



Protection of the Global Environment

tons/dav

(Approx. 11% of total gas emissions)

# Strategic Focus

# Key Strategic Domain: Hydrocarbon Chain

Related Product Segment: Energy

# Aiming for zero-emission generation from coal-fired power stations through carbon capture and storage (CCS) with oxyfuel combustion to capture CO<sub>2</sub> and store it in compressed form underground

Amid the diffusion of renewable energies, reducing the environmental burden has become an urgent issue for the continued operation of coal-fired power stations, which have the merits of being a low-cost, stable source of power. As a solution to this problem, CCS with oxyfuel combustion, which is one of Japan's high-level clean coal technologies (CCT), is attracting attention.

Together with the Electric Power Development Company (J-Power) and IHI Corporation, Mitsui has jointly implemented and successfully completed the Callide Oxyfuel Project, a public-private initiative by Japan and Australia to implement oxyfuel combustion technology at the Callide-A coal-fired power station in Australia. By generating electricity through the burning of coal using oxygen instead of air, it is possible to reduce the total volume of gas emissions, boost CO<sub>2</sub> concentration in the emitted gas, thus making it easier to recover the CO<sub>2</sub>, and also remove impurities in the series of processes, such as SO<sub>x</sub>, NO<sub>x</sub>, and mercury. The world's first test operation of this method on a utility boiler was completed successfully in February 2015. A CO<sub>2</sub> liquefaction device recovered 75 tons of CO<sub>2</sub> per day, of which a total of approximately 30 tons was transported by land and injected underground.

Based on the results of this project, Mitsui has also participated in a feasibility study at a coal-fired power station in Canada conducted by New Energy and Industrial Technology Development Organization (NEDO) of Japan. Since the incentive given by the Canadian Government for implementation of CCS for coal-fired power stations is applied in this new approach, and the effective use of CO<sub>2</sub> and N<sub>2</sub> discharged from the air separation unit can be expected to improve economic efficiency, we look forward to seeing the first commercial unit installed at the site.

Mitsui is continuing its efforts to promote the commercialization of coal-fired power generation with zero emissions of CO<sub>2</sub>, SO<sub>x</sub>, NO<sub>x</sub>, and mercury and thereby contribute to the alleviation of global warming.

Amount of CO<sub>2</sub> recovered in the Callide Oxyfuel Project:

Share of coal-fired power generation

worldwide:

(International Energy Agency, World Energy Outlook 2015)

Global Environment



# Mitsui & Co.'s Approach

We will comply with environment-related laws, regulations, and treaties. We will work to prevent environmental pollution and curb greenhouse gas emissions, and to maintain biodiversity. We will be alert to environmental impacts and work to mitigate those impacts. We will use our integrated strengths and work in cooperation with our partners to achieve rational, long-term industrial solutions to environmental problems. We will continue to provide grants, through the Mitsui & Co. Environment Fund, for research and activities by NPOs, universities, etc., relating to the solution of environmental problems, efficient resource utilization, and harmonious coexistence between ecosystems and human beings.

# Activities for FY Ended March 2016

Business Area > • Metal • Machinery & Infrastructure • Chemicals • Energy • Lifestyle • Innovation & Corporate Development • Corporate & Others

Theme	Business Activities	Theme	Business Activities
Enhancement of Environment Management Platform	<ul> <li>Assessment and promotion of adopting ISO14001: 2015</li> <li>Implemented seminars on environment and social due diligence relevant to business activities for officers and employees (approx. 200 participants in 3 seminars for business units; approx. 300 participants in 15 seminars in overseas locations)</li> <li>Development of renewed networking with international NPOs and NGOs to drive business-synergy creating CSR activities</li> <li>Implemented environment-related law seminars for officers and employees of Mitsui &amp; Co. and its affiliates (approx. 110 people in 2 seminars)</li> <li>Implemented environment seminars entitled "Lecture on Environmental Waste and Tour of Processing Facility" for officers and employees of Mitsui &amp; Co. and its affiliates (approx. 120 people in 2 seminars)</li> <li>Implemented a seminar during Mitsui Environment Month for officers and employees of Mitsui &amp; Co. and its affiliates (approx. 320 people)</li> </ul>	Initiatives toward Environmental Value Creation	<ul> <li>Boosting modal shift by developing railway network and introducing highly fuel-efficient aircraft through our leasing expertise</li> <li>Promotion of green chemicals business, such as palm oil and other natural oil-derived oleo chemicals business (Malaysia, China) and corn-derived glucose based bio-chemicals business (Canada)</li> <li>Investment and participation in wood biomass power generation plant (Japan)</li> <li>Commencement of surface surveys and excavations for the promotion of geothermal power generation projects by Mitsui Oil Exploration (Japan)</li> <li>Completion of CCS demonstration at a coal-fired power station (Australia)</li> <li>Investment and participation in fuel and chemical products development business utilizing microbial fermentation (U.S.)</li> <li>Construction completion and operation commencement of a waste gas recycling plant for LNG project (Qatar)</li> <li>Sale of solar power generation unit (Sumisho &amp; Mitsuibussan Kenzai) for the</li> </ul>
Initiatives toward Environmental Value Creation	<ul> <li>Stable supply of high environmental-friendly automobile parts through an intensive collaboration with Gestamp (America)</li> <li>Investment and participation in Gonvarri Eólica (Spain) to supply materials for wind power generation-related infrastructure</li> <li>Establishment of J/V with Honest (Japan) and GEM (China) for remanufacturing auto parts by means of Japanese technology</li> <li>Promotion of renewable energy IPP business, such as solar power generation (Japan), wind power generation (Australia), and run-of-the river type hydroelectric power generation (Brazil), (Our equity-share power generation capacity: 2 GW)</li> <li>Promotion of smart-city business (Malaysia)</li> </ul>		<ul> <li>residential market (over 1,000 houses)</li> <li>Acceleration of obtaining certifications (Mitsui Bussan Techno Products): for outdoor clothing fabric business, Bluesign® certification, which sets criteria aimed at abolition of child labor and forced labor, elimination of discrimination, freedom of association, labor health and safety, in addition to consideration of environmental aspects; for recycling business, GRS certification Sales promotion of such products (Europe, U.S., etc.)</li> <li>Promotion of Fujisawa Sustainable Smart Town project (Japan), (CO<sub>2</sub> reduction target: 70%; renewable energy utilization target: 30% and above)</li> </ul>



# Activities for FY Ended March 2016

Business Area > • Metal • Machinery & Infrastructure • Chemicals • Energy • Lifestyle • Innovation & Corporate Development • Corporate & Others

Theme	Business Activities
nitiatives toward Environmental Value Creation	<ul> <li>Production and sales of lithium-ion secondary batteries for new-energy vehicles, such as electric, hybrid, and plug-in hybrid automobiles (China)</li> <li>Investment and participation in smartphone flea market app business, which contributes to the development of the "sharing economy" (Japan, U.S., etc.)</li> <li>Inhibition of N<sub>2</sub>O emissions by optimizing the volume of fertilizers applied to farmlands (Canada, U.S., Brazil, Russia, etc.)</li> <li>Formation and sale of solar power infrastructure funds (Japan Alternative Investment)</li> <li>Investment in renewable energy projects through the Emerging Markets Infrastructure Fund</li> <li>Shortening of transportation distance for logistics services (Trinet group) by utilization of local ports (Japan)</li> </ul>
Initiatives to Reduce Environmental Load, including Curbing Global Warming	<ul> <li>Promotion of effective use of waste products, such as poultry manure as fertilizer and poultry manure-derived snow melting agent (Prifoods), and residual tea leaves as fertilizer material (Mitsui Norin)</li> <li>Verification by the Power and Energy Strategy Committee of mid- to long-term environmental changes in and future directions of environment, energy, and gas value chains, and the electric power industry, and implementation of relevant initiatives (4 times per year)</li> <li>Management of CO<sub>2</sub> Emissions, the Water Consumption Survey</li> <li>For the Mitsui Group in Japan Mitsui will monitor changes in CO<sub>2</sub> emissions over the year, seeking areas where cuts can be made, as Mitsui aims for an annual reduction in the energy consumption rate of at least 1% on average from the fiscal year ended March 31, 2012 (Mitsui's Head Office, subsidiaries and associated companies, branches and other facilities)</li> <li>For the Mitsui Group worldwide Mitsui will monitor changes in CO<sub>2</sub> emissions over the year (overseas subsidiaries and associated companies)</li> <li>An investigation of the amount of water consumption in major domestic and overseas subsidiary companies has begun</li> <li>Absorption of CO<sub>2</sub> by appropriate management and maintenance of Mitsui's forests (Simulated gas absorption volume: about 160,000 tons per year)</li> </ul>

