmental and societal risks based on international standards. Aspects covered by these assessments include pollution prevention, climate change, ecosystems, water stress*, and human rights.

Projects that are found to have significant environmental implications then undergo internal screening under the Specially Designated Business Management System. If necessary, a meeting of the Environmental & Societal Advisory Committee will be convened, as well as a meeting of the Sustainability Committee if the project needs to be considered in relation to corporate policies on the environment. Recommendations about whether or not to proceed with projects and any improvements that may be needed are then submitted to the Board of Representative Directors, where the final decisions are made through a *ringi* deliberation process.

* The state where the annual water availability per capita is less than 1,700 tons and where people feel inconvenience in their daily life.

**P.113** Specially Designated Business Management System and Environmental & Societal Advisory Committee

## Environmental Management for Existing Business

System Activity

Mitsui ensures effective monitoring and management of environmental and societal risks for existing business operations based on the international environmental management standard, ISO14001 at the non-consolidated level. We also encourage subsidiaries engaged in activities with the potential to cause significant environmental impacts to establish their own environmental management systems based on ISO14001 or other international guidelines for environmental and social considerations. In addition, we have established comprehensive systems to ensure prompt reporting of the effects of any environmental accidents or violations of laws, regulations, or ordinances. As part of our interactions with stakeholders, we also identify business risks and opportunities through dialogue with NPOs, NGOs, academic organizations, and government agencies and consider appropriate responses.

### Management of Subsidiaries

We select subsidiaries in Japan and overseas that need environmental priority management based on comprehensive assessments that take into account such factors as the type of industry, environmental and ecosystem impacts. We promote these companies to introduce environmental management systems based on ISO14001, or on international guidelines, and we help them to build robust management systems.

As of the end of March 2019, out of the target companies, 15 subsidiaries have acquired ISO14001.

### Response to Environmental Accidents

During the fiscal year ended March 2019, there was one environment-related incident at Mitsui and its subsidiaries.

We employ various measures to prevent recurrences of environmental accidents, including the use of collections of case studies to raise employee awareness. Any accident is promptly reported to the relevant units, and comprehensive steps are taken to prevent recurrence, beginning with the identification of the actual cause of the accident and an assessment to determine appropriate corrective and preventive measures.

## Compliance with Environment-Related Laws and Regulations

System

Our efforts to meet our corporate social responsibilities and keep pace with the expansion of those responsibilities include the creation of compliance assurance mechanisms based on our environmental management system. We also use training and other methods to ensure that staff in Japan and overseas understand and comply with various environmental laws and regulations.

At the start of each fiscal year, Environmental Management Officers in each department identify environment-related laws and regulations that are relevant to the operations of their units. They also assess compliance every half-year. In addition, an internal environmental audit or environmental self-check process is carried out every year to confirm that environmental management systems are being applied effectively. Mitsui itself, as well as any subsidiaries whose activities could have significant environmental impacts, acquires certification under ISO14001 or equivalent standards. We have established effective environmental law compliance mechanisms. Furthermore, we utilize environmental law compliance checking tools to easily confirm our legal compliance.

### Energy Saving Laws and Regulations

With the idea of compliance and environmental conservation in mind, we abide by energy saving laws and regulations (laws related to rationalizing energy use), and we are promoting energy conservation in office and energy usage improvement related to transportations, thereby developing environmentally friendly business activities.

### Waste Disposal Laws

Mitsui operates in compliance with the Waste Disposal and Public Cleansing Law (also referred to as "Waste Disposal Law" or "Waste Law"). In order to properly manage disposal of industrial waste generated through logistics operations and general waste from business activities, we have formulated a workflow in connection with the handling of industrial waste and general waste from business activities and prepared FAQ documents. Such tools and documents have been utilized by relevant divisions and departments.

We also hold periodic seminars within the company to increase awareness and understanding of proper waste disposal practices, covering such matters as the selection of waste management subcontractors and manifest compilation and management.

### Other Applicable Environmental Laws and Regulations

In promoting business activities, we comply with various environmental laws and regulations.

Act on Special Measures Concerning Promotion of Proper Treatment of PCB Wastes/Act on Rational Use and Proper Management of Fluorocarbons/Water Pollution Prevention Act/Soil Contamination Countermeasures Act/Act on the Promotion of Sorted Collection and Recycling of Containers and Packaging/Act on Promotion of Recycling and Related Activities for Treatment of Cyclical Food Resources/Air Pollution Control Act/Offensive Odor Control Law/Chemical Substances Control Law/ Pollutant Release and Transfer Register Law/Poisonous and Deleterious Substances Control Act/Fire Service Act/Industrial Safety and Health Act/REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) regulations

## Acquisition of Environment-Related Certification

System Activity

**SDGs : 7.3, 8.7, 12.2, 12.8, 13.3, 14.2, 14.7, 15.1, 15.2, 15.4**

Mitsui promotes sustainable procurement in partnership with suppliers throughout the world. We work actively to achieve environment-related certification in Japan and overseas, recognizing the importance of natural actual capital. We also develop procurement mechanisms that take into account the need to address global warming and conserve biodiversity. Furthermore, at properties we own that have acquired certifications (such as DBJ Green Building certification) through listed REITs operated by asset management companies, we are working to reduce our environmental impact by promoting energy savings and more efficient energy use.

### Company-Owned Forests "Mitsui's Forests" (Japan)

Mitsui has obtained forest certification for all 74 locations of Mitsui's Forests (approximately 44,000 hectares) throughout Japan under two international standards: FSC® certification*1 (FSC®-C057355) and SGEC certification*2 (Certificate no. SGEC/31-21-1101). Forest certification is based on objective third party assessments of whether forest management methods meet economic, environmental, and social requirements (i.e. principles and standards). Currently, Mitsui is the only private company with large-scale forest holdings in Japan covering over 10,000 hectares that has obtained certification under both of these systems. With respect to both FSC® certification and SGEC certification, Mitsui has received Forest Management (FM) certification, while Mitsui Bussan Forest, a subsidiary, has received Chain of Custody (CoC) certification for the processing and distribution of cut lumber; Mitsui & Co. Group has thereby established a thoroughly inclusive chain of certifications that covers the entire supply chain. Notably, Mitsui is the largest supplier of domestic FSC®-certified wood in Japan.


*1 FSC® certification is based on international standards established by the Forest Stewardship Council®, a non-profit committee-type organization that administers an international forest certification system.
*2 This certification system was developed by the Sustainable Green Ecosystem Council, a general incorporated foundation, by adapting the sustainable forest management philosophy promoted globally as the "Montreal Process" to the situation in Japan. In 2016, it became possible to distribute SGEC certified timber as timber certified under another international forest certification, the Program for the Endorsement of Forest Certification Schemes (PFEC), following reciprocal recognition between the two systems.

### Forest Resources Business (Australia)

Along with business partners, Mitsui is involved in plantation business in Australia with a scale of approximately 23,000 hectares. The goal is to ensure stable procurement of paper manufacturing resources. The business has acquired FSC®/CoC certification (Forest Resources Marketing Dept., Living & Environmental Business Div., Mitsui & Co.: FSC®-C104107, Mitsui Bussan Woodchip Oceania Pty. Ltd.: FSC®-C107463), as well as PEFC/CoC certification. This allows us to promote the responsible management and handling of forest resources. Moreover, our subsidiary Mitsui Bussan Packaging Co., Ltd. holds FSC®/CoC certification (FSC®-C009939). This allows us to link certified paper supply chains and further promote responsible management of forest resources.

### Feed Business (Japan)

Our affiliated company, Feed One Co., Ltd., manufactures and sells organic animal feed products produced using methods designed to minimize the environmental load, in compliance with the Japan Agricultural Standards (Notification 1607 of the Ministry of Agriculture, Forestry and Fisheries).

有機飼料 JAS エコデザイン N006325J07

### Palm Oil Import Business (Malaysia)

Mitsui and our investee, Wangsa Mujur Sdn. Bhd. have acquired certification from the Roundtable on Sustainable Palm Oil (RSPO), *3 a nonprofit organization that promotes the production and use of sustainable palm oil. The RSPO stipulates the legal, economic, environmental, and social conditions required for sustainable palm oil production in 8 principles and 43 criteria, and both Mitsui and Wangsa Mujur operate in accordance with its policy. In the fiscal year ended March 2019, RSPO-certified palm oil accounted for 3.6% of palm oil handled by Mitsui, and we aim to increase the ratio of sustainable certified palm oil including RSPO-certified, that we procure to 100% by 2030.

