



Environment

Environmental Management

Policy and Basic Concept

We consider efforts to conserve the global environment to be the most important issue in our management policy. This is under recognition that the business activities ITOCHU performs in Japan and overseas (e.g., the provision of various products and services, the development of resources, and business investment) are closely connected to global environmental problems.

We believe that sustainable corporate growth cannot be achieved without consideration for global environmental problems. Therefore, we established the Global Environment Department in 1990 ahead of other trading companies. We then formulated ITOCHU's Activity Guidelines on the Environment in 1993 (revised to the ITOCHU Environmental Policy in 1997). We reorganized and integrated the Environmental Policy and the Basic Policy for CSR Promotion in April 2018. This was revised into the ITOCHU Group Basic Policy on Promotion of Sustainability as a new policy based on the spirit of *sampo yoshi*, or the "three goods" (good for the buyer, good for the seller and good for society).

We are ensuring compatibility of both offense and defense — offense to promote environment conserving business and defense to take a precautionary approach to environmental risks — based on this policy. The aim of this is to fulfill our corporate philosophy of being committed to the global good. We are also engaged in global corporate management and activities with a constant awareness of global environmental problems. This comes from a perspective of wondering what we can leave to the next generation in addition to contributing to the good of the current generation.

We reorganized and integrated our conventional environmental management structure into a structure to promote sustainability in line with the revision to this policy in April 2018. We have built and are maintaining and operating an efficient environmental management system in accordance with the ISO14001 standards.

You can find our Basic Policy on Promotion of Sustainability on P7.

Targets

Effort Targets and Achievements by Item in FYE 2019

We set environmental goals we will tackle in the medium term for environmental management. Upon that, we set concrete targets and review achievements based on those every fiscal year.

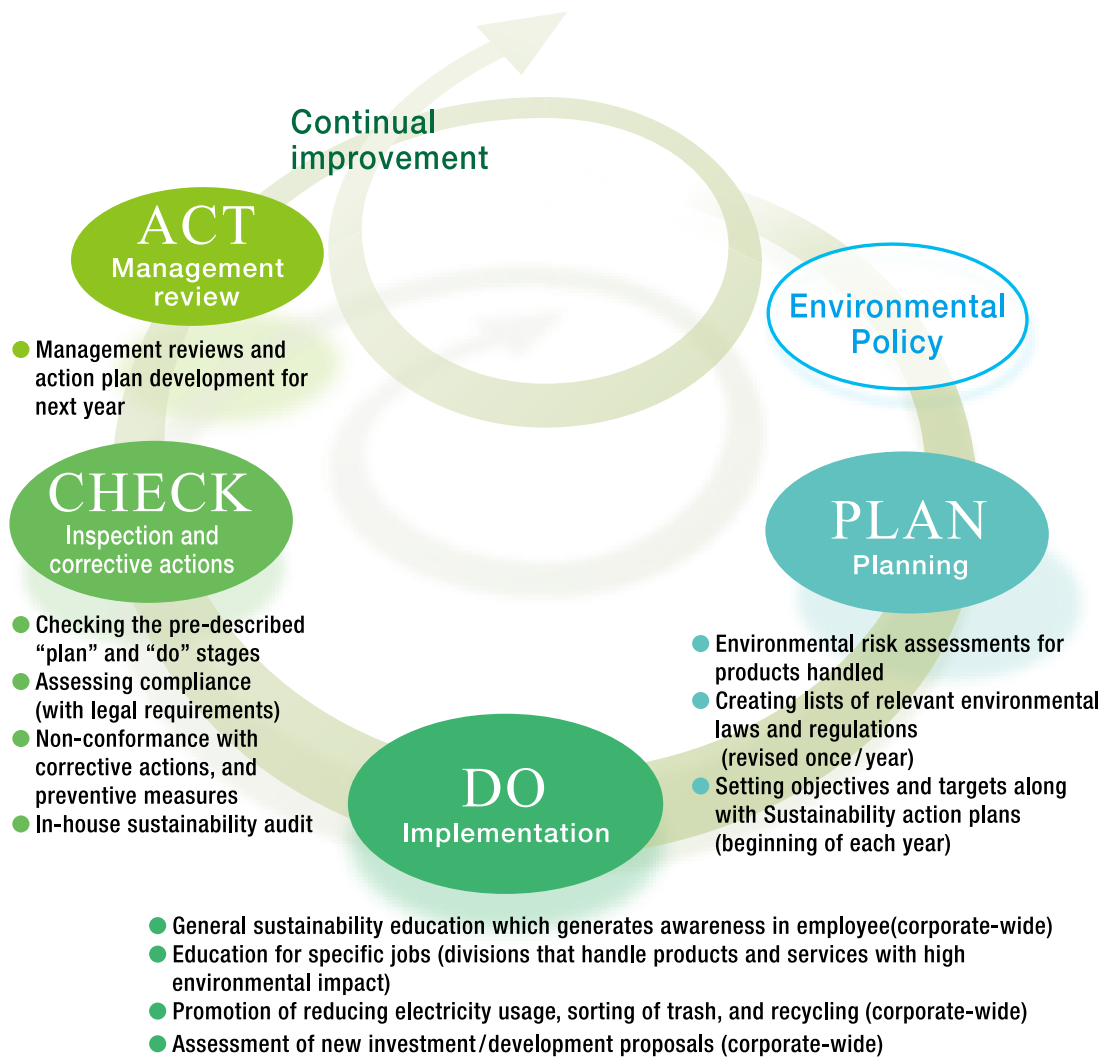
Item	FYE 2019 Environmental Target	Review	Content Implemented in FYE 2019
Prevention of environmental pollution and compliance with laws and regulations	To ensure thorough company-wide utilization of advance environmental risk assessments and the ESG Checklist for Investments when investing. To strengthen risk management awareness over the entire supply chain with environmental risk assessments by product and to ensure their thorough company-wide utilization.	○	We performed advance environmental risk assessment with the ESG Checklist for Investments in all investment projects. (The assessment items also include the energy consumption and CO ₂ emissions situation.) The 33 check items conform to the core subjects of ISO26000 (Guidance on social responsibility). We gave feedback on ESG aspects to the departments making the applications for all investment projects. (We gave comments on 112 projects in FYE 2019.)
	To promote efforts to improve the management level by checking the environmental management system, compliance and environmental performance situation through internal audits.	○	We conducted internal audits on 49 departments (including in the form of a self-check for five departments). We checked the environmental management system operation, compliance and environmental performance management situation. We then gave advice.
	To select group companies and then perform visits and surveys on their environmental management situation.	○	We visited and surveyed a group company and gave them a variety of advice. We implemented improvements on-site.

Item	FYE 2019 Environmental Target	Review	Content Implemented in FYE 2019
Promotion of environmental conservation activities	To expand the scope of things to be understood (e.g., energy emissions) in overseas local subsidiaries and major Japanese and overseas subsidiaries.	○	We collected and disclosed information from 15 overseas branches (including local subsidiaries), 208 group companies in Japan and 299 overseas group companies.
	To set and review targets according to the Sustainability Action Plan. (To promote at least one target in each company and branch.)	○	We planned, implemented and reviewed the respective environmental conservation activities in all company divisions and branches.
Coexistence with society	To give environmental education to elementary and junior high school students.	○	We provided a summer vacation environmental workshop (July 24 / about 100 participants).
	To provide cooperation to local companies and governments for environmental conservation activities. (To provide cooperation in at least one case in each branch.)	○	Branches held events and volunteer activities in cooperation with local companies and governments.
Promotion of awareness activities	To give and promote learning with seminars, tours, basic ESG education and education for personnel with specific duties for ITOCHU and group company employees.	○	We gave basic ESG education (June to November / 4,168 participants) and education for personnel with specific duties (June to March / 400 participants). We also held a sustainability seminar called the Human Rights Seminar (December 13 / 200 participants).
	To give and promote learning with workshops on the Waste Management and Public Cleansing Law and Soil Contamination Countermeasures Act for ITOCHU and group company employees.	○	We gave sustainability e-learning (November to December 2018 / 4,474 trainees).

* ○ : Implemented △ : Partially implemented × : Not implemented

Structures and Systems

ITOCHU was the first trading company to introduce an environmental management system (EMS) based on ISO14001 in 1997 to strive for continuous improvement. This system seeks to comply with environmental related laws and regulations, to take a precautionary approach to environmental risks (including those relating to climate change) and to promote environment conserving businesses. Specifically, we recognize that our business activities can have an impact on the global environment and so are looking to take a precautionary approach to environmental risks. To that end, we have built a mechanism to assess in advance the impact in regards to new investments in particular together with the products we handle. It is a system in which we formulate targets for items in terms of both offense and defense every year. These items relate to a precautionary approach to environmental risks, environment conserving businesses, saving energy, saving resources, CO₂ emissions reduction and other climate change related risks. We then assess and analyze the progress situation. Finally, we move through the PDCA cycle to reliably achieve our targets. Through this, we operate and manage our targets.



Environmental Management Structure

We have reorganized and integrated our environmental management structure into a structure to promote sustainability in the same way as with the Environmental Policy since April 2014. This has led to the establishment of a new structure to promote sustainability. You can find this from P11.

* Group companies subject to the environmental management system: ITOCHU Automobile Corporation, ITOCHU Metals Corporation, and ITOCHU Taiwan Corporation

No. of companies that have acquired ISO14001 in our group: 63 out of 532 companies (coverage :12%).

External Audits

We undergo an ISO14001 certification review every year by the BSI Group Japan K.K. (BSI). In FYE 2019, we underwent a renewal review. (We undergo a maintenance review in the first and second years and then a renewal review in the third year; this cycle then repeats). This review led to the renewal of our certification.

Internal Audits

We conduct internal sustainability audits every year based on ISO14001. In FYE 2019, we audited all 49 departments (including in the form of a self-check for seven departments). Members of the Sustainability Management Department constitute the audit team and conduct them with emphasis on compliance audits. The implementation of internal sustainability audits over half a year leads to a precautionary approach to environmental risks.

Environmental Accounting

Environmental Conservation Costs

The environmental conservation costs in all offices in Japan of ITOCHU in FYE 2019 are as follows.

(Unit: 1,000 yen)

Classification	Amount
Costs inside business areas	1,393,020
Up/downstream costs	15,384
Management activity costs	106,799
Research and development costs	500
Social activity costs	10,357
Costs to address environmental damage	48,481
Total	1,574,541

Summarized based on the Environmental Accounting Guidelines - 2005 Edition from the Ministry of the Environment.

Scope of Calculation: All domestic branches

Target period: April 1, 2018 to March 31, 2019

Environmental Conservation and Economic Effects

The environmental conservation effect and economic effect of our paper and electricity consumption and the volume of waste we discard in ITOCHU in FYE 2018 is as follows.

	Environmental Conservation Effects	Economic Effects (Unit: 1,000JPY)
Paper Usage	-7,837,000sheets	-1,685
Electricity Usage	62,000kWh	1,248
Waste Emissions	18t	915
Water Usage	-4,184m ³	-1,750

Environmental conservation and economic effects are calculated by subtracting actual values for the current fiscal year from those for the previous fiscal year.

Scope of Calculation: Paper and Water Usage - Tokyo Headquarters building, Electricity Usage, Waste Emissions - All of domestic branches.

Understanding the Situation of our Environmental Obligations

We do not limit ourselves to just supporting statutory requirements in regards to the environmental risks in the tangible fixed assets (e.g., land and buildings) of ITOCHU alone and our group companies — in particular, asbestos, PCB and soil contamination; we also look to understand the situation through surveys voluntarily and then aim to respond in a way that is helpful to prompt management policy decisions and judgments. We again promoted the sharing of relevant information through various training programs (P38), such as an Environmental and Social Risk Response Seminar, in FYE 2020.

Efforts

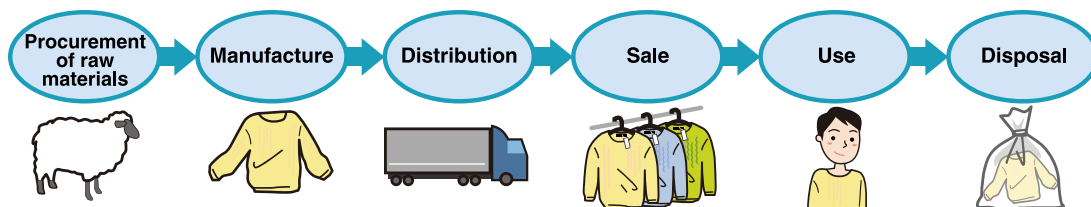
Reduction of Environmental Risks in the Supply Chain

We recognize that the business activities over our entire group can have an impact on the global environment. Accordingly, we are working on activities aimed at taking a precautionary approach to environmental risks for group employees. This is addition to the environmental risk assessments for the products handled by ITOCHU.