Theme	Business Activities
nitiatives for reserving iodiversity	<ul> <li>Support for the production of rice using farming methods that develop biodiversity, and sales promotion of the rice produced (Toho Bussan), (Japan)</li> </ul>
ddressing nvironmental ssues through contribution to ociety	<ul> <li>Provision of grants to organizations such as NPOs and universities for their activities and research that contribute to environmental issues through the Mitsui &amp; Co. Environment Fund, and employee participation in grant recipients' activities (grants totaling 220 million yen for 25 recipients; 377 persons participated in 8 activities)</li> <li>Implementation of school visit classes for elementary, middle, and high school students, utilizing Mitsui's forests (approx.1,060 people in 14 classes)</li> <li>Implementation of forest experience events for shareholders, elementary school kids' family, employees' family and others, utilizing Mitsui's forests (approx. 420 people in 11 events)</li> <li>Endowed course at Keio University to contribute to human resources training in forestry and the wood industry (approx. 290 people)</li> <li>Implementation of a "wood-use (<i>kizukai</i>) summer seminar" in Fukushima for high school students to contribute to the region's recovery (16 people)</li> </ul>

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	Contents	Corporate Information	Message from Our CEO	CSR at Mitsui & Co.	Five Material Issues in the CSR Field	Evaluation by Society	Independent Practitioner's Assurance Report
MITSUI & CO.	Contents	Activity Reports by Material Issue	Protection of the Global Environment	Respect for Human Rights	Enhancement of Local Industrial Bases & Quality of Life	Stable Supply of Resources & Materials	Corporate Governance & Human Resource Development





Society today faces the fact that the Earth is not a limitless frontier. Environmental issues on numerous fronts, such as climate change, energy sustainability, water resource management, sustainable food supply, and conservation of biodiversity, are all global issues that require efforts across multiple generations and regions. These issues will be difficult to resolve without initiatives involving partnerships between corporations, stakeholders, governments, and international institutions. Accordingly, enhancing business value in the context of a sustainable society calls for augmenting the collective value of a wide range of stakeholders in corporate activities.

In line with our Management Philosophy, we at Mitsui will actively contribute to protecting our irreplaceable Earth and fulfilling the dreams of its inhabitants. Mitsui's management is committed to addressing environmental issues. While actively engaging in dialogue with our stakeholders, we take proactive steps to address environmental issues on a global basis throughout the Mitsui & Co. Group to achieve harmony between economy and environment. It goes without saying that creating business that makes a positive contribution to the global environment entails far more than simply reducing environmental burdens across the entire spectrum of our business activities. We will continue taking on the challenge of achieving sustainable development by creating opportunities to resolve environmental and societal issues through our business activities.

Policy	Environmental Policy	
		Revised April 2011
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
- 2. Efficient utilization of resources and energy
- 3. Environmental care for products and services offered, as well as existing and new businesses
- 4. Contribution to providing industrial solutions to environmental issues

We will comply with various relevant environmental laws and regulations, as well as all agreements signed by the company for promoting business activities.

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.

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 conversation of biological diversity as well.

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.

Protection of the

Global Environment



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# **Enhancement of Environmental Management System**

System

# **Environmental Management System**

## Approach to Environmental Management

Since Mitsui & Co. acquired ISO14001 certification in 1999, we have maintained and utilized that certification with the aim of making continuous improvements through the PDCA cycle. From fiscal year 2016, we changed our management system in accordance with ISO14001: 2015, and are now operating under that system. Specifically, we are strengthening the integration with business processes, the approach to business risks and opportunities, and

awareness toward the importance of our stakeholders' perspectives in accordance with the purpose of the revision.

# **Environmental Management System**

To facilitate effective environmental management, Mitsui & Co. has implemented an Environmental Management framework on a global basis across the entire Group, applicable to all operational areas.

A Chief Environmental Officer has been appointed to assist the President with his management responsibilities in relation to environmental issues, and the general manager of the Environmental · Social Contribution Division has been appointed to conduct environmental management. In addition, a number of environmental managers have been appointed, including the general managers of each corporate staff division, the Chief Operating Officers of each business unit, the general managers of each branch and office in Japan, the chief operating officers of overseas regional business units and headquarter-managed regions area unit leaders. This organizational framework enables environmental management on a Group-wide basis.

#### Environmental Management System information (as of April 2016) President & CEO Chief Environmental Officer General Manager of the Internal Auditing Division (Officer in Charge of Corporate Staff Divisions (in Charge of the Environmental & Social Contribution Division) Environmental Management Administrative Manager (General Manager of the Environmental - Social Contribution Division) **Environmental Managers** General Managers (Department General Chief Operating Officers Heads of Domestic Offices and **Chief Operating Officers** Managers) of Each Corporate Staff Division of Business Units of Regional Business Units, Branches and Headquarter-managed Regions Planning & Coordination Divisions Environmer Manageme Environme Managem

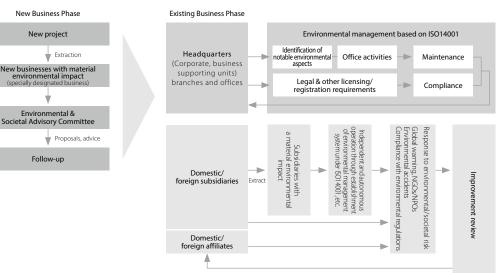
#### Addressing Environmental and Social Risks and Opportunities in Business System

Mitsui & Co. is expanding its business globally through six business segments: metals, machinery and infrastructure, chemicals, energy, lifestyle, and innovation and corporate development. In conducting business in each of these areas, we divide our activities into a "new business phase" and an "existing business phase" as shown in the following diagram, and we have put in place mechanisms to ensure that the utmost consideration is given to the environment and society during our business activities in each of these phases.

In order to properly understand and manage the environmental and social risks involved in the various types of business we engage in, Mitsui & Co. encourages its subsidiary companies that have a significant environmental impact to establish environmental management systems that are in accordance with the international ISO14001 standards and international guidelines relating to environmental and societal concerns. While promoting autonomous environmental management by the subsidiaries themselves, we have also established a system for making improvements by following up and reviewing measures to prevent recurrence based on reports concerning environmental accidents.

Furthermore, in accordance with the SDG targets, we identify programs, such as biodiversity protection programs, which are closely related to our business, as "opportunities", and we introduced an internal subsidy system for such programs in 2016. Mitsui & Co. is seeking to build a sustainable society by simultaneously resolving environmental and societal issues and enhancing business value.

# Addressing environmental and social risks in business (as of March 2016)





Protection of the Global Environment

# System Activity Environmental Management for New Business

# Specially designated business management systems and Environmental & Societal Advisory Committee

New projects are examined internally, and must receive approval prior to their implementation. Reports will be made on an ad-hoc basis by the CSR Promotion Committee and the Environmental & Societal Advisory Committee, with final approval coming from the representative directors through *Ringi* (circular approval letter) approval. Members of the Environmental & Societal Advisory Committee will primarily be selected from among external experts, lawyers, and others who possess a broad range of perspectives on measures in global warming, environmental restoration, ambient water and air pollution, soil contamination, and environment impact assessment as well as stakeholders' concerns.

# Use of environmental and social due diligence checklists

New business investment projects that will have a significant impact on the environment are investigated by experts. When conducting these investigations, we share and utilize environmental and social due diligence checklists listing the environmental and social risks for each business with reference to international standards relating to environmental and social concerns, for the purpose of identifying the environmental and social risks in advance, and at the same time helping to narrow down the matters to be investigated by the experts.

# System Activity Environmental Management for Existing Business

# Mitsui & Co.'s non-consolidated environmental management

Up until 2014, we had focused primarily on reducing paper, waste, and electricity in our office operations as a part of our activities based on ISO14001. In 2015, once the environmental awareness of the officers and employees had reached a certain level, we sought to link environmental activity more closely to our business operations. For this purpose, a company-wide environmental target of raising the environmental awareness of officers and employees in relation to business activity was set, and each division and office began undertaking target management in keeping with the conditions in their respective organizations. This resulted in raising the awareness of officers and employees in relation to the environmental and social risks associated with business activities, and the environmental target was achieved.