CERTIFIED SUSTAINABLE PALM OIL RSPO 2-0082-08-100-00

*3 RSPO certification aims to advance the production, procurement, and use of sustainable palm oil, and lessen the impact and load on the environment of producing countries and neighboring communities.

**Mitsui's Handling Volume of RSPO-Certified Palm Oil and Its Ratio to Total Handling Volume**

| | FY2018 | FY2019 |
|---|---|---|
| Handling volume of certified palm oil | 14,500t | 21,500t |
| Total handling volume of produced/used/processed palm oil | 520,000t | 600,000t |
| Ratio | 2.8% | 3.6% |

### Salmon Farming Business (Chile)

Mitsui is a shareholder and participant in the business operations of Salmones Multiexport S.A. ("Salmex"), a major salmon farming, processing, and sales company in Chile. This company has obtained certification as a sustainable aquaculture business under the Best Aquaculture Practices (BAP) ® system*4, which focuses on the five key areas of environmental conservation, social responsibility, animal welfare, food safety, and traceability. Salmones Multiexport also achieved Aquaculture Stewardship Council (ASC) certification*5 for two of its sites in 2017, and is now preparing to obtain certification for additional locations. Of the total amount of fishery product sales of Salmex in the fiscal year ended March 2019, products that have acquired BAP certification accounted for 93%.

BEST AQUACULTURE PRACTICES CERTIFIED ® FARMED RESPONSIBLY asc CERTIFIED ASC-AQUA.ORG TM

*4 This certification system is planned and administered by the Global Aquaculture Alliance (GAA), a US-based NGO dedicated to the establishment and spread of responsible aquaculture. The system certifies each component of the aquaculture value chain including hatchery, feed mill, farm, and processing plant. The program, which is represented by the BAP eco-label, is supported by numerous retailers and commercial food suppliers, especially in North America.
*5 The aim of the ASC certification system is to ensure that markets and consumers are supplied with responsibly produced aquaculture products, by certifying aquaculture businesses that show consideration for local communities and do not impose a major load on the environment. Qualifying products are instantly recognizable thanks to the use of eco-labels.

**Salmex's Handling Volume of BAP-Certified Salmon and Its Ratio to Total Handling Volume**

| | FY2019 |
|---|---|
| Handling volume of BAP-certified salmon | 84,283t |
| Total handling volume of fish and seafood produced/used/processed | 90,626t |
| Ratio | 93% |

### Food Importation and Sales (U.S.)

Our subsidiary, Mitsui Foods, Inc. (MFI), imports and sells canned tuna certified under the Marine Stewardship Council (MSC) system*6, the aim of which is to ensure the sustainable supply of seafood over the long-term future. MFI has also obtained MSC Chain of Custody certification, thanks to its careful management at the distribution stage.

*6 The aim of this system is to ensure the sustainable utilization of marine resources. Certification is limited to marine products that are harvested appropriately in terms of catch size, timing, methods, etc., and that are processed and distributed appropriately. The MSC label (Marine Ecolabel, MSC Ecolabel) indicates that products have been produced responsibly from the perspective of marine resources and the ocean environment.

### Shrimp Exporting Business (Vietnam)

As a shareholder, Mitsui participates in the management of Minh Phu Seafood Joint Stock Company, a Vietnamese company engaged in shrimp processing and exporting. The company has obtained environment-related certification, under the ASC, BAP and Global Good Agricultural Practice (GAP) systems*7, to meet the needs of buyers and consumers seeking products that have been produced responsibly with care for the environment.

*7 Certification under these aquaculture systems indicates that a company has met global standards for food safety and sustainable production management. The full production chain is verified from broodstock, farming, feed and processing. Currently there are 35 countries implementing this standard for 30 species of finfish, crustaceans and mollusk worldwide.

### Green Buildings (Japan)

Listed REIT Japan Logistics Fund, Inc. is operated by Mitsui & Co. subsidiary Mitsui & Co., Logistics Partners Ltd. It has acquired DBJ Green Building certification*8 at twelve of its owned properties, including some with five-star certification, which is the highest certification class in Japan. MIRAI Corporation is a listed REIT operated by Mitsui Bussan & Idera Partners Co., Ltd., which is a Mitsui associated company. It has also acquired DBJ Green Building certification at one of its properties and LEED® certification*9 at another of its properties. Owning these types of properties helps us to promote measures to reduce our impact on the environment, and contributes to reduced energy usage and $CO_2$ emissions.

*8 DBJ Green Building is a certification system for assessing real estate that takes the environment and society into consideration. In addition to assessing buildings' environmental performance, it provides an overall assessment of how buildings meet the needs of a variety of stakeholders, including matters such as disaster prevention and consideration for the local community. It provides assessments and certifications for real estate that meet the needs of both society and the economy.

*9 LEED® has been developed and operated by the U.S. Green Building Council® (USGBC®) as a certification system for assessing the environmental performance of buildings and the use of premises. The LEED® certification system has multiple assessment categories for assessing the environmental performance of buildings and the use of premises from a variety of different perspectives. LEED®, and its related logo, is a trademark owned by the U.S. Green Building Council®and is used with permission.

**Japan Logistics Fund, Inc.**

| Certifications received | Rank | Property |
|---|---|---|
| DBJ Green Building Certification | 2016★★★★★ | M-24 Shin-Koyasu Logistics Center |
| | 2018★★★★ | M-6 Funabashi Nishiura Logistics Center |
| | 2016★★★★ | M-11 Yachiyo Logistics Center |
| | 2018★★★★ | M-12 Yokohama Fukuura Logistics Center |
| | 2018★★★★ | M-13 Yachiyo Logistics Center II |
| | 2018★★★★ | M-19 Souka Logistics Center |
| | 2018★★★★ | M-26 Sagamihara Logistics Center |
| | 2018★★★★ | M-31 ShinKiba Logistics Center II |
| | 2018★★★★ | M-32 Yokohama Machida Logistics Center |
| | 2016★★★★ | T-8 Tajimi Logistics Center |
| | 2018★★★ | M-5 Urayasu Chidori Logistics Center |
| | 2018★★★ | M-22 Musashimurayama Logistics Center |

**MIRAI Corporation**

| Certifications received | Rank | Property |
|---|---|---|
| DBJ Green Building Certification | 2018★★★ | Shinagawa Seaside Parktower |
| LEED® Certification | Silver Class | MIUMIU Kobe |

## Environment-Related Training

System Activity

As we work to accelerate environmental initiatives across the global group, it is vital that we raise the environmental awareness of each of our employees at all levels. We conduct seminars and training sessions to promote these messages internally.

### Regular Seminars and Training Sessions

We work to raise awareness of environmental issues among officers and employees of Mitsui and its subsidiaries and affiliated companies through regular seminars, environmental law training sessions, and ISO14001 training programs. We also regularly publish in-house environmental and social newsletters through the intranet.

| Awareness activities (seminars, etc.) | | Environmental auditor training | |
|---|---|---|---|
| At time of induction | Induction Course (Environment) for Temporary Staff<br>Induction Course (Environment) for Contract Employees/Second-ees working at Mitsui | ISO14001 | ISO14001 Provisional Auditor Training<br>ISO14001 Lead Auditor Training |
| Continuing education | Environment Month (Seminars, lectures, etc.)<br>Environment Seminar<br>Environment-related Newsletter | Environmental Management | Environmental Management Officers Induction Course<br>Training Seminars on Environmental Laws and Regulations<br>Lectures on industrial waste and field trips to waste processing facilities |

### Training Seminars on Environmental Laws and Regulations

We continually hold seminars regarding environmental laws and regulations for officers and employees of Mitsui and its subsidiaries and affiliated companies regarding environmental laws and regulations. In the fiscal year ended March 2019, approximately 160 people participated from Mitsui & Co. group companies. We also conducted a separate training seminar on Japan's Waste Management and Public Cleansing Law, providing classroom training focused on precautions in regard to complying with the Law, as well as training that covered procedures for on-site checks at waste disposal facilities and actual visits to such facilities.