Environmental Risk Assessments for the Products We Handle

ITOCHU deals in a wide variety of products on a global scale. Therefore, we believe it is vital that we assess the impact on the global environment of each product, our environmental related laws and regulation compliance situation, and our relationships with stakeholders. Accordingly, we conduct our own environmental impact assessments on all our products. We use LCA* analytical techniques from the procurement of raw materials concerning the applicable product to their manufacturing process, use and disposal. These analysis assessment items include those related to climate change (e.g., the decrease in tropical rainforests, desertification and global warming) to assess such related risks. If the results of these assessments show that the impact on the global environment will be greater than a specific score, we formulate various regulations and procedure manuals with the applicable product being subject to priority management.

* Life Cycle Assessment (LCA): This is the technique to assess the impact of one product on the environment in all stages of its lifecycle — from raw materials to manufacture, transportation, use, and disposal or reuse.



Investigations into the Actual Conditions in Group Companies

We have continued to visit and investigate group companies since 2001. The aim of this is to prevent environmental pollution by these group companies. We analyze about 200 companies with a relatively high impact and burden on the global environment from among our group companies. We then conduct investigations into the actual conditions on approximately 10 companies a year. We have investigated a total of 283 offices over the past 18 years up to the end of FYE 2019. We assess companies in these investigations by investigating their factory and warehouse facilities, their situation of drainage to rivers, and their compliance with environmental laws and regulations in addition to holding a question and answer session with their management.

Environmental Risk Assessments on New Investment Projects

We assess in advance the impact on society and the environment by and conditions of corporate governance of business investment projects in Japan and overseas engaged in by ITOCHU and our Japanese subsidiaries. We do this with the ESG Checklist for Investment consisting of 33 items (The assessment items include the energy consumption and CO₂ emissions situation related to climate change risks). During FYE 2019, there were 112 applications of ESG Checklist. We make requests to external specialist organizations to conduct investigations in advance for projects requiring a professional point of view. The project is then only undertaken upon confirming that there are no problems in the results of those investigations.

Inquiries from Inside and Outside the Company and Our Response to Them




We received a total of 60 inquiries from outside the company in FYE 2019. These consisted of investigations and inquiries from the industrial world (12), administrative and industry organizations (9), NGO (2), and the media and investigation companies (5), and ISO14001 registration certification requests from business partners (32). There were no environmental related accidents, troubles or lawsuits in our company. Meanwhile, the contents of consultations from in the company and group companies were responded appropriately for such cases related Waste Management and Public Cleansing Law and Soil Contamination Countermeasures Act.

ITOCHU Europe Green Finance Framework

As the regional headquarters of ITOCHU's operation in Europe, ITOCHU Europe Plc (ITOCHU Europe) published its Green Finance Framework in March 2019 and raised its first green loan of EUR150Million from Mizuho Bank and ING Bank through ITOCHU Treasury Centre Europe Plc, ITOCHU's group finance vehicle for Europe and the Middle East. This is the first green finance procured by any of the Japanese trading houses (so-called "Sogoshosha"). ITOCHU Europe Green Finance Framework was supported by ING, which acted as a Green Structuring Advisor, and was independently reviewed by Sustainalytics.

The ITOCHU Europe Green Finance Framework highlights how the activities of ITOCHU Europe are supporting two of the SDGs, namely "Goal 7: affordable and clean energy" and "Goal 12: responsible consumption and production." These consist of material sustainability issues identified by ITOCHU at group level.

ITOCHU Europe, together with ITOCHU group companies in the region, aims to achieve growth by expanding our sustainable business in such ways as developing and introducing new technology for environmentally friendly materials, deploying sophisticated technology to save energy, and investing in energy efficient and/or renewable energy projects.

- [ITOCHU Europe's Sustainability](#) 
- [ITOCHU Europe Green Finance Framework](#) 
- [Sustainalytics second-party opinion](#) 

Environmental Education and Awareness

We provide various educational programs to encourage employees to conduct environmental conservation activities. In addition, we hold environmental law and ordinance seminars and global environmental problem awareness seminars for group employees. Through these efforts, we are striving to improve environmental awareness over the entire ITOCHU Group.

— Seminars and Training Sessions

We proactively hold seminars and training sessions. The aim of these is to thoroughly inform ITOCHU Group employees about environmental related law and ordinance requirements and to raise their compliance and environmental awareness.

List of Environmental Seminars and Training Programs Held in FYE 2019

Title		Dates	Main Targets	No. of Participants
Group ESG Managers Conference		April 24, 2018 October 12, 2018 February 5 and 14, 2019	Group ESG managers	119
Basic ESG Education		June to November 2018 Total of 49 times	Employees and group company employees	4,168
Education for Personnel with Specific Duties		June 2018 to March 2019 Total of 20 times	Employees and group company employees	Approx. 400
Climate change	e-learning	November to December 2018	Employees	4,474
Sustainability Seminar		December 13, 2018	Employees and group company employees	Approx. 200
Other workshops for specific departments and group companies		As needed	Employees and group company employees	20

— Sustainability Seminar

Please check Spreading Sustainability at ITOCHU (P27) for details.






Environment Conserving Businesses

Policy and Basic Concept

ITOCHU has decided to select important challenges that will lead to sustainable growth and to work on solving those challenges through our business in our Basic Policy on Promotion of Sustainability. Accordingly, we are striving to solve global environmental problems through the promotion of environment conserving businesses. We perceive business that contributes to solving environmental problems as a major challenge even in our business strategy. In particular, we are implementing business that contributes to efforts to address climate change (contribute to the realization of a low-carbon society) and to ensure stable procurement and supply — material sustainability issues — in various business fields. This is done through the spirit of sustainable growth according to the reinvented sampo yoshi, or the "three goods" (good for the buyer, good for the seller and good for society), approach aiming at our Brand-new Deal 2020 mid-term management plan. Each department formulates a sustainability action plan and then promotes it according to the PDCA cycle as the structure to promote these businesses.

Targets

Materiality	SDGs Targets	Issues to address	Business area	Commitment	Specific approach	Performance indicators	Degree of Progress
Textile Company							
Ensure stable procurement and supply		Stable supply of industrial resources and materials	Environmentally friendly materials (sustainable materials) such as recycled fibers	We will accelerate initiatives for the recycled fiber business, not only to create new businesses but also to help solve the global problem of apparel waste and reduce petroleum-derived materials.	Work aggressively on the recycled fiber business and lead the industry in promoting the use of sustainable materials.	Commercialize the recycled fiber business as soon as possible. Increase the ratio of sustainable materials to materials we trade.	We are aiming to strengthen our supply chain from raw materials to finished products, with a focus on sustainable raw materials. Thus, we have conducted multiple investment and planning projects for suppliers of Lyocell and recycled polyester and these are progressing well.
Machinery Company							
Address climate change	 	Taking counter-measures against climate change	Overall power generation business	We will develop power plants with a good balance between renewable energy power generation and conventional power generation, thereby contributing to the development of countries and regions in a sustainable manner that is optimized for each.	Pursue opportunities to invest aggressively in renewable energy power generation through analyses of countries and regions.	FYE 2031: Target to achieve a renewable energy ratio more than 20% (equity interest basis) and reflect this to the future strategy.	In FYE 2019, we accomplished followings in the field of development of renewable energy. Launching commercial operation of the final unit (No. 3 unit) of the Sarulla Geothermal IPP Project in Indonesia, Completion of the Saga-Ouchi Solar Power Plant in Saga Prefecture.
			Sales of passenger cars and commercial vehicles	We will achieve the eco-friendly mobility society by strengthening businesses of electric vehicles (EVs), hybrid vehicles (HVs), vehicles with a reduced environmental impact, and those related.	Contribute to spread of eco-friendly vehicles by increasing business of eco-friendly and high-efficiency products, such as EVs, HVs, vehicles with a reduced environmental impact, and related parts.	Expand sales of eco-friendly products in response to the expanded lineup of EVs, HVs, vehicles with a reduced environmental impact, and similar vehicles from automakers as our business partners.	In Japan, we participated in the field test of light electric trucks. We invested in two projects in China where the sales of electric vehicles is increasing drastically. 1) EV rental and maintenance service company Dishangtie Car Rental (Shenzhen) Co., Ltd., 2) Chinese emerging EV manufacturer ZHICHEAUTO Technology (Shanghai) Co., Ltd.
Respect human rights	 	Improving water and hygiene infra-structures	Water and environmental projects	We will contribute to improving the hygiene environment, the development of economic activities, and the protection of the global environment through the appropriate treatment and effective use of water and waste.	Expand water and environment projects to promote the appropriate use and treatment of water and the effective utilization of resources, and reduce the environmental impact.	Expand and diversify the investment portfolio in the water and environment field.	Water Sector We are participating in Water Supply and Sewerage Treatment Companies in the UK and Spain, Seawater Desalination Projects in Australia and Oman. Our Project in Oman started commercial operation in 2018. We continue to invest in portfolio in the water sector. Environment Sector We invested in four Waste Management Projects in the UK and awarded a 25-year Waste Management and Resource Recovery Project in Belgrade, the republic of Serbia in 2017.
Metals & Minerals Company							
Address climate change	 	Taking counter-measures against climate change	<ul style="list-style-type: none"> Mining business Environmental business Material-related business 	<ul style="list-style-type: none"> We will realize stable energy supply as our social mission and responsibility while fully considering its environmental impact. We will contribute to reducing greenhouse gases through businesses related to lighter-weight vehicles and Electric Vehicles (EVs). 	<ul style="list-style-type: none"> Continue to be involved in the development of technologies that contribute to the reduction of greenhouse gases emissions, including technologies for carbon dioxide capture and storage (CCS) and carbon dioxide capture and utilization (CCU). Aim to develop an appropriate portfolio of coal assets by fully considering its environmental impact. Strengthen initiatives in businesses that contribute to the development of lighter-weight vehicles and shift to EVs (aluminum, copper, and other businesses). 	<ul style="list-style-type: none"> Contribution to the development of a low-carbon society by committing to technologies that help reduce greenhouse gases emissions. Development of an optimal asset portfolio by fully considering social requirements, including those related to the shift to a low-carbon society. Implementation and expansion of businesses that contribute to developing lighter-weight vehicles and shifting to EVs. 	<ul style="list-style-type: none"> Carbon Capture and Storage (CCS): We continue to carry out information collection and analysis through observation and interviews with Japan CCS Co., Ltd. and companies conducting CCS projects overseas. Carbon Capture and Utilization (CCU): Along with joining research organizations and collecting information, we are also engaged in specific projects. We have considered our policy towards the coal business through actions such as analyzing multiple scenarios based on suggestions made by the Task Force on Climate-related Financial Disclosures (TCFD). Consequently, we publicly announced our policy commitment in February 2019. This is: 1) - We will not acquire new thermal coal mining interest., and 2) - Regarding the existing thermal coal mining projects, we will continue to review it and contribute to the development of a sustainable society while responding to the social demands of stable supply of energy to domestic and overseas customers. The amount of transactions for aluminum castings/die-cast materials for vehicles increased 6% in FYE 2019 over FYE 2018, contributing to the development of light-weight vehicles.