# Environmental management for subsidiaries

We designated a number of our domestic & overseas subsidiaries to acquire ISO14001 certification, taking into account the type of business, the impact on environment/biodiversity, requests from stakeholders, etc. As of the end of March 2016, 35 subsidiaries had acquired ISO14001 out of the 41 which we had targeted to acquire ISO14001. The remaining 6 subsidiaries are currently establishing environmental management systems in line with international guidelines.

Every year, we hold ISO14001 training for internal auditors of ISO standards, which helps to improve understanding regarding the application of environmental management systems and to enhance knowledge of the problem

extraction in the environmental management system use. In addition, our Business Units observe and participate in subsidiaries' ISO14001 internal audits and external audits, enabling us to understand the status of their environmental management and provide accurate guidance and support.

# Onsite environmental consultation

As a part of our stakeholder engagement, we visit business sites to examine how environmental and social issues are being addressed during business operations. In 2016, we visited the site of the Jirau Hydroelectric Power Plant, where we inspected the measures being taken in relation to the environment and local residents, and held talks with the people in charge of operating the project.

## Example: Jirau Hydroelectric Power Plant (Brazil)

The Jirau Hydroelectric Power Plant, located on the Madeira River in the State of Rondonia in northern Brazil, generates power using the "run-of-river power generation" method, utilizing the natural flow of the river. The plant supplies electricity to approximately 10 million residents of the Greater Sao Paulo metro area, and contributes to limiting fossil fuels combustion as a means of generating power. Due to the scale of the project and its location on the Madeira River, which is a tributary of the River Amazon and which is rich in biodiversity, and taking into account also the crisis of substantial deforestation facing



An aerial view of the power plant

the Amazon region, the project is attracting close attention from the local community, NGOs, and other stakeholders. There are strict restrictions placed on the power sector in Brazil in relation to the environment and local communities, and companies are required to go through several stages of authorizations, including obtaining construction permits and operating licences. Companies are also required to conform to the Equator Principles. After commencing operations, companies are required to continue contributing to the environment and local communities, and to provide regular reports. Through such site inspections and by talking directly with the persons concerned at the frontline, Mitsui & Co. seeks to gain an accurate understanding of the situation on the ground, and to bring about better stakeholder engagement.

# Responding to environmental accidents

During the fiscal year ended March 31, 2016, there were no environment-related incidents at Mitsui and its subsidiaries.

Mitsui & Co. employs 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, and comprehensive steps are taken to prevent recurrence, beginning with the identification of the true cause of the accident and an assessment to determine appropriate corrective and preventive measures.





#### Complying with Environment-Related Laws and Regulations System

Mitsui & Co. makes a serious effort to comply with environment-related laws and regulations in conducting its business. As a global group, we not only establish working practices to ensure the relevant compliance through our environment management system, but also conduct diverse training, research and site verification activities for our employees so that they can develop full awareness of various environment-related laws and regulations in domestic and international settings to ensure compliance with these laws and regulations.

We, and those of our subsidiaries with significant environmental impacts, endeavor to acquire ISO14001 certification or an equivalent, and implement proper working practices through our environment management system in line with the above certifications, to ensure environment-related 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 are involved in work related to environmental logistics and the implementation of energy saving use during shipping and logistics.

Since we handle more than 30 million gross ton-kilometers\*1 of domestic freight annually, Mitsui is classified as a Specified Consigner. We therefore calculate the total amount of freight based on Mitsui-owned cargo as well as freight arranged for transportation in Japan. When Mitsui became a Specified Consigner, to meet the requirements of the Energy Saving Act we began to carry out an array of company-wide initiatives to promote efficient energy use in our logistics business. These initiatives included making improvements to our operating systems and arranging seminars and other information events.

In each of our business units, we collaborate with our logistics partners and promote economical driving practices and other fuel-saving techniques. We also work to raise efficiency by using larger transport vehicles, introducing cargo consolidation arrangements, and reviewing transport routes. We implement energy saving measures through modal shifts, making use of rail and ship transport.

Each business unit is responsible for formulating and implementing specific energy reduction plans.\*<sup>2</sup> These plans are gradually being implemented with the support of the Logistics Management Division as the administrative body, which consults with government and administrative agencies (Japan's Ministry of Economy, Trade, and Industry), compiling data, conducting checks based on the PDCA cycle, and holding in-house seminars, and the Environmental and Social Contribution Division, which is responsible for overall company-wide environmental management systems.

\*1 Ton-kilometers are calculated by multiplying the number of metric tons of cargo by the distance they are transported (in kilometers). \*2 Plans are prepared on an annual basis, with monthly status reports.

# **Energy Reduction Policy**

Energy neudectorn oney			
Selection of transportation method	Use of railways, shipping (modal shift) Use of sophisticated freight services		
Measures to improve transportation efficiency	Use of shared/mixed loading Selection of appropriate vehicle class Optimization of routing and method Scaling up of vehicle size Use of most efficient freight vehicles Review of schedules to avoid congestion		
Alliances between transportation service providers and users	Review of distribution frequencies Adoption of coordinated logistics planning		
Measures to increase fuel efficiency	Eco-drive driving techniques Installation of fuel-saving equipment		

# Compliance with Waste Disposal laws

Mitsui operates in compliance with the Waste Disposal and Public Cleansing Law (also referred to as the "Waste Disposal Law" or "Waste Law"). Disposal of industrial and general waste generated through commercial activities is managed by Mitsui's Logistics Management Division, which formulates waste handling process flows, answers questions, and offers other ongoing support to business units within Mitsui. In addition, the Logistics Management Division holds periodic seminars to increase awareness and understanding of proper waste disposal practices, covering such matters as the selection of waste management subcontractors, manifest compilation and management, and other related issues. The division also holds seminars for associated companies, providing guidance from experienced personnel and offering other waste management related assistance, with the aim of promoting appropriate handling of industrial waste.

# Responding to REACH regulations

# (Registration, Evaluation, Authorization, and restriction of Chemicals)

REACH is legislation developed by the European Union (EU) that places restrictions on the registration, assessment, and permits required for chemicals. The REACH legislation became effective on June 1, 2007, with pre-registration completed by November 30, 2008 and the first full registration by November 30, 2010.

Under these regulations, compliance with the REACH law is required of all related businesses manufacturing in or importing into the EU. Mitsui has worked in cooperation with its European offices to complete a database on all the relevant chemical substances and to structure systems to confirm compliance with REACH regulations.



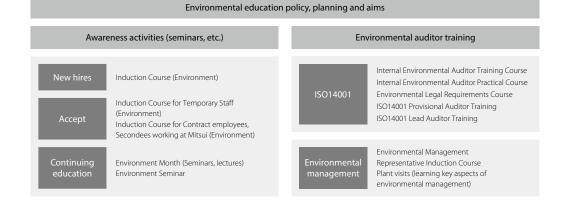


# System Activity Environmental Education/Communication

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

At Mitsui, we work to raise awareness of environmental issues among employees of Mitsui, our subsidiaries and affiliated companies, through regular seminars, environmental law training sessions, and ISO14001 training programs.



## Training seminars on environmental laws and regulations

We hold seminars for employees of Mitsui, subsidiaries and affiliated companies on environmental laws and regulations. From fiscal year 2013, we began co-hosting these seminars with other trading firms, thereby helping to further environment-related compliance. In fiscal year 2015, approximately 110 people participated from Mitsui & Co. group companies. We also conducted a separate training seminar on the 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 the procedures for on-site checks at waste disposal facilities and actual visits to such facilities.