Employees attend lectures about industrial waste and visit disposal facilities and plants

**Lecture and Training Sessions Held in FY 2019**

| Title | Number of times per year | Target audience | Outline |
|---|---|---|---|
| Environmental Laws and Regulations | Held twice approx. 160 participants | Mainly officers and employees of Mitsui and its affiliated companies | Basic knowledge on environmental laws and regulations, recent trends, key law amendments, etc. |
| Lecture on Environmental Waste and Tour of Processing Facility | Held twice approx. 90 participants | Officers and employees of Mitsui and its affiliated companies | Lecture on the responsibilities of Generator (waste-disposing parties) and precautions related to industrial waste. The tour of the processing facility aims to promote understanding of the importance and efficacy of on-site verification. |
| Temporary Staff Induction Training (Environment) | Held 8 times approx. 30 participants | Temporary employees | The programs include explanations on the environmental policy of Mitsui as a part of introductory training provided by the Human Resources and General Affairs Division to inform newly hired employees about Mitsui's management philosophy (MVV) and rules and regulations, the importance of compliance, and other matters. |
| Induction Training (Environment) for General/ Seconded Contract Staff | Held 4 times approx. 100 participants | General and seconded contract employees | |

### Mitsui Environment Month

As part of the environmental education activities for officers and employees of Mitsui and its affiliated companies, a variety of programs are offered during Mitsui Environment Month, which is held each year. The following seminar took place during Mitsui Environment Month 2018.

**Mitsui Environment Month Program "We borrow the Earth from our descendants. "**
**Speaker: Mr. Soh Kuramoto, playwright. (attended by approximately 200 people)**

For Mitsui Environment Month Program in the fiscal year ended March 2019, Mitsui invited Mr. Soh Kuramoto as a speaker, who implements an environmental education program in Furano City, Hokkaido, and for many years has called for action on environmental problems as issues that directly affect everyone. Presentation, which ran beyond the allotted time, Mr. Kuramoto covered various perspectives, including the significance of forest logging, the history heading toward oil depletion, the impact of fossil fuel resource and food wastage on humanity, and the importance of air and water to people. There were comments from the audience including the following: "Fossil fuels are finite resources. We really need to think about what we can do and take action amid the trend toward mass-consumption of energy." "When we think about our future work, we should never forget to be thankful to the Earth." "The speech was entitled 'We borrow the Earth from our descendants.' That's a novel perspective. Usually we tend to think that something is important because we inherited it from our ancestors. I was deeply impressed by the idea that we must leave the Earth in good condition for the future." "I was surprised to hear about the amount of fossil fuels remaining on the Earth. Food waste has become the focus of concern. In that context, I was very interested in the story about the basic living needs of members at the Furanojuku (environmental education program ran by Mr. Kuramoto) in the old days."

# Responding to Climate Change

## Our Approach to Climate Change Risks and Opportunities

Policy

In December 2018, Mitsui & Co. declared its support for the Task Force on Climate-related Financial Disclosures as part of our response to the growing importance of business sector action on climate change for the sustainability of society, as evidenced by the adoption of the Sustainable Development Goals (SDGs) and the Paris Agreement by the United Nations.

One of the priorities defined as part of Mitsui's Materiality is the creation of an eco-friendly society. We recognize global environmental impacts, including climate change, as risks that could threaten the sustainable growth of society and Mitsui. On the other hand, response to climate change will also bring new business opportunities in such areas as low-carbon energy, environment-friendly infrastructure and products, and innovative services based on digital technology. We regard both economic development and action on climate change as essential to sustainable social growth, and we will continue to make maximum use of Mitsui global group integrated strengths toward the achievement of the goal through our business activities in cooperation with various stakeholders.

As part of this commitment, In July 2018, Mitsui announced that it would no longer accumulate new thermal coal assets out of coal business that discharges a large amount of greenhouse gas. We also set the target of increasing the portion of our renewable energy based power generation capacity to 30% by 2030. Furthermore, we identify risks and opportunities in the business environments of each of our business units and formulate sustainable growth strategies. From the perspective of each of our following Materiality, "secure sustainable supply of essential products," "enhance quality of life," and "create an eco-friendly society," Mitsui will continue to work toward the achievement of both economic development and the creation of a low-carbon society by improving the efficiency of existing business operations, and promoting initiatives based on innovative technologies and business models.

We also actively participate in climate change sectional meetings hosted by the government ministries and agencies concerned, as well as related study groups and working groups to facilitate the recognition of issues on a global level and deepen discussions with member companies. We reflect what we have learned through these activities in our business initiatives.

## Accelerating our Response to Climate Change

System

Mitsui established the Sustainability Committee as a subsidiary organization of the Corporate Management Committee to gather information about the sustainability of our business activities, carry out monitoring, and provide advice to the Corporate Management Committee. In relation to climate change, the Sustainability Committee works with business units to identify risks and opportunities and monitor frontline responses. The committee is also working to ensure that it can appropriately respond to requests from external stakeholders for information disclosure. The content of deliberations by the Sustainability Committee is regularly reported to the Corporate Management Committee and the Board of Directors, and is reflected in the discussions of Mitsui's management policies.

**P.7** Sustainability Framework

## Building Risk Resilience and Capturing New Growth Opportunities

System Activity

**SDGs: 13.3**

Under the Specially Designated Business Management System, business projects with significant environmental implications are screened according to various criteria, including countermeasures against associated environmental loads, and compliance with environmental laws and guidelines, as part of our efforts to minimize risks from the project formation stage. To aid our efforts to optimize projects from objective and specialized perspectives, we have also established the Environmental & Societal Advisory Committee, with members consist of experts and attorneys from outside of the company, to advise the Sustainability Committee.

We analyze potential impacts on the business projects that we promote and operate, with reference to climate change scenarios developed by internationally recognized organizations, such as the International Energy Agency (IEA). Because Mitsui has business operations in many countries and regions worldwide, the profitability and sustainability of our activities can be significantly impacted by climate change-related policies in those countries and regions. Using the global networks that we have built through our business activities over many years, we monitor, in a timely manner, policies in various countries and regions, and trends relating to the stakeholders who influence those policies. Such information is reflected in our decision-making processes.

As a company engaged in diverse business activities, Mitsui continually reviews its portfolios to minimize climate change risks. We also flexibly take up new business challenges made possible by our wide-ranging business development activities, based on long-term perspectives covering at least ten years.

### Major Climate Change Risks and Their Implications for Our Activities

We are preparing for anticipated climate-related risks that could affect our business activities, as listed below, by restructuring our portfolios in each area to enhance climate change resilience, by monitoring policies, laws, and regulations in each country and region, and by developing new goods and services that are suitable for a low-carbon society.

| | | |
|---|---|---|
| Transition risks | Policy and legal risks | Reduction of demand for fossil fuels and impairment of the value of our existing interests due to the shift to low-carbon energy |
| | | Impact on earnings and our assets due to changes in the energy and power source mix affected by shifts in national and regional policies and the introduction of new laws and regulations, etc. |
| | Technology risks | Impact on supply and demand in markets for existing commodities and services due to the introduction of new technologies geared toward climate change |
| | Market risks | Business financing risks due to the adoption of de-carbonization policies by financial institutions and insurance companies |
| Physical risks | | Interruption of the operations of project companies in Australia and the United States, etc., due to cyclones and hurricanes |

**P.51** Environmental Performance Data

## Environment-Related Business

Policy

Our environmental policy calls for action on global warming and other aspects of climate change issues. Our business activities are directed toward both economic development and response to climate change issues.