Materiality	SDGs Targets	Issues to address	Business area	Commitment	Specific approach	Performance indicators	Degree of Progress
Energy & Chemicals Company							
Address climate change		Taking counter-measures against climate change	Oil & Gas LNG (Liquefied Natural Gas) Projects	Development and production of natural resources with consideration in the reduction of greenhouse gases.	Partnering with experienced operators with high technical strength in the development and production of natural resources.	Pursuing opportunities to take part in LNG projects (i.e. LNG or natural gas emits less greenhouse gases than the other fossil fuels).	We have begun concrete discussion concerning participation in a new liquefied natural gas (LNG) project.
Food Company							
Address climate change		Taking counter-measures against climate change	Provisions Fresh foods	We will reduce the impact of abnormal weather on the business with the aim of ensuring the stable supply of agricultural crops.	Decentralize production areas by collaborating with Group companies.	FYE 2021: Aim to develop other areas following the Philippines in the Fresh Produce Business.	In FYE 2019 we selected candidates for new production areas. From FYE 2020 on, we plan to specifically promote the fruits and vegetables business in new production areas.
Contribute to healthier and more enriched lifestyles		Supplying safe, secure food	Overall food-related businesses	We will select and concentrate on suppliers who are capable of manufacturing and supplying safe, secure food stably.	Increase the number of persons with international certifications/qualifications related to judgment on the Food Safety Management System (FSMS) to enhance the capability of human resources for selecting suppliers.	Proceed with the appropriate allocation of human resources as judges mentioned on the left to business departments, with the leading role played by the food safety management organization of ITOCHU Corporation.	In FYE 2019 three more personnel were certified as ISO22000 Provisional Auditors. We expect a similar increase in the qualified personnel in next fiscal year.
General Products & Realty Company							
Ensure stable procurement and supply		Using sustainable forest resources	<ul style="list-style-type: none"> Wood products & materials Pulp Woodchips 	We deal in sustainable forest resources to reduce the impact on the environment and prevent the increase of greenhouse gases.	<ul style="list-style-type: none"> Continue to request suppliers who have yet to obtain certifications to obtain them. Conduct sustainability surveys of suppliers and visit them. 	FYE 2026: Aim to achieve a rate of 100% for materials under high-level management or certified ones that we handle.	<p>We also continue to carry out the following for suppliers</p> <ul style="list-style-type: none"> Verifying traceability by conducting individual on-site inspections Expanding the handling of products subject to "timber traceability verification by third-party organizations.
Address climate change		Taking counter-measures against climate change	Cement alternatives such as slag	We plan to expand the use of sustainable byproducts (slag) as a substitute material for the cement which is vital to fields like construction and civil engineering.	Establish continuous, stable business flow between ironworks as the supplier of slag and other byproducts and demanders.	Consider investment, participation, etc. in the slag business and focus efforts on creating demand, especially in developing countries, with the aim of establishing continuous, stable business flow.	<ul style="list-style-type: none"> The volume of transactions to developing countries is expected to increase by 50% from the previous year. We are engaged in continued consultation concerning planning and investment for the slag business.

Structures and Systems

R&D Effort Policy

We are proactively developing business to contribute to solving material sustainability issues with a mid-to-long term perspective in the environment and clean tech field.

R&D Effort Structure

We have established the Business Planning & Development Division since FYE 2020. This office is striving to develop environmental business that will lead to next generation business.

R&D Efforts

	Specific Project Examples
Carbon dioxide capture and storage (CCS)	Japan CCS Co., Ltd.
Next-generation lithium ion batteries	24M Technologies, Inc.
Ultra-low illumination compatible photovoltaic elements	inQs Co., Ltd.
Bio-refinery business support	Green Earth Institute Co., Ltd.

We are engaged in climate change related business in the R&D field.

■ Carbon Dioxide Capture and Storage (CCS)

We recognize that CCS is an essential technology to aim for low carbonization. Therefore, we have participated in investment in Japan CCS Co., Ltd., which is conducting demonstration experiments in Tomakomai, to pursue the possibilities of practical application of CCS. (The cumulative volume of CO₂ injected as of the end of June 2019 is approximately 262,000 tons).

■ Next-generation Lithium Ion Batteries

24M is a company which researches and develops semi-solid batteries that surpass current lithium ion batteries in terms of their safety, energy density and manufacturing costs. The firm has established a unique process that greatly improves and simplifies the current lithium ion battery manufacturing process. It has also acquired a technical patent and is running a demonstration pilot plant in the US. The biggest feature of the company is that it is able to supply products with price competitiveness in addition to being able to maintain and improve the performance of current lithium ion batteries. It achieves this by reducing the components used and by simplifying the manufacturing process.

We are deploying the semi-solid battery manufacturing licensed business of 24M on a global basis. The aim of this is to respond to the growing demand for batteries that is spreading around the world. We are expanding our battery manufacturing business with local partners in areas of demand. This also includes the supply of battery components and the delivery of manufacturing facilities.

■ Ultra-low Illumination Compatible Photovoltaic Elements

IoT devices, which are expected to increase in number explosively in the future, are often installed in places with poor sunlight conditions (e.g., in factories and places where there is a risk of disaster). Conventional solar cells cannot generate power in such places.

Meanwhile, there is a problem of the excessive cost of wiring in connecting power supplies by wire and it takes effort to regularly replace button batteries. Under such circumstances, there are extremely high expectations for the ultra-low illumination compatible photovoltaic elements of inQs Co., Ltd. This is because they can become a self-sustaining power source that generates power at high efficiency without the need for battery replacement.

■ Bio-refinery Business Support

We are investing in and supporting the development of Green Earth Institute Co., Ltd. This is a venture company with technology that produces chemical substances from renewable biomass without using fossil raw materials. The amino acid valine licensed by this company since last year and for which commercial production has already begun is helpful in promoting health and increasing food production. In addition, an environmentally friendly manufacturing method is being provided.

Efforts

Renewable Energy Related Business

ITOCHU is working to solve social challenges. We are achieving this through business investment in power generation assets utilizing the geothermal, wind power and other renewable energies that are expected to grow as a necessary supporter of energy supply in the future.

We are aiming for a renewable energy ratio of over 20% (equity interest basis) by FYE 2031 in our overall power generation business. This will be reflected in our future efforts.

List of Renewable Energy Related Efforts

Details of Effort	Name of Business Operator / Investment Project	Country	Generating Capacity / Size	Greenhouse Gas Reduction Figures
Wind Power Generation Business	CPV Keenan II Wind Power Generation Project	USA	152MW	Approx. 400,000 tons / year
	Cotton Plains Wind and Solar Pear Generation Business	USA	217MW	Approx. 560,000 tons / year
Offshore Wind Power Generation Business	Butendiek Offshore Wind Power Generation Project	Germany	288MW	Approx. 750,000 tons / year
Waste Management Projects	ST&W Waste Management Project / South Tyne & Wear Energy Recovery Holdings Limited	England	Incineration treatment of 260,000 tons / year of general waste Scale of power generation: Equivalent power consumption of 31,000 homes	Estimated 62,000 tons / year
	Cornwall Waste Management Project / Cornwall Energy Recovery Holdings Limited	England	Incineration treatment of 240,000 tons / year of general waste Scale of power generation: Equivalent power consumption of 21,000 homes	Estimated 60,000 tons / year
	Merseyside Waste Management Project / Merseyside Energy Recovery Holdings Limited	England	Incineration treatment of 460,000 tons / year of general waste Scale of power generation: Equivalent power consumption of 63,000 homes	Estimated 130,000 tons / year
	West London Waste Management Project / West London Energy Recovery Holdings Limited	England	Incineration treatment of 350,000 tons / year of general waste Scale of power generation: Equivalent power consumption of 50,000 homes	Estimated 83,000 tons / year
	Serbia Waste Management Project / Beo Cista Energija (Construction will begin in 2019)	Serbia	Incineration treatment of 340,000 tons / year of general waste Scale of power generation: Equivalent power consumption of 30,000 homes (planned)	Estimated 120,000 tons / year
Geothermal Power Generation	Sarulla Operations Ltd	Indonesia	330MW	About 1,350,000 tons/year
Photovoltaic Power Generation	Oita Hiyoshibaru photovoltaic power plant large-scale solar power plant	Japan	44.8MW	Estimated 32,000 tons/year
	Shin-Okayama photovoltaic power plant large-scale solar power plant	Japan	37MW	Estimated 26,000 tons/year
	Saijo Komatsu photovoltaic power plant large-scale solar power plant	Japan	26.2MW	Estimated 17,000 tons/year
	Saga-Ouchi photovoltaic power plant large-scale solar power plant	Japan	21MW	Estimated 11,000 tons/year
Biomass Power Generation	Ichihara Biomass Power Plant	Japan	49.9MW (Planned start of operation Oct. 2020)	Estimated 136,000 tons/year

— Examples of Efforts

Offshore Wind Power Generation in the North Sea of Germany

The demand for renewable energy is increasing. Against this backdrop, we are jointly participating in power generation business at the largest class (288 MW) with the CITIC Group with which we have signed a strategic business and capital alliance. This project takes the form of an offshore wind power station operating in the North Sea of Germany. The wind power station supplies power to approximately 370,000 standard German households to contribute to the transition to a low-carbon society.



Butendiek Wind Power Plant

Supply of Clean Power with the Power of Sunlight

Fourth Site in Japan in Our Photovoltaic Power Generation Business

In recent years, there has been an increasing trend to effectively utilize renewable energy worldwide as a measure against global warming. The commercial operation of the Saga-Ouchi Photovoltaic Power Plant (power generation output: approximately 17,000 kilowatts) in which we are participating began in April 2018. This power plant was the largest mega solar (large solar power plant) in the prefecture at the point in time when it was constructed in Ouchi, Karatsu in Saga Prefecture. We plan to operate it for 20 years together with Kyudenko Corporation. The estimated amount of power it will generate annually is approximately 24 million kilowatt-hours; that is equivalent to the annual power consumption of approximately 4,200 regular households. The reduction in carbon dioxide from this will be approximately 11,000 tons per year. This is the fourth mega solar we operate in Japan after those in Ehime, Oita and Okayama. We will continue to proactively promote power generation business that utilizes renewable energy in and outside of Japan. This will allow us to give consideration to environmental conservation (e.g., by preventing global warming) and to contribute to the formation of a recycling-society.



Saga-Ouchi Photovoltaic Power Plant

Water Related Business

Approximately 97.5% of the water on the earth is seawater. Only 0.01% of water can be used by humans. On the other hand, global water demand is continuing to increase. This is due to economic development and the increase in population focused on emerging nations as well as changes in precipitation patterns due to climate change. ITOCHU considers our water related business to be a priority field. We are deploying seawater desalination business, water treatment business and concession agreement business, which we have been working on since 2014, on a global basis. This is to contribute to solving water problems around the world.

Business	Content of Efforts
Water supply and sewer services concession agreement business	<p>We invested in the Bristol Water Group in the UK in 2012. This made us the first Japanese company to participate in the UK water services business. The Bristol Water Group provides water services — from water source management to clean water treatment, water supply and distribution, billing and collection, and customer services — to approximately 1.2 million people.</p> <p>We invested in CANARAGUA CONCESIONES S.A. in 2014. This is a company which provides water supply and sewer services in the Canary Islands of Spain. This made us the first Japanese company to participate in the Spanish water services business. CANARGUA CONESIONES S.A. currently provides water supply and sewer services to a total of 1.3 million people under a concession agreement with the local government.</p>

Business	Content of Efforts
Seawater desalination business	<p>We have invested and are participating in a seawater desalination project in Victoria, Australia. This facility is capable of satisfying the water demands of approximately 30% of the population of Melbourne, Victoria. It is a project that has been supporting the stable supply of water to Melbourne since 2012.</p> <p>We have invested and are participating as the largest shareholder in a seawater desalination project with a daily volume of 281,000 m³. The Oman Power and Water Procurement Company (OPWP), which is under the umbrella of the Oman government, is promoting this project in Barka in the northern part of the country. This is the largest seawater desalination project in Oman. It involves the construction of reverse osmosis membrane (RO membrane) seawater desalination facilities and surrounding facilities. These will be operated for 20 years. The project has started commercial operation in June 2018.</p>
Seawater desalination plant, and osmosis membrane manufacturing and sales	<p>We started delivering multiple seawater desalination plants to Saudi Arabia in the 1970s. Upon entering the 21st century, we established ACWA Power Sasakura (now: Sasakura Middle East Company) with local capital in the country together with Sasakura. We also advanced into the seawater desalination plant rehabilitation business. We established a joint venture company called the Arabian Japanese Membrane Company, LLC with local capital from Saudi Arabia and Toyobo in August 2010. This company manufactures and sells reverse osmosis membrane elements for seawater desalination.</p>

— Examples of Efforts

Stable Supply of Drinking Water Connecting to Life

Largest Seawater Desalination Project in Oman

The demand for water in Oman in the Middle East is expected to grow by approximately 6% a year in the future. The shortage of drinking water has become a challenge together with the increase in the population and urbanization. The Barka Desalination Company in which we are participating entered into a seawater desalination business agreement for a daily volume of 281,000 m³ in Barka in the northern part of Oman toward the stable supply of water in that country in March 2016. This is a public-private partnership project promoted by the Oman government. We have constructed reverse osmosis membrane (RO membrane) seawater desalination facilities and surrounding facilities. These will be operated for 20 years. The facilities started commercial operation in June 2018. This is the largest seawater desalination project in Oman with total operating expenses of approximately 300 million dollars.