# Seminars and training sessions held in fiscal 2015

	Number of times per year	Target audience	Outline
Environmental law training	Held twice Approx. 110 participants	Mainly Mitsui, subsidiaries and affiliated company employees	Management methods based on ISO14001, recent environmental law trends, basic knowledge, and key law amendments, etc.
Internal environmental auditor training (ISO14001)	Held twice Approx. 50 participants	Mitsui, subsidiaries and affiliated company employees	For the purpose of improving the Company's environmental management and support systems based on ISO14001
Internal environmental auditor practical training (ISO14001)	Held twice Approx. 40 participants	Internal environmental auditors, department representatives in charge of self checks	Role-play based training which aims to improve the efficiency of internal audits and self checks
Environment seminar "Lecture on Environmental Waste and Tour of Processing Facility"	Held twice Approx. 120 participants	Officers and employees of Mitsui & Co. 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
ISO14001 revisions and Mitsui & Co.'s initiatives under these revisions	Held twice Approx. 100 participants	Environmental management managers	Aiming at overall improvement of the effectiveness of the global group's environmental management system by explanation of summary of ISO14001.2015 and next fiscal year's initiatives based on the revisions
Environmental and social due diligence seminar	Held 3 times (HQ Business Units) Approx. 200 participants Held 15 times (overseas offices) Approx. 300 participants	Mitsui & Co. officers and employees	Seminar on due diligence covering environmental and social risk analysis, etc. relating to the business activities of each business unit
New staff induction training (environment)	Held once Approx. 190 participants	New employees	In accordance with ISO14001 requirements, explain Mitsui & Co.'s environmental policy as part of the induction
Temporary staff induction training (environment)	Held 10 times Approx. 50 participants	Temporary employees	training conducted by the Human Resources & General Affairs Division designed to instil in employees the necessary understanding of the company's management
Induction training for general/ seconded contract staff (environment)	Held 4 times Approx. 100 participants	General and seconded contract employees	philosophy (MW), various rules, the importance of compliance, etc.

## Mitsui Environment Month

Mitsui & Co. has designated June as the "Mitsui Environment Month" each year, during which a variety of programs for officers and employees of Mitsui & Co. and affiliated companies are held as a part of Mitsui's environmental education activities. During Mitsui Environment Month 2015, we held the following lectures and "Forest School" presentations about the company's forests.

## Lecture: "Abnormal Weather and Global Warming as Seen Through Buzzwords" (Tsukasa Yoda, Meteorologist) ; Approx. 130 participants

Feedback responses via a questionnaire administered after the lecture included comments such as "The detailed explanation of the current state of global warming given through figures and simulations has made me realize again just how dangerous the situation is", and "I realized how essential it is to be more aware of energy saving in order to ensure a safe future for our children".



Tsukasa Yoda, Meteorologist

Lecture: "Innovative Ways of Thinking! Can We Solve Environmental Problems Through Sport?" (Shogo Sugiura, representative of Sugiura Environment Project) ; Approx. 80 participants

Forest School: "Let's Learn Morel Mitsui & Co.'s Priceless Assets: The Multi-faceted Use of Mitsui's Forests" (Environmental-Social Contribution Div.); Approx. 100 participants

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# Initiatives toward Environmental Value Creation

Tahara Solar-Wind Joint Project

IPM Eagle Desarrollos Espana

Brockville Solar

Beckwith Solar

Guzman Energia S.L.

NS Wind Power Hibiki

Tahara Solar-Wind

Norway Wind

Wind Farm Hamada

Solar thermal power generation business

Wind power generation business

Japan

Canada

Canada

Spain

Spain

Japan

Japan

Japan

Canada

50MW

10MW

10MW

1.5MW

50MW

15MW

6MW

48MW

9MW

# **Environment-Related Business**

Mitsui engages in a wide range of business in the world around us, and, under the Environmental Policy Action Guidelines, it positions active participation in finding industrial solutions for environmental issues as one of its highest management priorities. Accordingly, we carry out a broad spectrum of environment-related business activities on a global group basis. The increasing seriousness of global warming, population growth, resource depletion, and other issues is reflected in growing public interest in nature and biodiversity conservation, the low-carbon, recycling-oriented society, and renewable energy, and in an expanding range of initiatives targeting these issues. Outlined below are some of our efforts to find solutions for environmental problems.

Activity	Renewable Energ	v		Wind power generation business	SOP Wind	Canada	40MW
Activity	Reliewable Ellerg			West Cape Wind	Canada	99MW	
					Caribou Wind	Canada	99MW
Mitsui has set an objective of maintaining a constant ratio of renewable energy generation assets among its noldings of power generation assets as a policy for dealing with global warming and building a sustainable					Harrow Wind	Canada	40MW
					PAR Wind	Canada	49MW
ociety. Accordingly, Mitsui is pu	rsuing and strengthening its initiati	ves related to r	enewable energy projects in		Plateau Wind	Canada	27MW
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	alia, and other parts of the world.				ELSC Wind	Canada	99MW
	able energy, including hydroelectric	power accou	nted for approximately 13% of		Erieau Wind	Canada	99MW
	e. e .				Cape Scott Wind	Canada	99MW
	, or thew (including thew of equil	Mitsui's total generating capacity of 41GW (including 11GW of equity-share capacity).				U.S.A.	160MW
					Eoliatec del Istmo	Mexico	164MW
Project	Company name	Country	Generating capacity/Scale		Eoliatec del Istmo Eoliatec del Pacifico	Mexico Mexico	164MW 160MW
	Company name Haneda Solar Power Co., Ltd.	<b>Country</b> Japan	Generating capacity/Scale				
					Eoliatec del Pacifico	Mexico	160MW
	Haneda Solar Power Co., Ltd.	Japan	2MW	Biomass power generation business	Eoliatec del Pacifico Zajaczkowo Windfarm	Mexico Poland	160MW 48MW
	Haneda Solar Power Co., Ltd. Tottori Yonago Solar Park	Japan Japan	2MW 42.9MW	Biomass power generation business	Eoliatec del Pacifico Zajaczkowo Windfarm Bald Hills Wind Farm	Mexico Poland Australia	160MW 48MW 106.6MW
	Haneda Solar Power Co., Ltd. Tottori Yonago Solar Park Izumiotsu Solar Park	Japan Japan Japan	2MW 42.9MW 19.6MW	Biomass power generation business Run-of-river hydroelectric power	Eoliatec del Pacifico Zajaczkowo Windfarm Bald Hills Wind Farm Green Power Ichihara	Mexico Poland Australia Japan	160MW 48MW 106.6MW 50MW
<b>Project</b> Solar power generation business	Haneda Solar Power Co., Ltd. Tottori Yonago Solar Park Izumiotsu Solar Park Tomatoh Abira Solar Park	Japan Japan Japan Japan Japan	2MW 42.9MW 19.6MW 111MW		Eoliatec del Pacifico Zajaczkowo Windfarm Bald Hills Wind Farm Green Power Ichihara Tomakomai Biomass Power Generation Co., Ltd.	Mexico Poland Australia Japan Japan	160MW           48MW           106.6MW           50MW           5.9MW (Under Construction)
	Haneda Solar Power Co., Ltd. Tottori Yonago Solar Park Izumiotsu Solar Park Tomatoh Abira Solar Park Kumamoto Arao Solar Park	Japan Japan Japan Japan Japan Japan	2MW 42.9MW 19.6MW 111MW 22.4MW	Run-of-river hydroelectric power	Eoliatec del Pacifico Zajaczkowo Windfarm Bald Hills Wind Farm Green Power Ichihara Tomakomai Biomass Power Generation Co., Ltd. Energia Sustentavel do Brasi	Mexico Poland Australia Japan Japan Brazil	160MW           48MW           106.6MW           50MW           5.9MW (Under Construction)           3,750MW (Under Construction)

# Example: Mexico's Bii Stinu & Santo Domingo Wind Projects

Mitsui began participation in the Bii Stinu Wind Project (164MW) in February 2013 and in the Santo Domingo Wind Project (160MW) in December of that same year. Both projects are located in Oaxaca state in Mexico.



Bii Stinu Wind Project (Oaxaca, Mexico)

Activity





# Modal Shift

Building and improving the social infrastructure is a top-priority issue when it comes to economic growth and promotion of global industrial development in countries and regions around the world. To respond to these needs in various regions, Mitsui is strengthening its functions and capabilities on a global group basis. We have identified the railway freight transportation and railway passenger transportation businesses as key fields, and leveraging in particular the achievements of our long-term railway lease business, we are promoting initiatives to develop and operate a wide variety of railway projects as part of our on-going modal shift.

Business investment (Company name)	Main business	Country	Quantitative effects/ project size
Trinet Logistics Co., Ltd.	Tokyo Bay barge transportation (Ichihara to Yokohama)	Japan	92.3% reduction in CO <sub>2</sub> emissions compared to truck transportation
MRC (Mitsui Rail Capital, LLC)	Freight wagon leasing business	U.S.A.	Four global basis (US, Brazil,
MRC-LA (Mitsui Rail Capital Participacões)	Freight wagon rental business	Brazil	Europe, Russia) Freight wagons: approx. 16,000
MRCE (Mitsui Rail Capital Europe B.V.)	Locomotive leasing business	Europe	Locomotives: approx. 300
MRC1520 (MRC1520 LLC)	Freight wagon leasing business	Russia	
VLI	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. 700,000 passengers per day (December 2015)
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. 700,000 passengers per day (December 2015)

# Example: Railway Rolling Stock Leasing

Our rolling stock leasing business, in the United States, Brazil, Europe, and Russia, is helping its customers enhance the efficiency of their operations by meeting their needs for leasing different types of rolling stock as well as drawing on Mitsui capabilities as a general trading company to offer added value by providing operation and maintenance management services. This business conforms to the modal shift promotion policies for railway transportation that are being worked out by countries and regions around the world from the perspective of reducing greenhouse gas emissions and other aspects of global environment conservation.