## Renewable Energy Projects

Activity

**SDGs : 7.2**

We are developing our renewable energy business and expanding our capacity in this area as part of our electric power generation business. As of March 31, 2019, renewable energy, including hydroelectric power, accounted for approximately 15% of Mitsui's total power generating capacity of 10.4GW, and we are aiming to increase the share held by renewable energy to 30% by 2030.

| Type | Project name | Country | Generation capacity/scale |
|---|---|---|---|
| Solar power generation | Haneda Solar Power Co., Ltd. | Japan | 2MW |
| | Tottori Yonago Solar Park | Japan | 43MW |
| | Izumiotsu Solar Park | Japan | 20MW |
| | Tomatoh Abira Solar Park | Japan | 111MW |
| | Kumamoto Arao Solar Park | Japan | 22MW |
| | Omuta Miike Port Solar Park | Japan | 20MW |
| | Hamamatsu Solar Park | Japan | 43MW |
| | Tahara Solar-Wind Joint Project | Japan | 50MW |
| | Nishi-Sendai (Rich Solar) | Japan | 19MW |
| | Brockville Solar | Canada | 10MW |
| | Beckwith Solar | Canada | 10MW |
| | Kua Solar | China | 13MW |
| | METRO Jinan | China | 1MW |
| | Metro Cixi | China | 1MW |
| | Bohui-2 | China | 12MW |
| | Bangkhenchai | Thailand | 8MW |
| | Chiangrai | Thailand | 8MW |
| | Nakorn | Thailand | 6MW |
| Solar thermal power generation | Guzman Energia | Spain | 50MW |
| | Juneda Solar | Spain | 1MW |
| Wind power generation | NS Wind Power Hibiki | Japan | 15MW |
| | Tahara Solar-Wind Joint Project | Japan | 6MW |
| | Wind Farm Hamada | Japan | 48MW |
| | Canunda | Australia | 46MW |
| | Willogoleche | Australia | 97MW |
| | Norway Wind | Canada | 9MW |
| | SOP Wind | Canada | 40MW |
| | West Cape Wind | Canada | 99MW |
| | Caribou Wind | Canada | 99MW |
| | Harrow Wind | Canada | 40MW |
| | PAR Wind | Canada | 49MW |
| | Plateau Wind | Canada | 27MW |
| | ELSC Wind | Canada | 99MW |
| | Erieau Wind | Canada | 99MW |
| | Cape Scott Wind | Canada | 99MW |
| | Eoliatec del Istmo | Mexico | 164MW |
| | Eoliatec del Pacifico | Mexico | 160MW |
| | Zajaczkowo Windfarm | Poland | 48MW |
| | Los Hercules | Argentina | 97MW |
| Biomass power generation | Green Power Ichihara | Japan | 50MW |
| | Tomakomai Biomass Power Generation Co., Ltd. | Japan | 6MW |
| | Hokkaido Biomass Energy Co., Ltd. | Japan | 2MW |
| Run-of-river hydroelectric power generation | Energia Sustentavel do Brasil | Brazil | 3,750MW |
| | Spanish Hydro | Spain | 84MW |
| Hydropower generation | Nam Ngum 2 | Laos | 615MW |
| | Xayaburi | Laos | 1,285MW |
| Geothermal power generation | Iwate Geothermal Power Co., Ltd. | Japan | 7MW |

## Modal Shift

Activity

**SDGs : 3.9, 11.6, 13.3**

In addition to the railway leasing business that we have been engaging in over many years, we have also been actively launching and operating various railway projects, thereby developing and improving social infrastructure while promoting modal shifts to contribute to green logistics. Of the rail networks in whose operation Mitsui was participating as of March 31, 2019, the freight railroad network had a total route length of 10,700 kilometers, and the passenger network had a total route length of 1,922 kilometers.

| Business investment (Company name) | Main business | Country | Quantitative effects/project size |
|---|---|---|---|
| MRC (Mitsui Rail Capital, LLC) | Freight wagon leasing business | U.S. | Four global bases<br>(US, Brazil, Europe, Russia)<br>Freight wagons: approx. 15,000<br>Locomotives: approx. 340 |
| MRC-LA (Mitsui Rail Capital Participacões) | Freight wagon leasing business | Brazil | |
| MRCE (Mitsui Rail Capital Europe B.V.) | Locomotive leasing business | Europe | |
| MRC1520 (MRC1520 LLC) | Freight wagon leasing business | Russia | |

| Business investment (Company name) | Main business | Country | Quantitative effects/project size |
|---|---|---|---|
| VLI S.A. | Freight transportation business | Brazil | Operating a railway network of approx. 10,700 km, and port terminals |
| SuperVia (Supervia Concessionária de Transporte Ferroviário S.A) | Passenger railway transportation business Rio de Janeiro suburban railway) | Brazil | Transportation record: Approx. 550,000 passengers per day (December 2018) |
| Carioca (Concessionária do VLT Carioca S.A) | Passenger railway transportation business (Rio de Janeiro Light Rail Train) | Brazil | Transportation record: Approx. 80,000 passengers per day (December 2018) |
| Via Quatro (Concessionária da Linha 4 do Metrô de São Paulo S.A.) | Passenger railway transportation business (São Paulo metro line no. 4) | Brazil | Transportation record: Approx. 710,000 passengers per day (December 2018) |
| Abellio Transport Group Ltd. | Passenger railway transportation business (East Anglia) | U.K. | Transportation record: Approx. 350,000 passengers per day (December 2018) |
| | Passenger railway transportation business (West Midlands) | | Transportation record: Approx. 200,000 passengers per day (December 2018) |
| Car Club Private Ltd. | Car sharing business | Singapore | Fleet of cars: Approx. 230 |

## Other Business Initiatives for Responding to Climate Change Issues

Activity

**SDGs : 7.1, 7.2, 7.3, 7.a, 9.4, 11.6, 11.7, 15.2**

In response to climate change issues, we are also actively engaging in various other business initiatives that could lead to improvement in energy consumption efficiency, such as the mini-grid business for stably supplying electric power using renewable energy, and the reduction of $CO_2$ emissions.

| Business | Description |
|---|---|
| Solar power generation monitoring service | Mitsui Knowledge Industry Co., a consolidated subsidiary, offers cloud-based remote monitoring services to check the operation status of solar power generation facilities and detect any irregular behavior or malfunction. |
| Key parts for wind-power equipment | Through our investment and participation in the Spanish company GRI Renewable Industries, the biggest wind-power flange manufacturer in the world, we are supplying major wind-power generation equipment manufacturers with the steel towers used to support wind turbines, and large-scale flanges which are key components of those towers. |
| Flare gas reduction | Mitsui is implementing a project to reduce flare gas emissions in the LNG business in which it participates. Through this project, we have modified LNG production equipment to reduce the amount of flare gas produced during LNG production. |
| Demonstration project for oxyfuel and CCS technologies | Mitsui participated in the Callide Oxyfuel Project, a public-private initiative by Japan and Australia with the objective to realize zero-emission electricity generation at coal-fired power stations. The project uses carbon capture and storage (CCS) technology called oxyfuel technology for recovering $CO_2$ from coal-fired power stations and storing it underground. This demonstration project was completed successfully, and we are now exploring the potential for commercial utilization. |
| Distributed power generation | Through our equity participation in OMC Power, a leading company in the mini-grid business, we are contributing to the stable supply of electric power in un-electrified regions in India, primarily using renewable energy, thereby reducing $CO_2$ emissions. |
| | Through our equity participation in the solar home system business of M-KOPA Solar, we have reduced the use of kerosene, which is a fossil fuel, by supplying electric power to un-electrified regions in Africa, contributing to the mitigation of the environmental load. |
| | Through our equity participation in Ecogen Brasil Soluções Energéticas, a specialist provider of energy services in Brazil, we are providing distributed power sources and energy management services to commercial and industrial power users. |
| Distributed power generation | We are expanding our distributed solar power development activities and promoting next-generation energy management services using storage batteries, especially in the United States. |
| Electric power system control solutions | Through our investment participation in PXiSE Energy Solutions which provides software used to control storage batteries and electric power systems, we are maximizing power supply ratio, including those based on solar and wind energy and other renewable energy, thereby ensuring the stable and efficient supply of energy. |
| Smart cities | We are implementing an energy-efficient smart city project in Malaysia. |
| Shinbashi Tamura-cho district redevelopment | Our subsidiary Mitsui & Co. Real Estate is participating in the Shinbashi Tamura-cho district redevelopment project. Innovative technologies planned for introduction include the installation of solar panels, rooftop greening, and the use of paving materials designed to reduce heat absorption. |
| Cloud-based energy conservation services | Our subsidiary Mitsui Knowledge Industry Co. has been providing cloud-based energy management systems, including automated remote control of air conditioning systems through utilization of IT, mainly to commercial facilities (introduced at 610 locations in Japan). |
| Air conditioning remote monitoring and control services | Through Air as a Service (AaaS), which we established jointly with Daikin Air Techno, we provide remote management of air conditioning, realizing an approximately 20% reduction in electric power consumption (the reduction varies depending on the type of building). |
| Industrial data management | Through the U.S. company OSIsoft, which develops and sells IoT data management software to industrial users, we are supporting the improvement of energy efficiency by visualizing facility operating data in a wide range of industries, including electric power and oil & gas. |
| Introduction of BEMS | In Bussan Building (a rental office building in Nishi-Shimbashi, Minato-ku, Tokyo) owned by our subsidiary Mitsui & Co. Real Estate we have improved energy conservation performance by installing insulation in exterior walls by using double-glazing and introducing building energy management system (BEMS) technology to realize a system for controlling the electric power used for air conditioning, lighting, and other purposes and visualizing the energy consumption. |
| Local energy production for local consumption | In November 2017, we concluded an agreement with Arao City and Global Engineering Co. (GL) concerning urban development, with particular emphasis on the effective utilization of district energy systems. In December 2017, we established Ariake Energy Co. as a 50-50 joint venture with GL. In May 2018, Ariake Energy completed its registration as a retail electric power supplier and began to retail electric power to public facilities and local businesses in Arao City from September 2018. |
| Automotive parts (multi-material products) with enhanced environmental performance | Through our equity participation in the Spanish company Gestamp Automoción, we are supplying, on a global scale, automotive parts that can contribute to reducing fuel consumption through vehicle weight reduction. |
| | Through our equity participation in Mitsui Prime Advanced Composites Europe B.V., we are supplying European customers with PP compounds for use in bumpers and other parts, thereby contributing to vehicle weight reduction. |
| Supply of parts for electric vehicles (EVs) | We are developing an integrated business for EVs, encompassing all stages from the handling and processing of electrical steel sheet for use in motors, to the manufacture and sales of motor cores and motors. |
| Electric power services using electric vehicles (EVs) | Through our equity participation in The Mobility House, we are developing an innovative business model in which EV batteries are used to stabilize the power transmission grid, providing an additional source of income for EV owners. |
| Secondary battery materials | We have built a stable production and supply platform for secondary battery materials, especially for lithium-ion batteries. |
| Battery systems | Equity participation in French company Forsee Power, which manufactures and sells battery packs |
| Development and production of electric and fuel cell-powered buses | Through our equity participation in Portuguese electric bus manufacturer CaetanoBus, we are promoting the development and production of electrical and fuel cell-powered buses that have a reduced environmental load. |
| Tanks for natural gas- and fuel cell-powered automobiles | We are engaged in the importation and sales of vehicle tanks for natural gas and fuel cell-powered vehicles, tanks for compressed hydrogen transport vehicles, and accumulators for compressed hydrogen stations. |
| Hydrogen supply chain | We are promoting an international hydrogen supply chain on a trial basis in partnership with Chiyoda Corporation, Mitsubishi Corporation, and NYK Line. In 2020, hydrogen sourced in Brunei will be shipped to Japan in liquid form under normal temperature and pressure conditions, which will then be returned to gaseous form at a coastal location in Kawasaki City, from where a maximum of 210 tons per year (sufficient to fill 40,000 fuel cell vehicles) will be supplied to the users. |