Seawater Desalination Plant (During Construction)

The demand for water is growing due to the increase in the worldwide population, economic growth and global warming. In response to this, we consider the water business to be a priority field. Accordingly, we are working to increase our seawater desalination and water supply and drainage businesses. We will continue to promote business that contributes to the effective utilization of water resources in regions around the world in the future.

Stable Supply of Sustainable Forest Resources

For more information see Wood, Wood Products, Papermaking Raw Material, and Paper Products Example 2: Metsä Fibre (P142)

Realty Certification Status

Advance Residence Investment Corporation ("ADR"), an ITOCHU group company, is one of Japan's largest real estate investment trusts (J-REIT) specializing in rental housing. In addition, ADR takes full advantage of the collaboration with ITOCHU Group and acquires and operates some of the rental apartments developed and managed by the group.

ADR has participated in the GRESB assessment, which evaluates the sustainability performance of real estate companies and funds, since 2014 (a first among J-REITs specializing in housing). For the last three years, it has received the "Green Star" rating, which is awarded to entities receiving excellent scores in both the Management & Policy and the Implementation & Measurement sections. It has also received 3 out of 5 stars for the GRESB rating, which is a relative assessment based on the overall score and global ranking. In FYE 2019, ADR was chosen as a "Sector Leader" in the GRESB Real Estate Assessment for receiving top scores in the Residential/Asia/Listed Sector. For ESG-related disclosures, it received the highest grade of "A." By continuing to participate in this assessment, we aim to improve the quality of sustainability-related efforts at ADR and ADIM and further improve the scores.

ADR has seven properties that have obtained DBJ Green Building Certification. On a floor area basis, this represents 16.7% of the portfolio, while on a number of properties basis, it represents 2.7% of the portfolio. Additionally, Park Tower Shibaura Bayward Urban Wing, for which ADR has obtained certification has a five-star ranking (buildings exhibiting best-in-class environmental and social awareness), the highest rank in the DBJ Green Building Certification program.

Property name	Rating	Total floor area (m ²)
Park Tower Shibaura Bayward Urban Wing	★★★★★	19,562.07
Pacific Royal Court Minatomirai Ocean Tower	★★★★	40,527.16
Residia Tower, Azabu Juban	★★★★	11,053.03
Residia Nishiazabu	★★★★	10,834.93
Residia Tower Meguro Fudomae	★★★★	29,561.91
Residia Tower Kamiikebukuro	★★★★	40,910.59
Residia Izumi	★★★	10,546.49

* Details on DBJ Green Building Certification are current as of January 31, 2019

Below are examples of sustainability-related efforts by ADR.

Identification of material issues (critical issues related to sustainability)

Item	Material issue (critical issue related to sustainability)	Related SDGs
Environmental	Extending service life of properties through large-scale repairs and value enhancement work	11, 13
	Obtaining environmental, energy conservation, and other certification	11, 13
	Management and reduction of energy consumption, CO ₂ emissions, water usage, and waste volume	7, 11, 13
	Cooperation with property management (PM) and building management (BM) firms in implementing environmentally friendly practices (supply chain management)	11, 13, 17
Social	Improving tenant satisfaction and engaging with tenants	11, 13
	Contributing to local communities	3, 11, 13
	Developing employee skills	4, 5, 8
	Improving work-life balance	3, 8
Governance	Linking asset management fee to fund performance	8, 17

Material issues (critical issues related to sustainability) have been identified using the steps below.

Step 1 Clarify

We have clarified our material issues from among wide range of issues concerning the economy, environment and society using sustainable development goals (SDGs) and other global social issue initiatives, external evaluations (GRESB, DJSI, and MSCI), and various guidelines (GRI 4 Guidelines, SASB).

Step 2 Prioritize and establish

We prioritized the issues clarified in Step 1 based on their importance to stakeholders/stakeholder expectations and the level of impact ADR has on the economy, environment, and society. We then identified nine material issues for promoting ADR sustainability activities.

Step 3 Discuss at Sustainability Promotion Committee and have representative director make decision

The validity of the material issues identified in Step 2 was discussed and verified by the Sustainability Promotion Committee, and the nine material issues were ultimately decided by the representative director.

Step 4 Regular review

In order to flexibly address changes in the social environment, reflect stakeholder feedback, and improve our disclosure transparency, we will review these material issues regularly.

Environmentally conscious asset management

(1) Installation of LED lighting

As of January 31, 2019, LED lighting has been installed at 59 properties (22% of the portfolio).

(2) Introduction of green lease clause

We have introduced a clause on appropriate use of energy and water in our lease agreements with tenants (signed with roughly 44.2% of rental unit tenants as of February 28, 2019). We also incorporate the green lease clause into our management outsourcing agreements with property management companies.

Furthermore, we receive LED installation proposals once a year from building maintenance companies based on those agreements.

ITOCHU Advance Logistics Investment Corporation (IAL) is a real estate investment trust (J-REIT) specialized in logistics real estate with ITOCHU REIT Management Co., Ltd. (IRM) serving as its asset management company. IAL fully utilizes its collaborative relationship with the ITOCHU Group to acquire and manage part of the logistics real estate developed and managed by our group.

IAL owns five properties that have acquired DBJ Green Building certification. The proportion of these properties with respect to its holdings portfolio is 86.2% on a floor area basis and 62.5% on a number of properties basis. In addition, i Missions Park Inzai, for which certification has been acquired by ADR, is ranked as five stars (a building with outstanding consideration for the environment and society at the top level in Japan). This is the highest evaluation ranking in the DBJ Green Building certification.

Property name	Rating	Total floor area (m ²)
i Missions Park Inzai (Semi-joint ownership share: 80%)	★★★★★	88,018.00
i Missions Park Kashiwa	★★★★	31,976.44
i Missions Park Noda	★★★★	62,750.90
i Missions Park Moriya	★★★★	18,680.16
i Missions Park Misato	★★★★	22,506.53

* For the total floor area for i Missions Park Inzai, the figure corresponding to the semi-joint ownership share was rounded down to two decimal places.

* The details given for the DBJ Green Building certification are current as of the end of January 2019.

Other Environmental Related Business

— Project to reduce our environmental burden with the introduction of side shrink wrap packaging

ITOCHU PLASTICS INC. (CIPS) is supporting the introduction of side shrink wrap film in all stores operated by FamilyMart Co., Ltd., its domestic area franchise company locations stores (collectively "FamilyMart") as an effort to reduce our environmental burden. Side shrink wrap film covers only the area where the lids and containers meet for boxed lunch, sushi and noodle products.

FamilyMart completed the introduction of side shrink wrap packaging across Japan in February 2015.

The change from full shrink wrap packaging — which involves entire containers being packaged in wrapping — to side shrink wrap packaging makes it easier to open products, makes it easier to see their contents and offers a strong barrier performance. In addition to this, it reduces garbage, the plastic raw materials used in the packaging and also CO₂. This greatly contributes to a reduction in our environmental burden.

* FYE 2019 results (comparison with conventional wrap film): Approximately 540 ton reduction in plastic raw materials and an approximately 1,935 ton reduction in CO₂.

The corporate philosophy of CIPS is as follows: "Providing lifestyle comfort and convenience with chemical and plastic materials. A corporate culture of integrity propelling us forward, together. ITOCHU Plastics." CIPS is promoting corporate activities, including support for the introduction of shrink wrap film, that aim to balance a better global environment and economic growth. The firm is striving to conserve the environment and to contribute to the realization of a sustainable society.



Bento Box with Side Shrink Packaging

Climate Change

Policy and Basic Concept

Recommendations by the Taskforce on Climate-related Financial Disclosures (TCFD) in June 2017 encourage companies to effectively disclose climate-related financial information with consistency, comparability, reliability and clarity to promote appropriate investment decisions by investors. This comes from the observation that climate change related risks and opportunities will increase in the future.

We will utilize these recommendations as indicators to verify our response to climate change.

These recommendations include those that are still being debated and those that require a long-term response. Nevertheless, it is our policy to continue making disclosures about the efforts we tackle as they happen.

Main Climate Change Related Risks and Opportunities

Risk	Opportunity
<p>Transition risk</p> <ul style="list-style-type: none"> ● Reduction in demand for fossil fuels due to business restrictions on greenhouse gas emissions <p>Physical risk</p> <ul style="list-style-type: none"> ● Damage to business due to the increase in abnormal weather (e.g., droughts, flooding, typhoons and hurricanes) 	<ul style="list-style-type: none"> ● Increase in renewable energy and other business opportunities which will contribute to alleviating climate change ● Retention and acquisition of customers by strengthening supply structures that can adapt to abnormal weather

Targets

ITOCHU sets target values for a reduction in our electricity consumption. The targets are as below. ITOCHU alone and our consolidated subsidiaries as a whole have set a target of reducing our energy consumption by at least 1% on average annually at our output level. We are working to reduce our GHG emissions.

	FYE 2019 Results	Single Year Target	Target for the Year Ended March 2021
Electricity Consumption of Tokyo and Osaka Headquarters, Branches in Japan and Other branches and business facilities in Japan	Reduction of 0.6% compared with FYE 2018 levels	Reduction of at least 1% annually	Reduction of 30% compared with FYE 2011 levels
	Reduction of 43% compared with FYE 2011 levels		

In overall power generation business, we aim to achieve a renewable energy ratio more than 20% (equity interest basis) by FYE 2031 and will reflect this to the future strategy.

Realty business: Energy Consumption, Greenhouse Gas Emissions, and Water Usage

Advance Residence Investment Corporation ("ADR"), an ITOCHU group company, is one of Japan's largest real estate investment trusts (J-REIT) specializing in rental housing. In addition, ADR takes full advantage of the collaboration with ITOCHU Group and acquires and operates some of the rental apartments developed and managed by the group.

ADIM has established a Sustainability Policy consisting of six items, namely (1) Establishing organization-wide structure for compliance and risk management, (2) Reduction of energy consumption and CO₂ emissions, (3) Resource conservation and reduction of waste, (4) Employee education, (5) Stakeholder engagement, and (6) Transparent disclosures. By implementing these things in its general asset management operations, the company contributes to the achievement of a sustainable society.

It has also established policies on energy conservation, greenhouse gas emission reduction, water conservation and waste management to improve the energy efficiency of ADR's properties and is working to reduce the properties' energy consumption and greenhouse gas emissions in order to put the Sustainability Policy into practice. The target is to reduce energy consumption and greenhouse gas emissions by an average consumption rate of 1% annually throughout the entire portfolio of more than 20,000 properties in the medium to long term.

Item	Reduction target	Short-term target	Long-term target
Energy consumption	1%	Annual consumption rate basis	5 years (FYE 2015-FYE 2019)/5% reduction on consumption rate basis
Greenhouse gas (CO ₂) emissions	1%*	Annual output level basis	5 years (FYE 2015-FYE 2019)/5% reduction on output level basis

* Target reduction for both Scope 1 and Scope 2 is 1%.

ITOCHU Advance Logistics Investment Corporation (IAL) is a real estate investment trust (J-REIT) specialized in logistics real estate with ITOCHU REIT Management Co., Ltd. (IRM) serving as its asset management company. ADR fully utilizes its collaborative relationship with the ITOCHU Group to acquire and manage part of the logistics real estate developed and managed by our group.

IRM has established the Basic Policy on Sustainability. It gives the promotion of energy saving (de-carbonization) and resource saving as an item in the environmental field. With this, it is contributing to the realization of a sustainable society.

In addition, the company has formulated an Energy Saving Policy, Greenhouse Gas Emissions Reduction Policy, Water Saving Policy and Waste Management Policy. It is striving to reduce its energy consumption and greenhouse gas emissions by improving energy efficiency in the real estate portfolio owned by IAL with the aim of realizing the Basic Policy on Sustainability. Looking at the mid- to long-term over the entire portfolio of the properties it owns, the company is targeting a reduction in its energy consumption by 1% on an annual average consumption rate basis and in its greenhouse gas emissions by 1% on an annual average output level basis.