Siemens Electric locomotive in Europe

### Example: Passenger Railway Business

In the urban transport concession and PPP field, we began funding Brazil's São Paulo metro line no. 4 in 2007 and began operating the line in 2011. In addition, we began participation in four projects in 2014: the Rio de Janeiro suburban railway, the São Paulo metro line no. 6, the Rio de Janeiro LRT (light rail transport), and the Goiânia LRT. We effectively used the railway technology, know-how and other resources of Japanese railway companies and manufacturers to increase the value of these projects. At the same time, by developing the urban transportation infrastructure, we provide passengers with safe and secure transport and help alleviate the serious traffic congestion and air pollution problems in Brazilian cities.



Suburban railway in Rio de Janeiro ("SuperVia")

Activity





In addition to development of underground resources, Mitsui has positioned the recycling of aboveground resources as an area for emphasis within its comprehensive energy and environmental strategy. The objective of these activities is to

Recycling

offer industrial solutions to environmental problems and provide stable supplies of various resources.

Business investment (Company name)	Main business	Country	Business size
MM & KENZAI Corporation	Metal scrap collection and sales business	Japan	Handles 7 million tons/year of metal scrap
Kyoei Recycling Co., Ltd.	Industrial waste processing and gas production	Japan	Processing capacity of 27,000 mt/year, 140,000 Nm³/day
E.R. Japan Corporation	Recycling and reuse of used compact home appliances	Japan	Recycling capacity of 24,000 mt/ year
Mitsui Bussan Metals Co., Ltd.	Non-ferrous metal scrap and non- ferrous metal product trading business	Japan	Handles 100,000 tons/year of non-ferrous metal scrap
Sims Metal Management Ltd.	General recycling business (metal scrap, electronic device recycling, etc.)	North America, Europe, Australia, New Zealand, and elsewhere	Handles 1.2 million tons/year of metal scrap, etc.
Wuhan GHM Auto Parts Remanufacturing Co., Ltd.	Remanufacturing of automotive parts	China	360,000 units of remanufactured automotive parts per year

# Example: General Recycling Business for Metal Scrap, Electric Devices, etc.

In June 2007 Mitsui invested in Sims Metal Management Ltd., the world's largest recycler of ferrous and non-ferrous metal as well as electronics, and, as of March 2016, Mitsui was the largest shareholder with an approximately 18% stake. Today, Sims Metal Management has more than 240 locations on five continents with a focus on North America, and more than 5,000 employees. In addition to the metal scrap business, the company also operates the world's largest electrical and electronics recovery and recycling business, as well as New York City municipal waste processing business. Sims Metal Management is, therefore, continuing to grow as a total recycling enterprise.



Sims scrap yard (U.S.)

Activity

# Paper Manufacturing Resource Business

Business investment (Company name)	Country	Business size (*target)
BTP (Bunbury Treefarm Project)	Australia	20,000 ha (*)
GTP (Green Triangle Treefarm Project)	Australia	10,000 ha (*)
AAP (Australian Afforestation Pty., Ltd.)	Australia	2,000 ha (*)
PTP (Portland Treefarm Project)	Australia	3,000 ha (*)
BFP (Bunbury Fibre Plantations Pty., Ltd.)	Australia	14,000 ha

# Example : Forest Resources Business for Pulp and Paper Manufacturing

Since 1996, Mitsui has been engaged in two afforestation projects in Victoria and three in Western Australia with the aim of securing resources for pulp and paper manufacturing. By cultivating sustainable forests, these projects contribute to protecting valuable natural resources, absorbing and chemically immobilizing carbon dioxide, preserving biodiversity, and preventing soil erosion and salt pollution.



Forest Resources Business (Western Australia)

**4** 29 □





# Activity Other Environment-Related Business

Project	Main business
Materials for secondary battery use	Structuring systems for the stable production and supply of secondary battery materials, including principally those used in lithium-ion batteries
Rooftop gardening, green wall building, and greening at educational institutions	Proposal sales of greening (landscape)-related materials and development of sales business for greenery to improve the environment through Mitsui Bussan Agro Business Co., Ltd. (Japan)
High-pressurized tank for NGVs and FCVs	Import and sale of tanks for installation on vehicles powered by natural gas and fuel cells
Car-sharing business	Operation of a car-sharing business that utilizes high fuel-efficiency, low-pollution vehicles (Singapore)
Water treatment business in Mexico	Participation in four major water treatment projects (including one still under construction) in the State of Jalisco and other parts of Mexico through a consolidated subsidiary, Atlatec, S.A. de C.V. (headquartered in Mexico)
Water and sewer concession business in the Czech Republic	In September 2013, Mitsui and FCC Aqualia, a leading water management company in Spain, entered into a water concession business in Ostrava, Czech Republic. The project company is currently supplying drinking water, including bulk water, and sewage water treatment service for approximately 1.3 million users
Water treatment business in China	Galaxy NewSpring Pte. Ltd. established in August 2010 as a 50-50 joint venture with Hyflux Ltd., a leading provider of integrated water management solutions based in Singapore, currently operating drinking water, sewage treatment, and water recycling systems at 24 sites in China.
High-grade urea solution: AdBlue® business	See P.29
Solar power generation monitoring service	See P.29
Cloud-based energy saving service	See P.30
Investment for the development of microbe gas fermentation technology	See P.30
Precision agricultural solutions business	See P.30
Lithium ion secondary cell business in China	See P.30
The Callide Oxyfuel Project—Demonstration for zero-emission electricity generation with coal	See P.18 "Strategic Focus"

## Example : High-grade Urea Solution AdBlue® Business

Mitsui Chemicals' AdBlue® is a detoxifying agent of water and nitrogen which works as a reduction agent for nitrogen oxides including gas emissions of trucks and buses. Mitsui is building and enhancing a nationwide network of sales and logistics locations and infrastructure as the sole agent of Mitsui Chemicals' AdBlue®. Mitsui contributes to the environment by steadily supplying AdBlue® for diesel vehicles supporting the gas emission regulations set down by the government. Demand for a stable supply of AdBlue® is expanding due to further tightening of automobile emission standards (2016 standards).



AdBlue® is a registered trademark of the German Association of the Automobile Industry (VDA).

## **Example: Solar Power Generation Monitoring Service**

Solar power facilities are often thought to be maintenance free, but in fact, panels can be damaged or contaminated, equipment failures can occur, and facilities deteriorate with age. Therefore, making systems to rapidly detect these irregularities is essential. Mitsui Knowledge Industry Co., Ltd., a consolidated subsidiary, uses its abilities in integration of information and communication technologies to provide cloud services for remote monitoring of solar power generation facilities.



Conceptual image of solar power generation facilities and a remote monitoring screen

**30** ✓



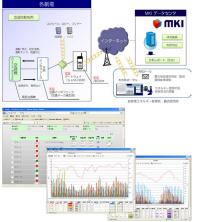


## Example: Cloud-Based Energy Saving Services

Mitsui Knowledge Industry Co., Ltd., a consolidated subsidiary, uses information technology to provide energy saving services to commercial facilities, enabling customers to easily save energy while maintaining a comfortable environment.

## Features of Energy Saving Services

- Automated remote control of air conditioning to eliminate wasteful energy consumption and cut costs.
- Effective use of existing air conditioning facilities without dependence on a specific manufacturer or energy source (electricity or gas).
- Fast and inexpensive installation.
- Real-time automated operation based on measured values.
- Control areas can be precisely divided for individual control of each area.
- Flexible control, even in environments susceptible to temperature changes, for efficient energy use without waste.



System overview and control screen

# Example: Investment for the Development of Microbe Gas Fermentation Technology Mitsui invested in the US venture company LanzaTech New Zealand

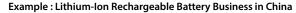
Limited that is developing microorganism gas fermentation technology which converts carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>) into fuel and chemicals such as ethanol and butadiene. We aim to develop businesses that can tackle global warming by commercializing technology that converts emissions containing carbon dioxide into energy.