| Business | Description |
|---|---|
| Marine transportation matching platform | We are contributing to energy conservation and the reduction of GHG emissions and ballast voyages through efficient vessel deployment made possible by maruFreight platform that optimally matches tramp vessels with bulk cargoes worldwide. |
| Engineering services | We are investing and participating in AZAPA with the aim of exploring initiatives leading to the provision of the functions needed by Japanese manufacturing industries in new fields of technology, such as EVs and autonomous driving. |
| Fuel efficiency improvement | In addition to the sale, ownership, and operation of highly fuel-efficient eco-ships, we are also supporting the development and introduction of fuel-efficient aircraft and engines. |
| Development of microbial gas fermentation technology | Through our equity participation in LanzaTech, which is developing technology to produce fuels and chemicals through the microbial fermentation of CO, $CO_2$, and other gases, we are building global business that will contribute to the reduction of GHG emissions and the creation of a circular economy. From May 2018, a fuel ethanol plant utilizing technology of LanzaTech commenced commercial operations in Hebei Province, China, using waste gas from steel works as its raw material. |
| Green chemicals | We are developing green chemicals business in the field of oleochemicals, using natural fats and oils as raw materials. |
| Solar marine salt production | Through Shark Bay Salt Pty., we own and operate two salt fields at Shark Bay and Onslow in Australia. Over a period of 2-3 years, they produce solar marine salt from water taken from the nearby ocean, using the natural power of the sun and wind, with almost zero emission of $CO_2$. |
| Carbon credits | Through our equity participation in the Jirau hydropower project in northern Brazil, we have acquired emission rights for 6 million tons of $CO_2$ per year. |
| | We have completed registration of a J-Credit project involving the installation of a biomass cogeneration system by Konan Utility Co. (Kobe City, Hyogo Prefecture). Over an eight-year period starting in 2020, we will acquire J-Credits for 36,000 tons of $CO_2$ per year. We will also create and sell J-Credits procured through the installation of energy-efficient equipment and other activities. |
| | We are working with the JCM bilateral credit mechanism to implement a Cambodian REDD+ project (a mechanism to provide economic incentives, including carbon credits, for a reduction in GHG emissions achieved through initiatives to prevent forest depletion and deterioration in developing countries). |
| | Invests in New Forests Pty. which maximizes the value of its sustainable forestry asset through a combination of timber harvest and carbon-offset sales, which as a result contributes to the prevention of global warming. |
| Solar power funds | Our subsidiary Mitsui & Co. Alternative Investments is contributing to the nationwide spread of solar power through providing investment funds focusing on solar power to Japanese investors. |

### Mitsui's Forests Accumulate and Absorb 560,000 tons of Carbon Dioxide Annually

It is estimated that Mitsui's Forests currently accumulate and absorb approximately 560,000 tons* of carbon dioxide per year. We contribute to the mitigation of climate change risk through sustainable forest management.

*This estimation is based on "IPCC Guideline for National Greenhouse Gas Inventories" Tier 1.

## Our Stories: Create an eco-friendly society

P.27 Aiming to Establish a Low-Carbon Society, and Using New Technology to Blaze a Trail to the Future

SDGs: 3.9, 7.1, 7.2, 7.b, 9.4, 11.6, 13.2



# Responding to Water Resource Problems

Reflecting the growing interest from a global perspective in the water-related problems, Mitsui & Co. is engaging in a water project which promotes the conservation and the sustainable use of water resources. In addition, we conduct investigations with experts for new business investment projects that are likely to have a significant impact on the environment. For risk assessments in water-stressed areas, in particular, we use the portal site Aqueduct from the World Resource Institute (WRI) to monitor and analyze water risks, not only for new business but also for our existing business, with the aim of reducing water stress.

### Water Supply Business in Thailand—Ensuring a Reliable Supply of Safe Water to Over One Million People

Activity

SDGs: 6.1

Mitsui is participating in a water supply business to serve the northern and western suburbs of Bangkok through the company TTW PCL ("TTW"), in which Mitsui invested jointly with the CH Karnchang Group, a major Thai construction firm. Using water taken from the Tha Chin River and the Chao Phraya River, TTW's water purification plants have total capacity for the production of approximately one million cubic meters of clean water per day, and reliably supply safe water to over one million people.

TTW's water purification plant

### Contribution to Safeguarding the Water Supply and Preventing Floods through Mitsui's Forests SDGs: 15.1

Approximately 130 $km^2$ (13,000 hectares) of Mitsui's Forests (74 locations in Japan, approx. 44,000 hectares in total) are officially designated as Water Conservation and Water Safety Forests, important for safeguarding the water supply and preventing floods and landslides. Leaf soil reduces the occurrence of floods by storing rainwater, and also plays a role in saving water resources, purifying water, and regulating water volume.

Tashiro forests designated as water conservation and water safety forests

# Resource Recycling Initiatives

Efficient utilization of resources and energy is a key part of Mitsui & Co.'s environmental policy. Under our comprehensive energy and environmental strategy, we engage in resource recycling (ground resources). We are also working to provide industrial solutions to environmental problems through the effective utilization of waste products and by-products.