Item	Reduction target	Short-term target	Long-term target
Energy consumption	1%	Annual consumption rate basis	5 years (FYE 2020-FYE 2024)/5% reduction on consumption rate basis
Greenhouse gas (CO ₂) emissions	1%*	-	5 years (FYE 2020-FYE 2024)/5% reduction on output level basis

* Target reduction for both Scope 1 and Scope 2 is 1%.

Structures and Systems

The Sustainability Management Department plans and formulates climate change measures in ITOCHU. These measures are then carried out by the ESG officers and managers in each unit in Japan and overseas under the decision of the Chief Administrative Officer - the official in charge of these. The Sustainability Committee, one of the company's key committees, holds deliberations and makes decisions concerning policy formulation and important matters. In addition to a role in heading the Sustainability Committee, the committee's chair joins meetings of the Board of Directors, the HMC and the Investment Consultative Committee, and also engages in decision-making based on the company's impact on the environment and society by reporting regularly to the Board of Directors to brief them on our promotion of sustainability. We furthermore engage in dialog with stakeholders within and outside the company. One example of this is our regularly convened advisory board. This dialog provides an understanding of what society expects of and desires from the company, which we can then apply to our efforts at advancing sustainability.

* Reference: Sustainability promotion framework (P11)

Participation in TCFD Consortium

In May 2019, ITOCHU Corporation announced its support for the TCFD, which encourages companies to disclose financial information related to climate change. We also participated in the TCFD Consortium established on May 27, 2019 by Ministry of Economy, Trade and Industry (METI), Ministry of the Environment (MOE), and the Financial Services Agency (FSA) as a body for promoting discussion and deliberation among companies and financial institutions supporting the TCFD mission. By participating in this Consortium, we will engage in the appropriate disclosure of ITOCHU business opportunities and risks associated with climate change.

Efforts

Among the environmental conservation costs disclosed in the environmental accounting (P36), associated with climate change are as follows :

- Administrative costs of the power generator installed in the Tokyo Headquarters 1,770 thousand yen
- Research and development expenses for climate change risk aversion (donation to Division of Climate System Research, Atmosphere and Ocean Research Institute, the University of Tokyo) 500 thousand yen

Scenario Analysis



We have begun analyses and business impact assessments using multiple scenarios (including the International Energy Agency's 2°C scenario*) based on suggestions made by the Task Force on Climate-related Financial Disclosures (TCFD). We are starting with our coal-related businesses which, out of all the businesses ITOCHU is engaged in, are in an industrial sector likely to be more heavily impacted in the event that greenhouse gas emission regulations are tightened around the world. They also have a greater financial impact on our company. Along with assessing materiality of climate-related risks and opportunities, we are identifying the variables with the greatest impact, primarily in terms of transition risk, and using a financial model that reflects the contracts and terms such as quality by business to analyze the optimal portfolio.

* IEA (International Energy Agency) Sustainable Development Scenario, 450 Scenario, ETP2016 2°C Scenario

Our understanding of the medium- to long-term business environment for the coal mining business and the power generation business, including coal-fired power, and our policy commitments are provided below. We have established the policy based on our understanding of the business environment under both the 4°C scenario*, which the greenhouse gas reduction efforts of each country are on pace to achieve, and the 2°C scenario, and will increase the tolerance of our businesses by ensuring proper measures for each scenario.

* Refer to IEA New Policy Scenario, ETP2016 4°C scenario, etc.



Coal business

Business environment under 4°C scenario	Business environment under 2°C scenario
	
<p>Under the 2°C scenario, use of fossil fuels will be reduced as a result of technological innovation and changes in regulatory trends, but demand for high-grade coal, which has a relatively lower environmental impact, will remain at a certain level, and effective utilization of CO₂ will be promoted. Our analysis shows that our high-grade thermal coal mining business can maintain its competitiveness.</p>	

Policy and efforts

- We will not acquire new thermal coal mining interest.
- Regarding the existing thermal coal mining projects, we will continue to review it and contribute to the development of a sustainable society while responding to the social demands of stable supply of energy to domestic and overseas customers.
- We will continue to be involved in development of technologies to contribute to reduction of greenhouse gas emissions, including carbon capture and storage (CCS) and carbon capture and utilization (CCU).

Power generation business

Business environment under 4°C scenario	Business environment under 2°C scenario
	
<p>Under both the 2°C and the 4°C scenarios, we will maintain at least the current level of income. Under the 2°C scenario, we can maintain and grow revenue by increasing the number of new renewable energy plants.</p>	

Policy and efforts

- We aim to achieve a renewable energy ratio more than 20% (equity interest basis) by FYE 2031 and will reflect this to the future strategy.
- We will not develop any new coal-fired power generation business, in part to contribute to the development of a sustainable society.

— Future efforts









In the future, we will select scenarios to verify the impact of climate change on our overall business, identify sectors most heavily impacted, and review the businesses that require action along with the priority and specific guidelines for action.

We are aiming to develop new production areas to follow on from the Philippines in our fruits and vegetables business by FYE 2021. This will allow us to stably supply agricultural produce by reducing the impact on our business due to abnormal weather.

Effort for the Tokyo Metropolitan Government Program to Prevent Global Warming

ITOCHU submitted a plan to the Tokyo Metropolitan Government to reduce the CO₂ emissions in our Tokyo Headquarters by approximately 15% from the reference value (average value from FYE 2003 to FYE 2005) over five years from FYE 2016 to FYE 2020 based on the Ordinance on Environmental Preservation. Our emissions in FYE 2019 were 6,168 t-CO₂. This is an approximately 42% reduction compared to the reference value.

The documents we have submitted to the Tokyo Metropolitan Government so far are as follows.

- [Greenhouse Gas Emission Reduction Plan for FYE 2011 to FYE 2015 \(Submitted in November 2011\) \(Japanese Only\) \(212KB\)](#) 
- [Greenhouse Gas Emission Reduction Plan for FYE 2011 to FYE 2015 \(Submitted in November 2012\) \(Japanese Only\) \(441KB\)](#) 
- [Greenhouse Gas Emission Reduction Plan for FYE 2011 to FYE 2015 \(Submitted in November 2013\) \(Japanese Only\) \(401KB\)](#) 
- [Greenhouse Gas Emission Reduction Plan for FYE 2011 to FYE 2015 \(Submitted in November 2014\) \(Japanese Only\) \(430KB\)](#) 
- [Greenhouse Gas Emission Reduction Plan for FYE 2011 to FYE 2015 \(Submitted in November 2015\) \(Japanese Only\) \(526KB\)](#) 
- [Greenhouse Gas Emission Reduction Plan for FYE 2016 to FYE 2020 \(Submitted in November 2016\) \(Japanese Only\) \(585KB\)](#) 
- [Greenhouse Gas Emission Reduction Plan for FYE 2016 to FYE 2020 \(Submitted in November 2017\) \(Japanese Only\) \(577KB\)](#) 
- [Greenhouse Gas Emission Reduction Plan for FYE 2016 to FYE 2020 \(Submitted in November 2018\) \(Japanese Only\) \(119KB\)](#) 

* In addition to the Tokyo Headquarters, the adjacent commercial facility of Itochu Garden is also subject to the Greenhouse Gas Emission Reduction Plans submitted to the Tokyo Metropolitan Government.

Initiatives in Business tackling Climate Change

— Toward Sustainable Plantation Operation in Response to Climate Change

We acquired the Asian fruits and vegetables business and processed foods business, which supplies canned food and beverages around the world, from Dole Food Company in the U.S. in April 2013.

Since this acquisition, typhoons, drought, and damage from disease and harmful insects have struck the Philippines — the largest production base of major products. The production volume of bananas was 440,000 tons in FYE 2017; this was a 40% decrease compared with before the acquisition. We looked to restore and expand this production volume. To that end, we introduced irrigation facilities for bananas. We also aggregated and expanded farmland and took measures against damage from disease and harmful insects. In addition, we invested in facilities for plantations and reviewed cultivation methods for pineapples to improve productivity. We are also promoting the diversification of production areas to prepare for the risk of unpredictable weather. Furthermore, we have improved management (e.g., the selection and concentration of businesses and products, and the disposal of unprofitable businesses).

In the future, we will aim to become the largest agricultural produce integrator in Asia. We will achieve this by developing a structure to increase production to 800,000 tons of bananas and 1 million tons of pineapples in the Philippines. We believe that people, the environment and society are important resources for the survival and development of the company.

Accordingly, DOLE again focused efforts on activities to contribute to local societies in the Philippines, Thailand, Japan, South Korea, China, North America and other countries in FYE 2019. For example, we spent approximately 2.5 million dollars to donate textbooks, desks, chairs and PCs to schools in various areas, construct and maintain school buildings, provide scholarships, and supply educational opportunities for children with disabilities. We also provided daily necessities and medical assistance to areas affected by natural disasters, donated blood, held hygiene education and provided food assistance to work on maintaining and promoting health.



Banana Field

— Utilization of Solar Power Generation in a Joint Venture with Teys in Australia

Teys Australia Condamine introduced 1,034 solar panels in 2015. This has made it possible to generate approximately 506,000 kWh of power annually. Accordingly, approximately 50% of the power used in this facility comes from renewable energy. The introduction of solar power generation has reduced CO₂ emissions by approximately 395 tons. Consequently, a reduction in CO₂ emissions of approximately 49% has been realized compared with before the introduction of solar power generation.

We also procure beef to be slaughtered and processed from Teys — our joint investment partner in Australia. This firm has formed sustainable operations. It extracts methane gas generated in the slaughter process and reuses it as heat for its factory.

Participation in COOL CHOICE

ITOCHU participates in the Ministry of the Environment-led COOL CHOICE climate change campaign aimed at realizing a low-carbon society. We are striving to adjust our air conditioning in the summer and winter and to switch off unnecessary electricity. We also conduct environmental conservation activities from the things that all employees can do in their daily lives. For example, we encourage separation of waste in offices and promote recycling.



Cooperation with Stakeholders

Initiative Participation (Activities Through Business and Industry Groups)

We are participating in the Global Environment Subcommittee of the Committee on Environment and Safety — an environment and energy related committee of the Japan Business Federation (Keidanren). We are working to realize an environmental policy compatible with the economy (e.g., through promotion of voluntary action plans, and measures for global warming, waste and recycling and environmental risks). We are also participating in the Global Environment Committee of the Japan Foreign Trade Council. We are striving to build a low-carbon society, construct a recycling-orientated society, and to support environmental related laws and regulations.

If we decide the direction regarding such as climate change in various industry groups we participate, we express an opinion in line with our Basic Policy on Sustainability in the decision process, and when it is different from our policy, we will strive to be in line with our policy.

Performance Data

Energy Consumption

Scope of Aggregation

○:in scope of aggregation

	Electricity consumption	GHG emissions from business facilities
Tokyo headquarters	○	○
Osaka headquarters	○	○
Branches in Japan ^{*1}	○	○
Other branches and business facilities in Japan ^{*2}	○	○
Group companies in Japan ^{*3}	○	○
Overseas offices ^{*4}	○	○
Overseas group companies ^{*5}	○	○

*1 The branches in Japan cover all five domestic branches (Hokkaido, Tohoku, Chubu, Chugoku & Shikoku, and Kyushu).

*2 The other business facilities cover business facilities owned or leased by ITOCHU (except facilities for residences). The number of offices including domestic branches was eight in FYE 2016, eight in FYE 2017, six in FYE 2018 and eight in FYE 2019.

*3 The group companies in Japan cover consolidated subsidiaries directly invested in by ITOCHU (as of March 31, 2017) for FYE 2016 to FYE 2017. The number of such companies was 70 in FYE 2016 and 65 in FYE 2017. All consolidated subsidiaries are covered since FYE 2018 (coverage 100%). The numbers of such companies was 208 in FYE 2018 and 220 in FYE 2019.

*4 The numbers of overseas offices covered was 16 in FYE 2016, 16 in FYE 2017, 15 in FYE 2018, and 30 in FYE 2019.