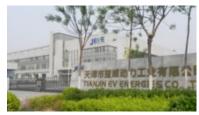
Demonstration project with Shougang Steel in China

## Example: Precision Agricultural Solutions Business

Mitsui has acquired an equity stake in Farmers Edge, a global leader in precision agriculture and independent data management solutions headquartered in Canada, which provides one-stop access to services ranging from farm analysis to consultation. It helps to raise crop yields and reduce costs by using satellite remote sensing, soil analysis and various other information resources to support the implementation of efficient fertilizer application plans. Using these methods, it has reduced fertilizer costs by an average of 5% and improved yields by an average of 9%. While the company provides these services mainly in Canada at present, it is also expanding into the United States, Russia, Brazil, and Australia. It provides services to a global customer base of over 2,200 farm operators.



Mitsui contributes to realizing a sustainable energy consumption society by providing solutions to save electricity through our business participation in Tianjin EV Energies Co., Ltd., which manufactures and sells lithium-ion rechargeable batteries for electric automobiles, hybrid automobiles, plug-in hybrid automobiles and other applications in China.



Tianjin EV Energies factory

Precision Agricultural Solutions

(Unit-1.000t-CO<sub>2</sub>)



# Initiatives to Reduce Environmental Load, Including Curbing Global Warming (With Environmental Data)

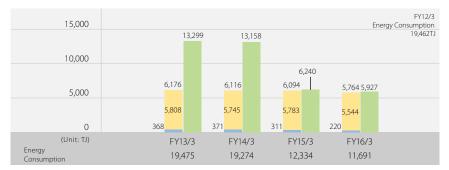


# Activity Management of Greenhouse Gas (GHG) Emissions

Mitsui is carrying out initiatives for the reduction of greenhouse gas (GHG) emissions on a global Group basis. From the fiscal year ended March 31, 2006, Mitsui has continually surveyed its domestic GHG emissions in order to understand its fixed quantity of emissions year by year. Mitsui has also announced its objective of reducing energy consumption (intensity target) since the fiscal year ended March 31, 2012 for Mitsui itself as well as for its domestic subsidiaries, by an average of over 1% per year. In this way the entire group is promoting the reduction of GHG emissions from energy sources. In addition, Mitsui has begun surveying the GHG emissions of its overseas subsidiaries since the fiscal year ended March 31, 2009 and we are continuing to consider new initiatives to reduce GHG on a global Group basis. An investigation of the water amount of consumption in a main domestic and abroad subsidiary company is begun from fiscal year ended March 31, 2016.

Concerning the data marked with  $\bigstar$ , an independent practitioner's assurance report prepared in accordance with the international standard ISAE 3000 and 3410 was given by Deloitte Tohmatsu Evaluation and Certification Organization Co., Ltd.

# Energy Consumption★



Domestic locations

Subsidiaries and associated companies in Japan

Overseas subsidiaries and associated companies

# CO₂ Emissions★



				( , ,
	FY2013	FY2014	FY2015	FY2016
SCOPE1	1,364	1,460	384	317
SCOPE2	366	390	341	374
Total	1,730	1,850	725	691

**32** 
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Protection of the Global Environment

# Electricity Consumption ★



## Water Consumption

FY16/3	(Unit: Thousand m <sup>3</sup> )		
Subsidiaries and associated companies in Japan	15,549		
Overseas subsidiaries and associated companies	13,761		
Total	29,310		

< Scope of coverage>

- 1 Figures for Energy Consumption, CO<sub>2</sub> Emissions and Water Consumption:
- \* Domestic locations are based on the computation criteria stipulated in the Act on the Rational Use of Energy. The scope includes not only Mitsui's Head Office, subsidiaries, and branches, but also buildings owned in Mitsui's name in Japan as well as rental buildings, offices, and training centers.
- \* Subsidiaries and associated companies in Japan are domestic subsidiaries as specified in the Financial Instruments and Exchange Law. Estimates are based on the computation criteria stipulated in the Act on the Rational Use of Energy.
- \* Overseas subsidiaries and associated companies are overseas subsidiaries included within the scope of consolidation. Estimates are based on the computation criteria stipulated in the World Business Council for Sustainable Development (WBCSD) and GHG protocols "Emission Factors from Cross Sector Tools (April 2014).0", "GHG emissions from purchased electricity (Version 4.7)" and Act on the Rational Use of Energy.
- \* We reviewed the data in FY15/3 in accordance with surveying in FY16/3, also expand the scope of coverage, including some estimates from FY16/3. 2 Figures for Electricity Consumption: It is based on the computation criteria stipulated in the Act on the Rational Use of Energy. The scope includes not only
- 2 requires for clearning consumption: it is based on the computation criteria supulated in the Act on the Rational Use of Energy. The scope includes not only Mitsui's Head Office, subsidiaries, and branches, but also buildings owned in Mitsui's name in Japan as well as rental buildings, offices, and training centers.

# Activity Reducing the Environmental Impact of Offices

All employees at Mitsui strive to reduce the burden on the environment not only when conducting business, but also in their office activities through the efficient utilization of energy resources, as well as the reduction, reuse, and recycling of waste and its proper disposal.

Concerning the data marked with 🖈, an independent practitioner's assurance report prepared in accordance with the international standard ISAE 3000 and 3410 was given by Deloitte Tohmatsu Evaluation and Certification Organization Co., Ltd.

# Electricity Consumption★



# Water Consumption★



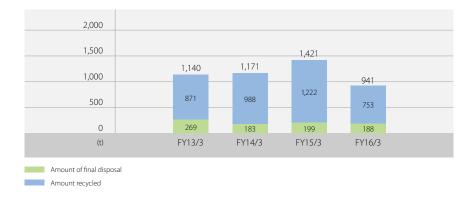
**33** ✓



# Paper Consumption ★



# Waste★



	FY13/3	FY14/3	FY15/3	FY16/3
Recycling rate (%)	76.4	84.4	86.0	80.0

\* Figures for Electricity Consumption and Paper Consumption are for all offices in Japan (Mitsui & Co., Head Office Building (Tokyo), 6 Offices, 5 Branches).
 \* Figures for Water Consumption and Waste are for the following Mitsui & Co. Head Office Building (Tokyo) and Mitsui-owned buildings (Osaka and Nagoya). Also we reviewed the data in FY15/3 in accordance with surveying in FY16/3.

# Activity Work in Environmental Logistics

At present, we handle a diverse range of freight, including iron and steel, other metals, chemical products, and foods. We handle a total of 635 million ton-kilometers<sup>\*1</sup> of domestic freight annually. About 87% is carried by ship, about 13% by truck, and the remainder by rail or airplane.

Concerning the data marked with  $\bigstar$ , an independent practitioner's assurance report prepared in accordance with the international standard ISAE 3000 and 3410 was given by Deloitte Tohmatsu Evaluation and Certification Organization Co., Ltd.

# Freight Volumes Handled by Mitsui★



# Result for Fiscal Year Ended March 31, 2016<sup>\*2</sup>★

Specific consumption*3	18.3

\*1 Ton-kilometers are calculated by multiplying the number of metric tons of cargo by the distance they are transported (in kilometers).

\*2 Results based on the Act on the Rational Use of Energy were reported in June 2016.

\*3 Specific consumption: An expression of energy efficiency, calculated as energy used (liters of oil equivalents) divided by thousand ton-kilometers, where a smaller number represents higher transportation efficiency.

# • P.81 Independent Practitioner's Assurance Report





#### Environmental Accounting/Environmental Liabilities Activity

## Environmental conservation costs

The cost of environmental conservation for all of Mitsui's domestic offices during the fiscal year ended March 31, 2016 is outlined below.

		(Unit:1,000JPY)		
Category	Investments	Expenses		
Business areas costs	552,832	554,748		
Upstream/downstream costs	0	86,523		
Administration costs	146	531,445		
Social activity costs	0	666,309		
Other cost	11,410	1,268		
Total	564,388	1,840,293		

\* Based on the Environmental Accounting Guidelines (2005 version) published by the Ministry of the Environment of Japan Scope of coverage: All offices in Japar

Target period: April 1, 2015 - March 31, 2016

## Environmental conservation/Economic effects

Mitsui's environmental conservation and economic effects for paper consumption and energy consumption, during the fiscal year ended March 31, 2016 are shown below.