## Mitsui & Co.'s Business Initiatives Relating to Resource Recycling

Activity

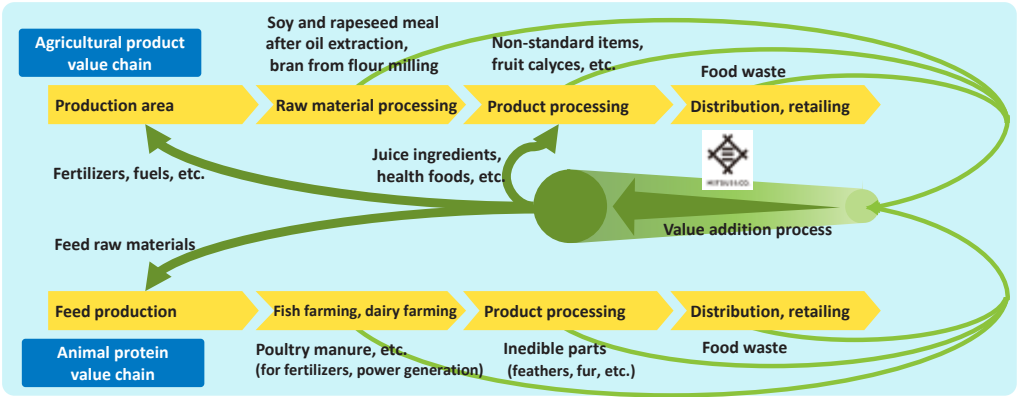
**SDGs : 12.2, 12.5**

| Activities | | Country | Scale |
|---|---|---|---|
| Reduce/sharing economy | Promotion of the sharing economy through the smartphone flea-market app business of our investee, Mercari | Japan | Over 70 mil. downloads in Japan (100 mil. in Japan and the U.S. combined)<br>Gross transactions: ¥500 billion (Apr. 2018-Mar. 2019) |
| Reuse | Effective utilization of waste by our subsidiary Mitsui Norin through the utilization of tea leaf residues as a raw material for fertilizers | Japan | Waste reduction: 920.4 t/year (FY2019) |
| Reuse | Production of juice from fruit pulp attached to calyces (sepals) from cut strawberries by our subsidiary Bussan Food Materials | Japan | Waste reduction: 13 t/year (FY2019) |
| Reuse/recycle | Effective utilization of waste by our subsidiary Prifoods, through the commercial use of poultry manure as a fertilizer, or (after carbonization) as a snow melting agent | Japan | Waste reduction: 71,000t/year (FY2019) |
| Reuse/recycle | Promotion of initiatives relating to battery lifecycles, including the reuse and recycling of batteries as stationary batteries for vehicles, through equity participation in the French company Forsee Power, which manufactures and sells battery systems for electrical mobility equipment | Europe | |
| Recycle | Recovery and sales of scrap iron, including iron recovered from demolished structures and the processing of iron and steel products, and recycling of non-metallic materials by our affiliated company, MM & KENZAI | Japan | Metal products handled: 7 mil. t/year |
| | Use of dust (mainly automobile crusher dust) by our affiliated company, Kyoei Recycling Co. as feedstock for a gasification furnace, to produce gas for use as fuel at the nearby Kyoei Steel Yamaguchi Division facility, and co-generated hot slag for sale to refiners | Japan | Processing capacity: 33,000 t/year |
| Recycle | Recovery and sales of non-ferrous scrap (aluminum, copper, lead, rare metals, etc.) and waste circuit boards and plastics from the demolition of buildings, and disassembled automobiles and electrical goods, etc., by our subsidiary Mitsui Bussan Metals | Japan | Non-ferrous scrap metals handled: 250,000 t/year |
| | Recycling of metals and electronic equipment and processing of general waste from New York City by our investee Sims Metal Management, which is one of the world's leading recyclers | N. America, Europe, Australia, New Zealand, etc. | Scrap metal, etc.: 8.7 mil. t/year |

## Formation of Cyclical Systems for the Effective Utilization of Food Industry By-products

System

Mitsui's Food Business Unit has developed systems to support the effective utilization of by-products created through the production of processed agricultural products and fisheries products through the establishment of value chains for agricultural products and animal protein. Examples include the effective utilization of soy meal, wheat bran, and fish meal to produce livestock and fish feeds, the extraction of lecithin from soy meal for use in health foods, and the refining of fruit material attached to calyces (sepals) cut from strawberries to produce juice.



# Initiatives against Environmental Pollution


Mitsui & Co. bases its environmental policy on compliance with environment-related laws and regulations. In particular, we engage in initiatives that lead to the reduction of water and soil contamination and the reduction of the quantity of chemical substances released into the atmosphere, with the aim of reducing or preventing pollution.

## Initiatives by Mitsui & Co.

Activity

**SDGs : 3.9, 6.3, 12.4, 14.1**

| Aim | Initiatives |
|---|---|
| Prevention of atmospheric pollution through the detoxification of exhaust gas | As a distributor, Mitsui & Co. Plastics, one of our consolidated subsidiaries, is building and expanding a nationwide network of sales and logistics locations and infrastructure for AdBlue®, which converts the nitrogen oxides contained in exhaust gases from trucks and buses into harmless water and nitrogen. |
| Water treatment | Proper treatment of water used at mining operations has been effectively carried out. |
| Reduction of atmospheric pollution from transportation vessels | We are updating our fleet, including increased orders for vessels with substantially lower SOx and NOx emissions. |
| Reduction of soil pollution through the optimization of fertilizer usage quantities | We are stabilizing soil quality and reducing soil pollution by using digital technology to ensure the appropriate application of fertilizers. Examples include the use of satellite images to analyze vegetation and monitor farmland topography, the use of yield trends and soil analysis results in digital mapping and fertility analysis, automatic fertilizer application from tractors, and timely system-based monitoring of fertilizer applications. |

### Participation in Ocean Pollution Prevention Initiatives, Clean Ocean Material Alliance (CLOMA)

CLOMA was established in January 2019 to find solutions to the emerging global challenge of marine plastic debris through the sustainable use of plastic products, the development and introduction of alternative materials, and the acceleration of innovation. Mitsui is one of the 26 secretary companies. As of August 9, 2019, 250 companies and organizations have joined CLOMA, including Mitsui's consolidated subsidiaries namely Mitsui & Co. Plastics Ltd., Mitsui Bussan Chemicals Co., Ltd., and Mitsui Bussan Packaging Co., Ltd.

### Participation in a Circular Economy for Flexible Packaging (Ceflex)

Ceflex is the collaborative initiative of a European consortium to develop and apply robust design guidelines for implementing a circular economy for flexible packaging and measures for collecting, sorting and recycling. Mitsui is one of more than 120 companies participating in the consortium, where the companies represent the entire value chain of flexible packaging.

### Initiatives to Reduce and Prevent Pollution—Actions Relating to Radioactive Substances

A wholly owned subsidiary of Mitsui in the United States purchases and sells uranium concentrate. However, the scale of business is extremely limited in terms of value and quantities handled when seen in the context of Mitsui's overall business operations, and furthermore, the materials are not physically relocated and do not leave the storage facility. The storage contractor to which the materials are entrusted has been licensed by the U.S. Nuclear Regulatory Commission (NRC) to handle radioactive materials and ensures that the employees in its storage facility maintain strict compliance with NRC standards concerning the management of radioactive materials and the risk of exposure. The storage contractor also undergoes regular inspections by the NRC. On this basis, we believe that the risk that uranium concentrate owned by Mitsui's subsidiary will damage the local environment or cause exposure is quite limited. All of the uranium concentrate handled is intended solely for peaceful, civilian purposes such as power generation, and is compliant with all NRC regulation. It should be noted that Mitsui and its subsidiary rigorously ensure compliance with NRC management standards (including those for nuclear waste) in handling the materials, but no nuclear waste is handled whatsoever.

# Environmental Performance Data

The data marked with "★" (FY2019) are assured by Deloitte Tohmatsu Sustainability Co., Ltd., an external assurance provider based on International Standard on Assurance Engagements (ISAE) 3000 and ISAE3410.

**P.124** Independent Practitioner's Assurance Report

## Energy Consumption

Activity

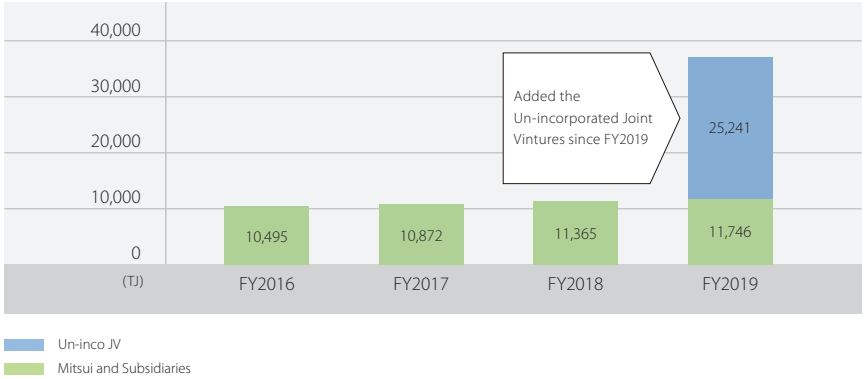
**SDGs : 7.3**

Mitsui & Co. has set a goal of "reducing energy consumption intensity by 1% or higher on average per year" for Mitsui and its subsidiaries in Japan.