*5 The overseas group companies cover consolidated subsidiaries directly invested in by ITOCHU (as of March 31, 2017) from FYE 2016 to FYE 2017. The number of such companies was 44 in FYE 2016 and 46 in FYE 2017. All consolidated subsidiaries are covered since FYE 2018 (coverage 100%). The numbers of such companies was 299 in FYE 2018 and 282 in FYE 2019.

However, companies expected to be sold within the next five years held for investment management purposes are not included in the scope of the data. Moreover, the CO₂ emissions of non-manufacturing site offices with 10 or fewer employees are quantitatively insignificant. Accordingly, they are not included in the scope of the data.

Energy Consumption

Energy Consumption in the Japanese Bases of ITOCHU

	FYE 2016	FYE 2017	FYE 2018	FYE 2019
Purchased and consumed non-renewable fuel (Unit:MWh)	805	765	610	525
Purchased non-renewable power (Unit:MWh)	25,955	30,282	29,558	29,306
Other purchased non-renewable energy (e.g., steam, heat and cooling water) (Unit:MWh)	11,286	8,299	8,206	7,605
Generated renewable energy (solar power generation) (Unit:MWh)	87	58	58	51
Energy consumption cost total (Unit:million yen)	580	564	576	404

Energy Consumption Attributable to Business Facilities

(Unit:GJ)

	FYE 2016	FYE 2017	FYE 2018	FYE 2019
Tokyo headquarters	129,084	134,076	130,977	127,824

* The figures for the Tokyo Headquarters are calculated based on the Tokyo Metropolitan Ordinance on Environmental Preservation.

Electricity Consumption

Our electricity consumption and CO₂ emissions attributable to business facilities in FYE 2016 to FYE 2019 are as follows. We have been introducing energy saving facilities (e.g., air conditioner inverters and desktop LED stands). At the same time, all employees are switching off unnecessary lighting and office machines. We also started a trial of a morning-focused working system for regular employees working in headquarters and branch offices in Japan from October 2013. The formal introduction of this in May 2014 has led to a reduction in our electricity consumption.

(Unit:Thousand kWh)

	FYE 2016	FYE 2017	FYE 2018	FYE 2019
Tokyo headquarters	9,169	9,331	9,200	9,178
Osaka headquarters	442	434	409	396
Branches in Japan	326	291	292	295
Other branches and business facilities in Japan	1,300	1,270	1,184	1,145
Total of domestic bases of ITOCHU corporation★	11,237	11,326	11,084	11,014
Group companies in Japan	484,755	471,432	(*) 798,054	878,025
Overseas offices	3,424	3,087	2,224	2,118
Overseas group companies	147,665	143,485	500,777	590,175
Grand total of ITOCHU Group◆	647,081	629,329	(*) 1,312,139	1,481,382

* This data has been calculated based on the Ordinance on Environmental Preservation for the Tokyo Headquarters and based on the Act on the Rational Use of Energy for the Osaka Headquarters, branches in Japan, other branches and business facilities. However, companies expected to be sold within the next five years held for investment management purposes are not included in the scope of the data. Moreover, the CO₂ emissions of non-manufacturing site offices with 10 or fewer employees are quantitatively insignificant. Accordingly, they are not included in the scope of the data.

* FYE 2018 data has been corrected because of an error (*).

CO₂ Emissions Per MWh of Electricity Consumption

(Unit:t-CO₂/MWh)

	FYE 2017	FYE 2018
Grand total of ITOCHU group	0.524	0.506

Solar Power Generation

ITOCHU has installed solar panels on the roof of our Tokyo Headquarters and the roof of the adjacent CI PLAZA. These panels started generating power in March 2010. The power generation capacity of the solar panels installed is a total of 100 kW. This is equivalent to the power for 30 regular houses (calculated at approximately 3.0 kW per house). All the clean energy generated is used in our Tokyo Headquarters. This is equivalent to an amount of power used in lighting 3.5 floors in our Tokyo Headquarters (during instantaneous maximum power generation).

Greenhouse Gas (GHG) Emissions

ITOCHU sets target values for a reduction in our electricity consumption and in the volume of waste we discard, the promotion of recycling, and a reduction in our paper and water consumption. The target values are as below. ITOCHU alone and our consolidated subsidiaries as a whole have set a target of reducing our energy consumption by at least 1% on average annually at our output level. We are working to reduce our GHG emissions.

	FYE 2019 (Results)	Single Year Target	Target for the Fiscal Year Ending March 31, 2021
Electricity consumption in our Tokyo and Osaka Headquarters, branches in Japan, other branches and business facilities	Reduction of 0.6% compared to FYE 2018	Reduction by an average of at least 1% a year	Reduction of 30% compared to FYE 2011
	Reduction of 43% compared to FYE 2011		

GHG Emissions Attributable to Business Facilities

(Unit:t-CO₂e)

FYE 2019	Scope 1	Scope 2
Total of all Japanese bases in ITOCHU★	91	6,969

(Unit:t-CO₂e)

FYE 2019	Scope 1	Scope 2
ITOCHU Group◆	1,213,395	771,204

(Unit:t-CO₂e)

	FYE 2016	FYE 2017	FYE 2018	FYE 2019
Tokyo headquarters	6,229	6,459	6,307	6,168
Osaka headquarters	235	221	208	172
Branches in Japan	208	180	175	170
Other branches and business facilities in Japan	664	641	582	550
Total of domestic bases of ITOCHU corporation★	7,336	7,501	7,273	7,060
Intensity figures per employee (Total of domestic bases of ITOCHU corporation)	1.714	1.737	1.660	1.622
Intensity figures per one square meter of all floor space (Total of domestic bases of ITOCHU corporation)	0.063	0.064	0.063	0.061
Group companies in Japan	369,775	340,559	(*)1,280,241	1,174,507
Overseas offices	1,907	2,238	1,674	2,769
Overseas group companies	102,372	98,427	(*) 628,021	800,263
Grand total of ITOCHU Group◆	481,389	448,725	(*)1,917,209	1,984,599

* The data has been calculated based on the Tokyo Metropolitan Ordinance on Environmental Preservation for the Tokyo Headquarters and based on the Act on the Rational Use of Energy and the Act on Promotion of Global Warming Countermeasures for the Osaka Headquarters, branches in Japan, other branches and business facilities and group companies in Japan. (We have calculated this data by employing the basic emissions coefficients of the power companies.)

* The data has been calculated based on the CO₂ conversion coefficient according to the average value from 2010 to 2012 by country of the International Energy Agency (IEA) for overseas offices and overseas group companies.

* The denominators of Intensity figures per one square meter of all floor space are as follows:
FYE 2016 116,585m², FYE 2017 116,528m², FYE 2018 115,905m², FYE 2019 115,842m²

* FYE 2018 data has been corrected because of an error (*).

* From the FYE 2019 data, 6.5 gases, which are greenhouse gases other than CO₂ from energy consumption, are also included. 6.5 gases from group companies that emit more than 3,000 t-CO₂e per year are aggregated and disclosed.

Greenhouse Gases Other Than CO₂ from Energy Consumption (6.5 Gases)

Scope1 Emission (only 6.5 gases) data for each GHG

(Unit:t-CO₂e)

			FYE 2019
Total 6.5 gases (t-CO ₂ e)			52,393
Breakdown	non-energy consumption carbon dioxide (CO ₂)		0
	methane (CH ₄)		0
	dinitrogen monoxide (N ₂ O)		17,932
	hydrofluorocarbon (HFCs)		34,461
	perfluorocarbon (PFCs)		0
	sulfur hexafluoride (SF ₆)		0
	nitrogen trifluoride (NF ₃)		0

* 6.5 gases from group companies that emit more than 3,000 t-CO₂e per year are aggregated and disclosed.

* Greenhouse gas emissions other than CO₂ have several tens to several tens of thousands of times of greenhouse effect compared to CO₂, and t-CO₂e is used as a unit for expressing that greenhouse effect equivalent to CO₂.

Independent Assurance

Independent Assurance Report (P200): The data below marked with a ★ is independently assured through KPMG AZSA Sustainability Co., Ltd. This assurance conforms to the International Standard on Assurance Engagements (ISAE) 3000 and 3410 of the International Auditing and Assurance Standards Board (IAASB).

★: Total electricity consumption and total CO₂ emissions attributable to business facilities of the Tokyo Headquarters, the Osaka Headquarters, branches in Japan, domestic branches and other business facilities, CO₂ emissions (attributable to distribution), and the volume of waste discarded, recycling rate, water consumption, gray water production volume and wastewater volume for the Tokyo Headquarters.

Independent Assurance Report (P200): The data below marked with a ◆ is independently assured through KPMG AZSA Sustainability Co., Ltd. This assurance conforms to the International Standard on Assurance Engagements (ISAE) 3000 and 3410 of the International Auditing and Assurance Standards Board (IAASB).

◆: Total electricity consumption and GHG emissions attributable to business facilities of the Tokyo Headquarters, Osaka Headquarters, branches in Japan, domestic branches, other business facilities, group companies in Japan, overseas offices and overseas group companies and the ITOCHU Group in total.

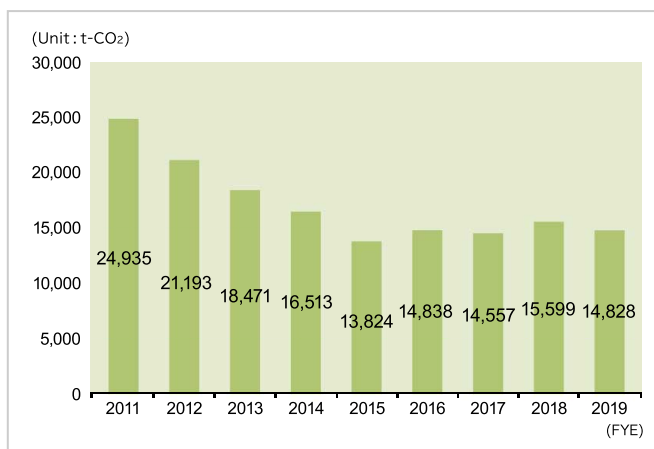
Efforts Toward Environmental Distribution

ITOCHU is engaged in green distribution to reduce our environmental impact. This is to comply with the Act on the Rational Use of Energy (Energy Conservation Law).

Carbon Dioxide Emissions from Distribution

The carbon dioxide emissions generated due to contracted transport as shippers of ITOCHU is as follows.

CO₂ Emissions Attributable to Distribution★



* ★This is independently assured through KPMG AZSA Sustainability Co., Ltd. This assurance conforms to the International Standard on Assurance Engagements (ISAE) 3000 and 3410 of the International Auditing and Assurance Standards Board.

Energy Saving Measures for Distribution

We have established a company-wide common energy saving measures policy as below in regards to energy saving measures for distribution. On top of that, we have formulated concrete measures for each division company.

Transportation method selection	Promotion of the use of railroads and domestic shipping
Measures to improve transportation efficiency	Use of transportation with the freight of multiple shippers on one vehicle and mixed loading Selection of appropriate vehicle types Increase in the size of vehicles Optimal transportation routes Improvement in the loading ratio
Cooperation with freight transportation operators and recipients of freight	Review of transportation plans and frequency

Concrete Measures

(1) Transportation Method Selection

- We will survey and analyze the conditions of long-distance truck transportation. We will then consider a change to the transportation method from business that can be switched to railroad and domestic shipping transportation that has a relatively low environmental impact.

(2) Measures to Improve Transportation Efficiency

- We will survey the conditions of transportation. We will then consider the selection of appropriate vehicle types and the selection of appropriate transportation routes to further improve loading efficiency and to reduce the energy consumption rate.

(3) Cooperation with Freight Transportation Operators and Recipients of Freight

- We have decided to check the efforts toward environmental distribution with internal criterion concerning the appointment of distribution companies. We recommend the appointment of certified companies.
- We are building a cooperative system together with our suppliers in addition to distribution companies to realize (1) and (2) above.

Realty business : Energy Consumption, Greenhouse Gas Emissions

ADIM has established a Sustainability Policy consisting of six items, namely (1) Establishing organization-wide structure for compliance and risk management, (2) Reduction of energy consumption and CO₂ emissions, (3) Resource conservation and reduction of waste, (4) Employee education, (5) Stakeholder engagement, and (6) Transparent disclosures. By implementing these things in its general asset management operations, the company contributes to the achievement of a sustainable society.