	Environmental conservation effects	Economic effects (Unit:1,000JPY)	
Paper consumption	riangle214 Thousand sheets	2,887	
Electricity consumption	3,598 MWh	74,664	

\* Environmental conservation/Economic effects are calculated by Actual numerical results for the previous year - Actual numerical results for this year Scope of coverage

Paper: All offices in Japan / Sheet: A4-size sheet equivalent

Electricity consumption: Mitsui & Co. Head Office Building (Tokyo), Mitsui-owned buildings (Osaka and Nagoya)

## Assessment of environmental liabilities

Currently, demands are being placed on corporate management to make proactive efforts regarding environmental issues. Mitsui endeavors to understand the environmental risk—particularly asbestos, PCB, and soil pollution—of tangible fixed assets such as the land and buildings of Mitsui itself, as well as those of its domestic group subsidiaries, through on-site investigations. It also works to respond in a timely manner in order to ensure its usefulness during decisions and judgments related to management policies, in addition to responding to legal requirements.

#### Activities to Prevent Global Warming through Business Activity

Environmental conservation is an integral part of economic and social activities. To achieve sustainable development, we must carry out development in a way that meets the needs of the present generation without reducing the capacity to meet the needs of future generations.\*1

Mitsui & Co. concluded an equity participation agreement with New Forests Pty Limited ("New Forests", head office: Sydney, Australia), which manages forest assets in Oceania, Asia, and North America. Through this relationship, Mitsui & Co. aims to participate in the stable supply of forestry resources while contributing to sustainable social development.



Management of forest land in new forests in Australia

New Forests was founded in 2005. The forestry funds that it manages and invests in under trust amount to A\$2.8 billion (approximately ¥240 billion), and its forestry plantations and other assets cover a total area of 600.000 hectares. In Oceania, the company

invests its forestry funds mainly in plantations to produce materials for paper manufacturing and construction. New Forests is helping to ensure stable supplies of timber resources to Asian markets, where demand is expanding in step with rising living standards. It also invests in sustainable forestry resource initiatives, including rubber plantations, in Southeast Asia. New Forests is also active in North America, where in addition to its forestry assets, it also manages a fund that sells greenhouse gas emission rights to meet the needs of energy utilities and other organizations.

New Forests combines its global business development and management capabilities with a commitment to the United Nations Principles for Responsible Investment,\*2 which form the basis for its forestry asset investment and management policies. In principle, all of its investment and business activities are subject to verification by independent organizations.

This investment will allow Mitsui & Co. to support the sustainable development of forestry resources to meet anticipated demand growth, while also making a positive contribution in a field that is closely linked to the global environment.

\*1 The final report of the 1987 United Nations World Commission on Environment and Development (WCED) (the Brundtland Commission)

\*2 United Nations Principles for Responsible Investment: Published by the United Nations in April 2006, these six principles define the philosophy needed to reflect perspectives relating to the environment, society, and corporate governance (ESG) priorities in the investment decision-making processes of institutional investors, and in policies on share ownership.

Protection of the

Global Environment



# Initiatives for Preserving Biodiversity

# Activity Conservation of Biodiversity through Business: Tree-Planting Program in Australia

Mitsui is carrying out a eucalyptus tree-planting program in Australia, together with partners such as Nippon Paper Industries Co., Ltd., for the stable provision of wood chips (the raw material for paper). Australia was chosen for its very flat topography compared to mountainous Japan, and because its tree-planting areas are highly productive and intensively managed—so much so that they are often called "tree farms." The trees grow for approximately 10 years between planting and harvest, known as one 'rotation'. After harvest, reforestation (or coppice regeneration) is done so as to grow subsequent rotations of trees in a sustainable manner.

As of the end of March 2016, the total forested area, both solely possessed as well as jointly owned and operated with partners including Nippon Paper Industries Co., Ltd., was approximately 200 km<sup>2</sup>, equivalent to an area slightly larger than Washington D.C. Since tree planting commenced in 1996, the current areas are in their second rotation after the first-rotation forestation was logged, with full consideration for the environment over the long term.

These tree-planting areas have all acquired either FSC® (Forest Stewardship Council) certification (an international certification) or the international Program for the Endorsement of Forest Certification (PEFC), in order to promote sustainable forest management. With periodic certification audits, the following items are observed in respect to criteria set by the relevant certification bodies, and work is undertaken while taking the needs of biodiversity and conservation into consideration.

- 1. Compliance with local laws and regulations
- 2. Monitoring of the forest's health, results of forestry operations, and production results
- 3. Creation of and adherence to long- and short-term forest management plans
- 4. Forest management that takes into consideration the environment and local communities

As an example of our adherence to these criteria, we are being careful not to disrupt the many kinds of flora and fauna that live in the wetland and headwater ecosystems of the land we manage. We are also actively preventing the supplanting of native vegetation by controlling specific invasive weeds.

All forest management activities near water and tree-planting areas are carried out with reference to the database of rare species (for native reptiles, mammals, birds, fish, etc.) of Australia's Department of Sustainability, Environment, Water, Population and Communities. As a



Tree-planting areas in Australia

result, these activities also serve to protect native species, headwaters, and water quality.

The greatest threat to biodiversity is posed by bushfires. To prevent these, we install mandatory firebreaks throughout the tree farms, maintain a fire truck response system, and operate a continuous monitoring network. In cooperation with neighboring farmers, we make use of the Australian location to allow sheep to graze the forest undergrowth, helping prevent the spread of fire at the same time as reducing the need for weed killers and other such chemicals.



Sheep that contribute to preventing the spread of fires

# Policy

# About Initiatives at Mitsui's Forests

# Overview of Mitsui's Forests

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, and 0.1% of Japan's territory. We have worked under our Forest Management Policy to nurture these forests and make productive use of the benefits that they provide. Mitsui gives its forests the status of "assets with a high degree of public use that benefits the whole of society". Forests provide timber, which is a renewable resource. When properly managed and developed, they also provide a wide range of public benefits. For example, forests help to clean the atmosphere by absorbing carbon dioxide and emitting oxygen. They also clean and enhance water resources, while their water storage capacity helps to prevent natural disasters and maintain ecosystems. Based

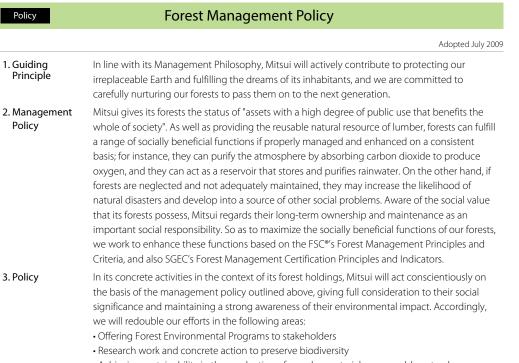


on a quantitative assessment using Forestry Agency data, the estimated value of Mitsui's forests is ¥120 billion per year. One example of that value is the fact that our forests absorb and fix around 160,000 tons of carbon dioxide annually. Furthermore, around 14,000 hectares of our forests have been officially designated as "Water Conservation and Water Replenishing Forests" because of their role in securing water resources and preventing floods.

Recognizing these public benefits provided by its forests, Mitsui sees itself as having an important social responsibility, as a forest owner, to maintain and manage these forests properly over the long term.

Global Environment





 Achieving sustainability in the production of wooden material as a reusable natural resource and promoting its utilization as wood biomass

# Policy

# **Forest Social Value**

Appropriate forest management is just part of our commitment. We are also actively engaged in initiatives to utilize forest resources on various levels. As part of our contributions to society and to local communities, we use our forests for environmental education activities. Resources from our forests are also used to support cultural activities and traditional events in surrounding areas, as well as reconstruction in areas affected by the Great East Japan Earthquake of 2011. Mitsui supports the campaign to promote the use of Japanese-grown timber as a way of revitalizing the Japanese forestry industry and providing additional impetus for regional development. We use Japanese-grown timber from our forest in our offices. We utilize Mitsui's forest resources for a wide range of other purposes. For example, wood biomass is a dependable source of fuel for local biomass power generation projects.

In the area of environmental education, Mitsui's forests are used for field studies that teach people about the role of forests, for forestry experience programs, and for various other activities within and beyond the Mitsui organization. We also provide "Visiting Lectures" at elementary and junior and senior high schools throughout Japan to present lessons about the functions and management of forests and the role of forestry.