We aim to achieve our goals through a variety of measures, including the group-wide effort to improve energy efficiency.

From the fiscal year ending March 2019, the scope of coverage has been expanded to a joint control business (Un-incorporated Joint Ventures). We will continue to monitor energy consumption and explore new initiatives to reduce energy consumption on a global group basis.

**Energy Consumption**




| Category | | Scope of coverage | Unit | FY2017 | FY2018 | FY2019 | External Assurance |
|---|---|---|---|---|---|---|---|
| **Energy Consumption** | | | | | | | |
| | Non-consolidated | Head Office and all offices in Japan | GJ | 220,370 | 207,259 | 205,182 | ★ |
| | Consolidated | Subsidiaries and Un-incorporated JVs | | 10,651,544 | 11,157,784 | 36,781,584 | ★ |
| | **Total** | | | **10,871,914** | **11,365,043** | **36,986,766** | ★ |
| (Breakdown) | | | | | | | |
| | Fuels | | | 5,061,035 | 5,617,840 | 27,003,028 | |
| | Electricity | | | 4,949,825 | 4,923,641 | 8,722,166 | |
| | Steam | | | 860,942 | 823,561 | 1,261,572 | |
| Intensity | Non-consolidated | Head Office and all offices in Japan (per square meter) | MWh/m$^2$ | 0.123 | 0.121 | 0.120 | ★ |

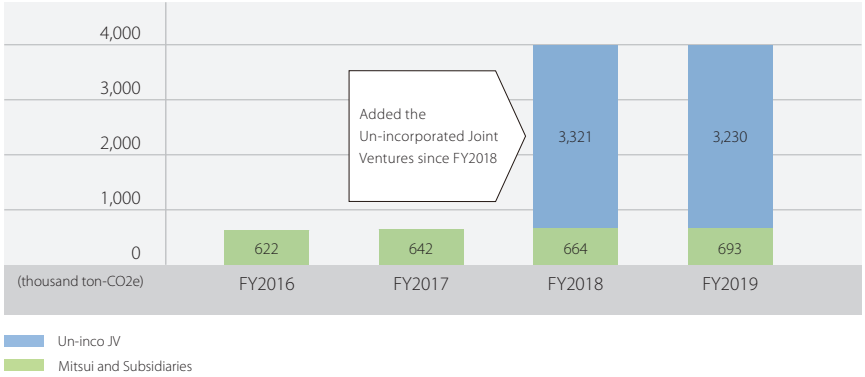
## Greenhouse Gas (GHG)

Activity

SDGs : 7.3

Mitsui is carrying out initiatives for the reduction of greenhouse gas (GHG) emissions from energy sources on a global group basis. From the fiscal year ended March 2006, Mitsui has continually surveyed its domestic GHG emissions in order to understand the amount of its emissions year by year. In addition, we have begun surveying the GHG emissions of its overseas subsidiaries since the fiscal year ended March 2009 and from the fiscal year ended March 2018 onward, the scope of coverage has been expanded to a joint control business (Un-incorporated Joint Ventures). We will continue to monitor the GHG emission amount and explore new initiatives to reduce GHG on a global group basis.

**Green House Gas (GHG) Emissions Scope 1+2**




| Category | | Scope of coverage | Unit | FY2017 | FY2018 | FY2019 | External Assurance |
|---|---|---|---|---|---|---|---|
| **Greenhouse Gas (GHG) Emissions** | | | | | | | |
| Scope 1 | Non-consolidated | Head Office and all offices in Japan | | 1,025 | 1,083 | 1,036 | ★ |
| | Consolidated | Subsidiaries and Un-incorporated JVs | | 313,370 | 3,447,872 | 3,332,140 | ★ |
| | **Total** | | | **314,395** | **3,448,955** | **3,333,176** | ★ |
| Scope 2 | Non-consolidated | Head Office and all offices in Japan | | 10,238 | 9,542 | 8,915 | ★ |
| | Consolidated | Subsidiaries and Un-incorporated JVs | | 317,571 | 526,483 | 581,196 | ★ |
| | **Total** | | | **327,809** | **536,025** | **590,111** | ★ |
| Scope 1+2 | **Total** | | | **642,204** | **3,984,980** | **3,923,287** | ★ |
| Scope 3 | Transportation | Domestic consignment transportation with Mitsui as the shipper | | 29,387 | 27,399 | 31,295 | ★ |
| | Commuting | Head Office | ton-CO2e | 980 | 949 | 928 | |
| | Business trips | Head Office | | **9,654** | **10,049** | **9,699** | |
| | **Total** | | | 40,020 | 38,397 | 41,922 | |
| Scope 1 By GHG type | $CO_2$ | Carbon dioxide | | — | 1,652,011 | 2,305,572 | |
| | $CH_4$ | Methane | | — | 1,796,280 | 1,024,738 | |
| | $N_2O$ | Carbon monoxide | | — | 664 | 2,723 | |
| | HFCs | Hydrofluorocarbon | | — | 0 | 0 | |
| | PFCs | Perfluorocarbon | | — | 0 | 0 | |
| | $SF_6$ | Sulfur hexafluoride | | — | 0 | 143 | |
| | $NF_3$ | Nitrogen trifluoride | | — | 0 | 0 | |

[ Calculation standard ] Act on Rationalizing Energy Use, GHG Protocol "Emission-Factors-from-Cross-Sector-Tools (March2017)," International Energy Agency (IEA) Emissions Factors 2018, IPCC 2006 Guidelines for National greenhouse Gas Inventories, Law Regarding the Rationalization of Energy Use

## Water Consumption

Activity

SDGs : 6.4

Mitsui started surveying water intake and drainage data by water source from the fiscal year ended March 2019. We will continue to monitor water risk and explore new initiatives to reduce water consumption on a global group basis. At the Head Office, we use 100% recycled drainage water for toilet flushing in order to promote reduction in water consumption.

| Category | | Scope of coverage | Unit | FY2017 | FY2018 | FY2019 | External Assurance |
|---|---|---|---|---|---|---|---|
| **Water Intake** | | | | | | | |
| | Non-consolidated | Head Office and Mitsui-owned buildings | thousand $m^3$ | 66 | 65 | 64 | ★ |
| | Consolidated | Subsidiaries and Un-incorporated JVs | | — | — | 330,867 | |
| | **Total** | | | **66** | **65** | **330,931** | |
| (Breakdown) | | | | | | | |
| | Industrial water, water utility | | | — | — | 10,923 | |
| | Pumped groundwater | | | — | — | 18,147 | |
| | Rivers, lakes | | | — | — | 24,577 | |
| | Sea | | | — | — | 273,085 | |
| | Rainwater | | | — | — | 3,661 | |
| | Others | | | — | — | 538 | |
| Intensity | Non-consolidated | Head Office and Mitsui-owned buildings | $m^3$/employee | 16.11 | 16.36 | 16.10 | ★ |
| **Drainage Water** | | | | | | | |
| | Non-consolidated | Head Office and Mitsui-owned buildings | thousand $m^3$ | 66 | 65 | 64 | |
| | Consolidated | Subsidiaries and Un-incorporated JVs | | — | — | 57,232 | |
| | **Total** | | | **66** | **65** | **57,296** | |
| (Breakdown) | | | | | | | |
| | External disposal facilities (sewers) | | | — | — | 2,830 | |
| | Groundwater | | | — | — | 760 | |
| | Rivers, lakes | | | — | — | 6,651 | |
| | Sea | | | — | — | 18,081 | |
| | Others | | | — | — | 28,974 | |

* Drainage water is assumed to be equal to intake water quantity in case there is no drainage data.