It has also established policies on energy conservation, greenhouse gas emission reduction, water conservation and waste management to improve the energy efficiency of ADR's properties and is working to reduce the properties' energy consumption and greenhouse gas emissions in order to put the Sustainability Policy into practice. The target is to reduce energy consumption and greenhouse gas emissions by an average consumption rate of 1% annually throughout the entire portfolio of more than 20,000 properties in the medium to long term.

Item	Break-down	Unit	FYE 2015 (Reference year)	FYE 2016	FYE 2017	FYE 2018	FYE 2019		
							Actual	Apples-to-apples comparison	Coverage (actual)
Energy consumption	Electric power	Total amount (MWh)	20,469	19,495	21,937	20,957	21,632	21,480	21.6%
		Consumption rate (MWh/m ²)	0.0226	0.0205	0.0230	0.0215	0.0222	0.1034	
	Fuel	Total amount (MWh)	1,540	1,715	1,574	1,718	1,827	1,803	21.6%
		Consumption rate (MWh/m ²)	0.0018	0.0018	0.0017	0.0019	0.0020	0.0093	
	Region air conditioning	Total amount (MWh)	2,854	3,208	3,077	3,256	3,228	3,228	100.0%
		Consumption rate (MWh/m ²)	0.0704	0.0792	0.0759	0.0803	0.0797	0.0797	

Item	Break-down	Unit	FYE 2015 (Reference year)	FYE 2016	FYE 2017	FYE 2018	FYE 2019		
							Actual	Apples-to-apples comparison	Coverage (actual)
Green-house gas emissions (CO ₂)	Total	Total amount (t)	10,337	11,783	12,547	24,830	25,975	25,727	24.0%
		Consumption rate (t/m ²)	0.0114	0.0124	0.0132	0.0252	0.0266	0.0410	
	Direct emissions Scope1	Total amount (t)	233	292	289	298	323	319	37.7%
		Consumption rate (t/m ²)	0.0003	0.0003	0.0003	0.0031	0.0034	0.0089	
	Indirect emissions Scope2	Total amount (t)	10,104	11,491	12,258	11,854	12,205	12,122	24.3%
		Consumption rate (t/m ²)	0.0112	0.0121	0.0129	0.0122	0.0125	0.0518	
	Scope3	Total amount (t)	-	-	-	12,678	13,447	13,287	65.1%
		Consumption rate (t/m ²)	-	-	-	0.0130	0.0138	0.0212	

* Data collection period

The data collection period is from April to March, and the results are updated annually in principle.

* Calculation method

1. The consumption rate is calculated as total usage or emissions/total floor area (m²).

2. Coverage is calculated as follows:

Coverage (%) = (1) Data collection range (m²)/(2) Maximum possible data collection range (m²)

(1) Data collection range is the floor area of the data collected.

(2) The maximum possible data collection range is the total floor area of the applicable properties.

3. Comparison under the same conditions:

(1) This is the comparison of energy consumption, GHGs, water consumption and weight of waste for properties we have managed continuously for two years or properties for which we could obtain data for two years in our portfolio.

(2) This comparison does not include properties which we have acquired or disposed of in the past two years, properties which we have developed or refurbished on a large-scale basis, or properties with variations in the data acquisition rates for each reporting year in our portfolio.

Prevention of Pollution

Policy and Basic Concept

ITOCHU has established the following in the ITOCHU Group Basic Policy on Promotion of Sustainability that we revised in 2018. We respect the legislative systems of each country and international norms while striving to prevent environmental pollution that threatens our lives. We promote business activities that consider conservation of the global environment such as climate change alleviation and adaptation, and protection of biodiversity and ecosystems. Promoting sustainability rests in the hands of individual employees. Therefore, we conduct educational and awareness activities for employees to foster their awareness to solve social challenges. Individual employees observe the laws, ordinances and regulations of Japan and other countries and other matters agreed to by our company. They then implement the action plans of each organization based on this policy. We contribute to society through our core business with efforts like these.

The chemicals and synthetic resins handled in the Chemicals Division and the products made with these are used in every aspect of our lives. This means that they are extremely useful. On the other hand, many of these chemicals are toxic or dangerous in nature. Therefore, they are regulated by a great many related laws and regulations in various settings (e.g., manufacture, sales, transportation and storage).

These chemicals are connected to serious problems concerning public health and environmental conservation. Accordingly, the laws and regulations on the trading of chemicals are diverse and extremely strict. The penalties for violating these laws and ordinances are also very heavy. Many chemicals require permission to be handled as products. However, if this permission is revoked as a result of violating laws and ordinances, it could seriously affect the business of the Chemicals Division.

There is an international trend to minimize risks at the level of the entire supply chain of chemicals. Against this background, both advanced nations and developing nations have started to introduce new regulations and to make large-scale revisions to existing regulations. Consequently, the regulatory environment in the handling of chemicals is expected to become ever stricter in the future.

With awareness of the above, we recognize the importance of compliance with laws and ordinances in addition to knowledge of products and the industry as a company that handles chemicals. Our basic policy is that each individual should engage in business in accordance with the requirements of laws and ordinances upon correctly understanding the laws and regulations concerning the products that they are in charge of handling.

Targets

ITOCHU has set the following as our environmental targets (FYE 2019). (1) Prevention of environmental pollution and compliance with laws and regulations: We will perform advance environmental risk assessments according to the CSR and Environmental Checklist for Investments for all investment projects. We will promote efforts to improve the management level by checking the environmental management system, compliance and environmental performance situation through internal audits. We will select group companies and then visit them to survey their environmental management situation. (2) Promotion of awareness activities: We will hold workshops and promote learning on the Waste Management and Public Cleansing Law and the Soil Contamination Countermeasures Act for ITOCHU and group company employees. We will set target values and then review results based on them. (3) ITOCHU will set numerical targets for the reduction of the waste we discard, the promotion of recycling, and the reduction of our paper and water consumption even in our office activities in addition to considering the environment when performing our business activities. We will also gradually expand the scope of environmental performance data we collect from group companies in Japan and overseas offices to understand the actual situation and utilize that in our future environmental conservation activities.

Structures and Systems

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* Reference: Excerpt from the Handbook on Chemicals Related Laws

Organization

— Supervising Department

Chemicals Planning Supervision Department, Chemicals Division, Energy & Chemicals Company

* Some support work is outsourced to Chemical Logitec Co., Ltd. (Group company under the supervision of the Chemicals Division)

— Management Method

1. Management with a Law and Ordinance Management System (Substances Handled, Applicable Laws and Ordinances, Legal Compliance Matters and Performance Situation Check and Database Creation)
 - Approx. 3,000 products handled currently (basically, counted as one per SDS)
 - Products subject to management: chemical raw materials, intermediate goods and products (some)
 - There are rules for the registration to this system when handling new products and for the acquisition of approval from the supervising department in advance
 - There are 39 laws and ordinances subject to management
2. Outsourcing of Advisory Work to a Chemical Industry Legal Consultant
 - Subcontractor: Technohill Co., Ltd. (This company is home to multiple former employees of general chemical manufacturers and provides advisory services)
3. Use of Web Law and Ordinance Search Systems
 - ez-Advance (Provided by Japan Chemical Database Ltd.)
 - chrip (Provided by the Chemicals Evaluation and Research Institute, Japan)
4. E-learning on Chemicals related Laws and Regulations
 - Frequency: Once a year
 - Introduction to the major laws (Chemical Substances Control Law, Industrial Safety and Health Law, Poisonous and Deleterious Substances Control Law, Pollutant Release and Transfer Register Law, and Industrial Waste Law) and law and ordinance search tools
5. Creation and Distribution of a Handbook on Chemicals Related Laws
 - This handbook describes 32 laws and ordinances
 - It clarifies the outline and compliance matters of each law and ordinance

Management Structure for Emergency Response and Accident Response

ITOCHU responds as below in accordance with our accident and emergency response regulations.

- The person who first receives an accident and emergency report immediately makes a report to the Chief Operating Officer and Secretary-General of the Chemicals Division via those in charge of ESG promotion according to the emergency contact network.
- The person that first receives an accident and emergency report write an accident and emergency report and obtain the approval of those in charge of ESG promotion.

If an accident occurs during the handling or storage of toxic or hazardous substances, we respond as follows in line with the Pharmaceutical Key Toxic and Hazardous Substance Risk Prevention Procedures Manual.

- We will make reports as necessary according to the emergency contact network in the above manual. In addition, we will take prompt action to limit the risks caused by toxic and hazardous substances.
- In the event of splashing, leaking, outflow, seepage or penetration underground, we will immediately notify the health care center, police station or fire department to that effect when there is a fear of a risk to the health of an unspecified or large number of people. At the same time, we will take measures to prevent risks to health.

Efforts

Acquisition of ISO22301 Certification Aiming for a Safe, Secure and Resistant-to-Disaster Tank Terminal

Nagoya Chemport, which is managed and operated by Chemical Logitec Co., Ltd., plays an important part in the supply chain that includes Nagoya and its environs. Its main business is to receive, store and dispense liquid chemicals at Nagoya Port No. 9.

The company spent two years educating and training its employees, enhancing its facilities and developing its structures with the aim of ensuring a safe, secure and resistant-to-disaster chemport. This has been done in preparation for the Nankai Trough Earthquake predicted to strike in the future based on lessons learned from the Great East Japan Earthquake that occurred on March 11, 2011. As a result of these efforts, the site acquired initial ISO22301:2012 certification on May 1, 2014; it was then re-certified on June 15, 2017.

ISO22301 is a management standard to minimize the impact on stakeholders, including customers, and elevate the abilities of organizations to continue providing services by promptly recovering from disasters and accidents that interrupt and hinder business. Nagoya Chemport broke ground to become the first company to acquire this certification in the chemical tank industry in Japan and among ITOCHU Group companies.

We are continuing to review issues inside and outside the organization and working to improve them. In FYE 2016, we provided safety measures training with a scenario of accidents occurring when there are few people to deal with them (e.g., at night and on holidays) in the presence of shippers. We also held night training again in FYE 2018 following on from FYE 2017 to check whether there were any problems with the support for that. We are continuing to work on ensuring safety in the event of a disaster with respect for human life as our number one priority. In addition, we repeatedly hold education and training for organizations and strive on a daily basis to respond to the trust placed in us by our customers.



Tank Terminal

Cooperation with Stakeholders

To contribute to the promotion of the formation of a recycling-based society, ITOCHU Corporation as a specified business operator prescribed by the Container and Packaging Recycling Law measures recycling of containers and packaging every year to ascertain its own manufacturing / import volume of containers and packaging, Commercialization consignment fee is included in Japan Containers and Packaging Recycling Association. Details: See Cooperation with Stakeholders (P67)

Performance Data

- We hold chemicals related law and regulation e-learning every year
Chemicals Division alone (participants: 141 / period: October 1 to 31, 2018)
We also give information on the same e-learning to the Chemicals Division related Group companies, each division company in ITOCHU other than the Energy & Chemicals Company and also its related Group companies
- There were no major violations (e.g., license suspensions)

Resource Circulation

Policy and Basic Concept

ITOCHU stipulates the following in the ITOCHU Group Basic Policy on Promotion of Sustainability that we revised in 2018. We shall strive to understand the situation concerning the use of resources (e.g., the atmosphere, water, soil, food, minerals, fossil fuels, and animals and plants) and the situation concerning consideration for human rights and labor in our business investments and in the supply chain of the products we handle. We shall ask our business partners to understand and put into practice our concept toward sustainability. The aim of this is to build a sustainable value chain. In addition, we specified material sustainability issues which incorporate the viewpoint of the Environmental, Social and Governance (ESG) in April 2018. We consider ensuring stable procurement and supply to be a critical issue. We work to effectively utilize and to ensure stable procurement and supply of resources (including water) according to demand in each country with consideration for the environment (e.g., biodiversity). In doing this, we are aiming for a recycling-oriented society.

With regard to water resources, we understand that water stress and shortages of potable water supply are an increasing global concern. About 97.5% of earth's water resources come from the ocean, leaving less than 0.01% to be potable water. Potable water resources are also at risk of decrease given the exacerbation of natural conditions due to climate change. Nonetheless, the demand for water supply will increase along with the growing global population, mainly around emerging economies, putting a lot of strain on existing water supply.

Water resources are however critical to the sustained execution of ITOCHU Corporation's vast range of global business activities. In order to adapt to the changing environment and contribute to the sustainability of water supplies around the world, we are committed to limiting our water consumption to what is necessary, recycling and reusing water, improving efficiency, and reducing water consumption.