We are also helping to protect culture. We have entered into agreements with the Biratori Ainu Association and the town of Biratori in Hokkaido concerning the protection and fostering of Ainu culture and the reconstruction of traditional Ainu living spaces. Under those agreements, we are helping to protect and foster Ainu culture. Under an agreement with the Kyoto Model Forest Association, we are supporting efforts to ensure the continuation of traditional events in Kyoto by protecting and nurturing forests in the region.

We also contribute to local communities through forestry activities in forests owned by Mitsui. We have started to promote the use of wood biomass as an alternative to fossil fuels. For example, we are providing steady supplies of wood biomass from Mitsui's forests for a biomass power generation project, which will become operational in December 2016, in Tomakomai, Hokkaido.





# System Cultivating Different Types of Forests: Forest Management Zoning

Mitsui's forests are divided into Forests for Regeneration and Harvest (approximately 40%) and Natural Forests and Naturally Regenerated Forests (approximately 60%). Forests for Regeneration and Harvest are forests that have been planted and cultivated by human hands, and follow a repeated cycle of planting, cultivating, harvesting, and utilization for the production and supply of lumber resources. Natural Forests are forests that have been cultivated through natural action, while Naturally Regenerated Forests are forests that have grown back mainly through



natural action following deforestation due, for instance, to a natural disaster or tree-harvesting. Forests in these categories are maintained in their natural state. Areas within these forests that are particularly important from the viewpoint of biodiversity are designated as Biodiversity Conservation Forests (approximately 10% of all Mitsui's forests).

Mitsui manages Mitsui's forests in accordance with the Forest Management Zoning categories as shown below. Appropriate management is applied to each forest category.

## Management zoning categories of Mitsui's forests (as of December 31, 2015)

	Category		Definition	Area (ha)
Forests for Regeneration	Harvest-oriented Sustainable Cycle Forests Natural Restoration Forests		Forests for the production and supply of lumber resources through the repeated cycle of harvesting, planting, and cultivating.	6,839
and Harvest			Forests to be restored as Naturally Regenerated Forests consisting of coniferous and broad-leaved trees.	10,631
Forests for Regeneration and Harvest, Natural Forests and Naturally Regenerated Forests	Biodiversity Conservation Forests	Special Conservation Forests	Forests judged to have irreplaceable biodiversity value at the regional and national level and requiring stringent protection.	324
		Environmental Conservation Forests	Forests confirmed to support a large number of rare creatures whose habitat requires protection.	875
		Water and Soil Conservation Forests	Forests with plentiful water stocks that form a water resource, reduce the risk of natural disasters, or have other major socially beneficial functions which contribute to the safeguarding of the water supply and the preservation of ecosystems.	3,164
		Cultural Conservation Forests	Forests requiring protection due to the particularly high value of their "cultural services"—functions that nurture traditions and culture and form part of the "ecosystem services" that are dependent on biodiversity.	117
Naturally Regenerated Forests	Productive Naturally Regenerated Forests		Forests to be cultivated for tree species useful as a source of lumber.	1,814
	General Naturally Regenerated Forests		Forests not composed of productive species but to be cultivated for increased social value.	19,149
	Other Naturally Regenerated Forests		Naturally Regenerated Forests other than in the above categories.	1,504
Total				44,417

Approximately 70% of Japan's land area is covered by forests, 40% of which are Forests for Regeneration and Harvest, or forests created and tended by human hands. When considering the benefits of forests in Japan, working out how to maximize the benefits of Forests for Regeneration and Harvest is very important. Forests for Regeneration and Harvest need to be constantly tended by human hands. Forests for Regeneration and Harvest, when not managed properly, tend to become dark and overgrown. When managed well, Forests for Regeneration and Harvest are bright and open to sunlight. In such forests, which are bright because they are well-managed, underbrush grows, animals thrive, and new soil is created. As a result, groundwater is purified and nutrients are carried to the rivers and the sea. These forests also store water, thus preventing floods and other natural disasters. The economic benefit of this is that trees grow well and provide lumber. When forests are not properly managed and therefore are dark, they not only fail to provide these benefits but also lose the biodiversity and end up actively contributing to regional environmental degradation.

# System

# **Forest Certification**

Forest certification is given based on assessments regarding whether fixed criteria are met concerning forest management methods. The spread of such certification prevents unregulated deforestation, preserves healthy forests, and helps protect the global environment.

In December 2009, we achieved certification for all Mitsui forests under the FSC® international forest standards. We took this step to obtain independent assessment and certification as confirmation that our forests are being managed appropriately and with care for biodiversity. Mitsui was the first private company in Japan to obtain this certification for large-scale forests covering an area of over 10,000 hectares.



The FSC® certification is a type of certification established by the Forest Stewardship Council (FSC®), an international NGO with a membership system that operates an international forest certification system. FSC® has 10 principles and 70 criteria for Forest Management from a wide perspective of multi-stakeholders. Certification criteria focus not only on whether the forest manager is carrying out appropriate management from an economic standpoint, but also look at consideration for the environment, maintaining favorable relationships with regional communities near the forest and other factors. When Mitsui completed the certification procedures, a survey was given to stakeholders in our 74 forestlands across Japan. This survey confirmed that Mitsui and our subsidiary Mitsui Bussan Forest Co., Ltd., which manages the forestlands, have built a favorable relationship with all local communities.

Among the different types of FSC<sup>®</sup> certification, Mitsui has received Forest Management (FM) certification, while Mitsui Bussan Forest has received Chain of Custody (CoC) certification for the processing and distribution of cut lumber. As a result, Mitsui became the largest supplier of domestic FSC<sup>®</sup>-certified wood in Japan.



# Addressing Environmental Issues through Contribution to Society

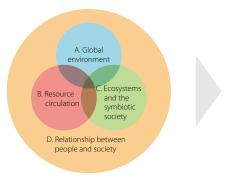
Activity	Overview of The Mitsui & Co. Environment Fund	
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In July 2005, Mitsui launched the Mitsui & Co. Environment Fund as a grant program that aims to contribute to the sustainable development of society and address global environmental problems by supporting various activities and research projects.

Since FY2011, when the Great East Japan Earthquake occurred, Mitsui has been engaged in recovery efforts aimed at achieving the sustainable development of society through initiatives to mitigate and resolve environmental problems caused by the earthquake.

In addition to its financial support for the activities and research conducted by NPOs, universities, and other groups or organizations, the fund is also encouraging Mitsui & Co.'s officers, employees and their families to participate in the activities, conducted by groups or organizations that received our grants, as volunteers.

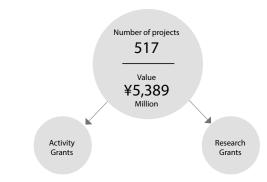
Launched	July 1, 2005
Screening structure	CSR Promotion Committee, Project Deliberation Panels, Project Selection Meeting (composed of outside experts, Mitsui management, and staff)
Grant program	Activity Grants     Research Grants     For practical activities or research providing concrete proposals, which contribute to the sustainable development of society and address global environmental problems.
Focus fields	A. Global environment B. Resource Circulation C. Ecosystems and the Symbiotic Society D. Relationship between People and Society
Eligible groups or organizations	NPOs, NGOs, general incorporated associations & foundations, public interest incorporated associations & foundations, special civil foundations, universities



Sustainable development of society



# Activity Grants Awarded of The Mitsui & Co. Environment Fund



## Grants Awarded

(Unit: "Number": number of project, "Value": ¥ million)

	Activity Grants		Research Grants		Total	
			Research Grants		Total	
	Number	Value	Number	Value	Number	Value
FY06/3	15	117	—	_	15	117
FY07/3	18	217	_	—	18	217
FY08/3	48	437	23	456	71	893
FY09/3	51	523	24	368	75	891
FY10/3	34	311	17	213	51	524
FY11/3	28	244	22	285	50	529
FY12/3*	52 (43)	528 (463)	46 (34)	603 (481)	98 (77)	1,131 (944)
FY13/3*	36 (22)	237 (157)	14 (2)	112 (13)	50 (24)	349 (170)
FY14/3	20	165	15	150	35	315
FY15/3	21	118	8	85	29	203
FY16/3	15	155	10	65	25	220
Total	338	3,052	179	2,337	517	5,389

\* Figures in parentheses show Restoration grants for the Great East Japan Earthquake. However, since FY14/3, we have continued to support restoration projects within the framework of regular programs, without providing a separate additional framework. The total value of the restoration projects since FY12/3 is ¥1,288 million.