## Waste and Paper Consumption

Activity

SDGs : 12.5

Mitsui has set a goal of "recycling rate of 85% or higher" for Head Office and corporate buildings in Osaka and Nagoya and promote reducing waste, reuse, recycling and appropriate dispose. We are working to reduce paper consumption for Head Office and all offices in Japan by introducing various IT tools and promoting paperless meetings.

| Category | | Scope of coverage | Unit | FY2017 | FY2018 | FY2019 | External Assurance |
|---|---|---|---|---|---|---|---|
| **Waste** | | | | | | | |
| | Waste amount | Head Office and Mitsui-owned buildings | ton | 1,279 | 1,259 | 1,220 | ★ |
| | Recycling rate | | % | 84.2 | 83.4 | 81.9 | ★ |
| | Intensity | (per employee) | ton/employee | 0.312 | 0.316 | 0.309 | ★ |
| | Hazardous waste | Specially-controlled industrial waste | ton | 1.2 | 1.3 | 1.1 | |
| **Paper Consumption** | | | | | | | |
| | Paper consumption | Head Office and all offices in Japan | thousand sheets (A4-size sheet equivalent) | 48,529 | 45,894 | 38,614 | ★ |
| | Intensity | (thousand sheets per employee) | thousand sheets/employee | 11.53 | 11.20 | 9.51 | ★ |

## Environmentally-Friendly Logistics

Activity

In collaboration with our logistics partners, we implement energy saving measures including promotion of economical driving practices and other fuel-saving techniques, improvement in transportation efficiency by using larger transport vehicles, introducing cargo consolidation arrangements, reviewing transport routes and modal shifts using rail and ship transport.

| Category | Scope of coverage | Unit | FY2017 | FY2018 | FY2019 | External Assurance |
|---|---|---|---|---|---|---|
| **Environmentally-Friendly Logistics** | | | | | | |
| Freight volumes in Japan with Mitsui as the shipper | Consigned logistics in Japan with Mitsui as the shipper | Million ton-kilo-meter | 767 | 705 | 769 | ★ |
| (Breakdown) Ship | | | 684 | 624 | 677 | ★ |
| Truck | | | 83 | 81 | 92 | ★ |
| Air/Rail | | | 0 | 0 | 0 | ★ |
| Intensity | (fuels per thousand ton-kilo-meters) | kl/thousand ton-kilo-meters | 0.014 | 0.014 | 0.015 | ★ |

### Initiatives toward Environmentally-Friendly Logistics

| | |
|---|---|
| Improvement of Land Transport Efficiency | We will use more energy efficient transportation method.<br>• Using consolidated cargo<br>• Using larger transport vehicles to increase loading rate<br>• Reviewing transport routes and methods |
| Improvement of Sea Transport Efficiency | We will continue to provide the following guidance for vessels chartered and/or operated by our affiliated companies.<br>• Increasing ship loading rate<br>• Economic cruise speed operation |

## Environmental Conservation/Economic Effects

Activity

Mitsui's environmental conservation and economic effects in the areas of paper consumption and energy consumption during the fiscal year ended March 2019 are shown below.

| Category | | Scope of coverage | Environmental conservation effects | Economic effects |
|---|---|---|---|---|
| **Environmental Conservation/Economic Effects** | | | | |
| | Paper consumption | Head Office and all offices in Japan | 7,280 K Sheets | 4,219 K JPY |
| | Electricity consumption | Head Office and Mitsui-owned buildings | 115MWh | -13,459 K JPY |

## Assessment of Environmental Liabilities

Activity

Currently, corporate management is strongly required to proactively deal with environmental issues. In addition to complying with legal requirements, we are working to monitor environmental risks of tangible fixed assets through self driven surveys such as land and buildings of Mitsui subsidiaries in Japan, especially asbestos, PCB and soil pollution, and make prompt decisions on management policies

## Environment-Related Fines or Penalties

Activity

Mitsui did not incur any environment-related fines or penalties in the fiscal year ended March 2019.

# Reducing Impacts on Biodiversity, and Promoting the Conservation and Recovery of Ecosystems

In Mitsui & Co.'s forest resources business, we have acquired FSC® certification to promote responsible forest resource management, and give consideration to biodiversity. Mitsui also promotes our food resources business using farming methods that encourage biodiversity. In our hydropower business, we have implemented an environmental program that aims to promote operations in a way that gives maximum consideration to the environment. This includes the conservation of plants and animals, including fish species and mammals. In addition, we have obtained FSC® and SGEC certifications for all of our company-owned forests, "Mitsui's Forests," which we own in 74 locations throughout Japan (approx. 44,000 hectares). Approximately 10% of the forest areas under our management have been designated as "biodiversity conservation forests," and we maintain and manage these forests accordingly.

## Initiatives by Mitsui & Co.

Activity

**SDGs: 8.7, 15.1, 15.2, 15.4**

| Business | Description |
|---|---|
| Hydroelectric Power Plant Business | The Madeira River is a tributary of the Amazon River and forms part of the Amazon Basin, a region that is known for its rich biodiversity but which is also under serious threat from forest depletion. Located on the Madeira River in northern Brazil, the Jirau Hydroelectric Power Plant has been closely watched by many parties, including local communities and NGOs because of its location, and every possible step is being taken to ensure that the plant is operated in an environmentally responsible way. As part of an approximately ¥60 billion environmental program, we conducted preliminary surveys to identify every possible impact that could affect the local environment and local communities. We then built hospitals, schools, and new housing to improve the local living environment. Other initiatives include measures to protect flora and fauna, such as fish and mammals. |
| Forest Resources Business | Along with business partners, Mitsui is carrying out a plantation business in Australia (as of March 31, 2019, the project area was approximately 23,000 hectares), with the aim of ensuring the stable provision of wood chips, the raw material for paper. The business has acquired FSC® (FSC®-C104107/FSC®-C107463) as well as PEFC certification, and manages forest resources responsibly. It also carries out measures in consideration of biodiversity protection. |
| Production and sale of rice | Toho Bussan, a consolidated subsidiary, supports the production and sales of rice using farming methods that encourage biodiversity, such as the minimum use of agrichemicals and chemical fertilizers. |

## Biodiversity Conservation Activities at Mitsui's Forests

Activity

**SDGs: 15.1, 15.2, 15.4, 15.5**

Mitsui owns forests in 74 locations in Japan, from Hokkaido in the north to Kyushu in the south. Mitsui's Forests cover a total area of approximately 44,000 hectares, which is equivalent to about 70% of the area of Tokyo's 23 wards, or 0.1% of Japan's territory. Mitsui's Forests are divided into "Forests for Regeneration and Harvest" (approximately 40% of the total) and "Natural Forests and Naturally Regenerated Forests" (approximately 60%). Furthermore, especially important areas from the viewpoint of biodiversity are designated as "Biodiversity Conservation Forests" (approximately 10% of all Mitsui's Forests) and are managed with care given to conserving the living environments of rare species.

## Biodiversity Conservation Activities in Cooperation with NGOs

Activity

**SDGs:13.3, 13.6, 15.1, 15.2, 15.4, 15.5**

### Conserving the Prey Lang Forest in Cambodia (REDD+*)

Prey Lang, located in the northeast of Cambodia along the west bank of the Mekong River, is the largest tropical lowland evergreen forest in Indochina. It is inhabited by many wild animals, including endangered species, and is also an important source of water for Cambodia. However, illegal logging, along with reclamation of land for farming by local communities, has resulted in progressive deforestation, loss of wildlife habitats, and an increase in greenhouse gas emissions that would normally be concentrated in the forests.

In partnership with Conservation International, an international NGO, Mitsui has been using the REDD+ mechanism established under the Paris Agreement in cooperation with the Cambodian Ministry of Environment to reinforce forest patrols to prevent illegal logging in the Prey Lang Forest. Moreover, Mitsui has been engaging in dialogue with local communities to provide alternative sources of livelihood that do not rely on logging, with the aim of contributing to forest and biodiversity conservation.

Tropical lowland evergreen forest in Prey Lang
©Jeremy Holden

* REDD+ (Reducing Emissions from Deforestation and forest Degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries): A scheme which provides economic incentives such as carbon credits through the mitigation of deforestation and degradation of forests in developing countries.

## Supporting Research Aimed at Restoration of Ecological Systems

Activity

**SDGs: 15.1, 15.2, 15.4**

In the forest of Shiretoko, the Graduate School of Environment and Information Sciences of Yokohama National University conducts research in order to forecast changes to forest dynamics over the next 200 years, using a method called the "process base model." The model is designed based on findings acquired by the quantification of plant biodiversity and soil biodiversity, and various functionalities, such as decomposition of organic matter and retention of nutrients in the soil. Building on this research, the group aims to propose a comprehensive recovery method.

Mitsui was impressed by the fact that this study focuses on the multi-functionality of ecosystems, a type of research that has not been conducted so far, and have decided to support the research as one of the grant projects under the Mitsui & Co., Ltd. Environmental Fund.

Shiretoko Forest
Research conducted in the area managed by the Shiretoko 100 Square-Meter Movement Trust and surrounding research areas