Given these global circumstances, ITOCHU Corporation has identified its water-related business as a material area. As such, we are committed to enhancing our global capability regarding our seawater desalination business and our water supply and sewerage concession businesses, which we have been engaging in since 2014. We believe that these efforts will allow us to contribute to solving water stress and shortage issues around the world.

Targets

ITOCHU sets numerical targets for the reduction of the waste we discard, the promotion of recycling, and the reduction of our paper and water consumption.

ITOCHU develops water and hygiene infrastructure, and appropriately treats and effectively utilizes water and waste. Through this, our water resource related business contributes to improving the hygiene environment, developing economic activities and conserving the global environment. We are promoting the appropriate use and treatment of water, and the effective utilization of resources through expansion of our water and environmental business. In this way, we are working to reduce our environmental impact.

In our Tokyo Headquarter building, we are implementing resource saving measures to recycle water through creation of reclaimed water. This allows us to improve our water consumption efficiency in the office. Targets and indicators we track to manage our performance are noted in the table below.

	FYE 2019 (Results)	Single Year Target	Target for the Fiscal Year Ending March 31, 2021
Volume of waste discarded by our Tokyo Headquarters	Reduction of 35% compared to FYE 2011	Reduction of 10% compared to FYE 2011	Reduction of 20% compared to FYE 2011
Recycling rate in our Tokyo Headquarters	93%	90%	90%
Paper consumption in our Tokyo Headquarters	Reduction of 16% compared to FYE 2011	Reduction of 3% compared to FYE 2011	Reduction of 3% compared to FYE 2011
Water consumption in our Tokyo Headquarters (water supply)	Reduction of 14.1% compared to FYE 2011	Reduction of 10% compared to FYE 2011	Reduction of 15% compared to FYE 2011

Targets for realty business

Item	Reduction target	Short-term target	Long-term target
Water usage	No increase	Annual consumption rate basis No increase	<ul style="list-style-type: none"> ● Residence portofolio:5 years (FYE 2018-FYE 2022)/No increase on consumption rate basis ● Logistics portofolio:5 years (FYE 2020-FYE 2024)/No increase on consumption rate basis
Waste volume	No increase	Annual consumption rate basis No increase	<ul style="list-style-type: none"> ● Residence portofolio:5 years (FYE 2018-FYE 2022)/No increase on consumption rate basis ● Logistics portofolio:5 years (FYE 2020-FYE 2024)/No increase on consumption rate basis

Structures and Systems

We assess in advance the impact on the market, society and the environment by business investment projects in Japan and overseas engaged in by ITOCHU and our Japanese subsidiaries. We do this with the ESG Checklist for Investment. (The assessment items are related to climate change risks and also include the energy consumption and CO₂ emissions situation.) We have been operating this revised checklist since FYE 2014. The revision to the checklist means it now contains 33 check items including elements of the seven core subjects in ISO26000 (organizational governance, human rights, labor practices, the environment, fair operating practices, consumer issues, and community involvement and development). We make requests to external specialist organizations to conduct investigations in advance for projects requiring a professional point of view. The project is then only undertaken upon confirming that there are no problems in the results of those investigations.

ITOCHU has reorganized and integrated our environmental management structure into a structure to promote sustainability in the same way as with the Environmental Policy since April 2018. This has led to the establishment of a new structure to promote sustainability. You can find this from P11.

ITOCHU considers ensuring stable procurement and supply to be a critical issue. We work to effectively utilize and to ensure stable procurement and supply of resources (including water) according to demand in each country with consideration for the environment (e.g., biodiversity). In doing this, we are aiming for a recycling-oriented society. We recognize that there are risks related to ensuring stable procurement and supply. These include the impact from opposition movements caused by environmental problems and worsening relations with regional communities and structural exhaustion of the industry as a whole is due to competition to reduce prices in the consumer-related field primarily. Meanwhile, we recognize that there are opportunities related to ensuring stable procurement and supply. These include a rise in demand for resources because of the increase in population and improvement in the living standards of emerging nations, and winning the trust of customers and creating new business from the stable supply of environmentally friendly resources and materials.

We manage water resource risks by using the World Resources Institute's (WRI) Aqueduct for manufacturing bases affiliated with our group.

Efforts

Among the environmental conservation costs disclosed in the environmental accounting (P36), associated with water are as follows :

- Cost for water pollution prevention, wastewater treatment cost, grey water production cost, monitoring measurement cost and management cost 9,456 thousand yen
- Research and development expenses for water risk aversion (donation to Division of Climate System Research, Atmosphere and Ocean Research Institute, the University of Tokyo) 500 thousand yen

Understanding Water Risks at Manufacturing Bases

ITOCHU uses the Aqueduct tool developed by the World Resources Institute (WRI) to identify areas with high water stress levels at manufacturing bases affiliated with our group. With this, we have quantified the water stress levels at all our manufacturing bases in Japan and overseas and have identified areas with a high level of water stress.

Overall water risk	Number of sites
Low risk (0-1)	1
Low to medium risk (1-2)	32
Medium to high risk (2-3)	63
High risk (3-4)	10
Total	106

As in the Environment Conserving Business page (P43-44), we are striving to solve global environmental problems through the promotion of environment conserving businesses such as seawater desalination business in Victoria, Australia and Oman and seawater desalination plant, and osmosis membrane manufacturing and sales in Saudi Arabia.

Food Recycling

ITOCHU makes regular reports on the amount of food we discard and the amount we recycle in Japan to comply with the Food Recycling Law. We are striving to suppress the generation of waste and to promote recycling (e.g. conversion into feed) in line with the reference rate (recycling rate target).

Food Recycling Rate

		FYE 2016	FYE 2017	FYE 2018	FYE 2019
Quantity recycled	Waste volume generated (Unit: t)	959.9	828.2	1,816.9	869.0
	Amount of recycling (Unit: t)	567.7	544.9	620.6	454.9
	Waste volume (Unit: t)	392.2	283.3	1,196.3	414.1
Target (recycling rate target by individual food related operator)	Reference rate	74.8%	75.8%	76.8%	77.8%
Percentage recycled	Recycling rate	64.3%	70.6%	34.2%	52.3%

* In FYE 2018, 1,001.0 tons were discarded due to a warehouse fire.

* FYE 2020 recycling rate target: 78.8%

Number One Trader in the World for the Cement Substitute of Blast Furnace Slag

Blast furnace slag is a by-product of the steelmaking process. Mixing and using it with cement as a cement substitute makes it possible to save natural resources (e.g., limestone – the raw material of cement). It is an environmentally friendly product that can reduce the CO₂ generated during manufacturing by about 40%* compared with when making concrete only with cement.

It is highly durable against seawater and the steel material in it is less likely to suffer corrosion over a long period of time. Therefore, it is widely used in large civil engineering projects at ports.

We have been selling blast furnace slag produced in Japan and overseas in around 10 countries since about 20 years ago. We handle of volume of blast furnace slag that makes us the number one trader in the world for it. In the future, we will build continuous and stable distribution channels and consider investing and participating in the slag business.



Structure Made with Blast Furnace Slag

* Calculated at a 55:45 ratio for cement and blast furnace slag

Cooperation with Stakeholders

Compliance with the Containers and Packaging Recycling Law

ITOCHU understands our own manufacturing and import volume of containers and packaging every year to recycle containers and packaging. We then pay a recycling fee to the Japan Containers and Packaging Recycling Association. The aim of this is to contribute to promoting the formation of a recycling-orientated society as a specified business operator prescribed by the Containers and Packaging Recycling Law.

The recycling fee we pay every year is as below.

(Unit:Yen)

Fiscal Year	Recycling Fee / Contribution Fee	Glass Bottles			PET Bottles	Paper Containers and Packaging	Plastic Containers and Packaging	Total
		Colorless	Brown	Other Colors				
FYE 2017	Recycling	814,414			708	18,306	631,798	1,465,226
	Contribution	0			68	168	47,052	47,288
	Total amount	814,414			776	18,474	678,850	1,512,514
FYE 2016	Recycling	770,179		158,548		30,825	292,375	1,251,927
	Contribution	0		0		315	13,395	13,710
	Total amount	770,179		158,548		31,140	305,770	1,265,637
FYE 2015	Recycling	754,732		16,016		25,416	339,157	1,135,321
	Contribution	0		0		107	11,896	12,003
	Total amount	754,732		16,016		25,523	351,053	1,147,324

Initiative Participation (Activities Through Business and Industry Groups)

We are participating in the Global Environment Subcommittee of the Committee on Environment and Safety – an environment and energy related committee of the Japan Business Federation (Keidanren). We are working to realize an environmental policy compatible with the economy (e.g., through promotion of voluntary action plans, and measures for global warming, waste and recycling and environmental risks including water management). We are also participating in the Global Environment Committee of the Japan Foreign Trade Council. We are striving to build a low-carbon society, construct a recycling-orientated society, and to support environmental related laws and regulations.

Participation in the CDP

We participate in the CDP. This is an NGO with the largest database in the world related to environmental information (e.g., water security management of companies). We do this as part of our work to proactively disseminate information about our efforts on ESG for various stakeholders around the world. We have been answering the written inquiries of CDP Water Security to assess water management in the supply chain of companies since FYE 2014.

Performance Data

Scope of Aggregation

○:in scope of aggregation

	Waste volume	Paper consumption	Water consumption and wastewater discharge
Tokyo headquarters	○	○	○
Osaka headquarters	—	—	—
Branches in Japan ^{*1}	—	—	—
Other branches and business facilities in Japan ^{*2}	—	—	—
Group companies in Japan ^{*3}	○	—	○
Overseas offices ^{*4}	○	—	○
Overseas group companies ^{*5}	○	—	○

*1 The branches in Japan cover all five domestic branches (Hokkaido, Tohoku, Chubu, Chugoku & Shikoku, and Kyushu).

*2 The other business facilities cover business facilities owned or leased by ITOCHU (except facilities for residences). The number of offices including domestic branches was eight in FYE 2016, eight in FYE 2017, six in FYE 2018 and eight in FYE 2019.

*3 The group companies in Japan cover consolidated subsidiaries directly invested in by ITOCHU (as of March 31, 2017) for FYE 2016 to FYE 2017. The number of such companies was 70 in FYE 2016 and 65 in FYE 2017. All consolidated subsidiaries are covered since FYE 2018 (coverage 100%). The numbers of such companies was 208 in FYE 2018 and 220 in FYE 2019.

*4 The numbers of overseas offices covered was 16 in FYE 2016, 16 in FYE 2017, 15 in FYE 2018, and 30 in FYE 2019.

*5 The overseas group companies cover consolidated subsidiaries directly invested in by ITOCHU (as of March 31, 2017) from FYE 2016 to FYE 2017. The number of such companies was 44 in FYE 2016 and 46 in FYE 2017. All consolidated subsidiaries are covered since FYE 2018 (coverage 100%). The numbers of such companies was 299 in FYE 2018 and 282 in FYE 2019.

However, companies expected to be sold within the next five years held for investment management purposes are not included in the scope of the data. Moreover, the non-manufacturing site offices with 10 or fewer employees are quantitatively insignificant. Accordingly, they are not included in the scope of the data.

Water Consumption and Wastewater Discharge

The table below gives the water consumption, gray water production volume and wastewater discharge in the Tokyo Headquarters as well as the wastewater discharge in group companies, overseas offices and overseas group companies from FYE 2016 to FYE 2019. Our Tokyo Headquarters has set a target of reducing its water consumption by 10% compared with FYE 2011 levels. We are reducing our water consumption by introducing devices to save water by using gray water for the water used to flush toilets.

(Unit:m³)

	FYE 2016	FYE 2017	FYE 2018	FYE 2019
City water usage by the Tokyo headquarters★	46,922	52,248	43,039	46,573
Gray water usage by the Tokyo headquarters★	35,729	30,736	33,830	31,225
Wastewater discharge by the Tokyo headquarters★	62,857	63,446	58,129	58,779
Wastewater discharge by group companies in Japan*	981,549	846,700	14,628,762	51,913,278
Wastewater discharge by overseas offices*	5,932	5,722	5,863	5,366
Wastewater discharge by Overseas group companies*	205,394	207,267	11,831,598	34,380,149

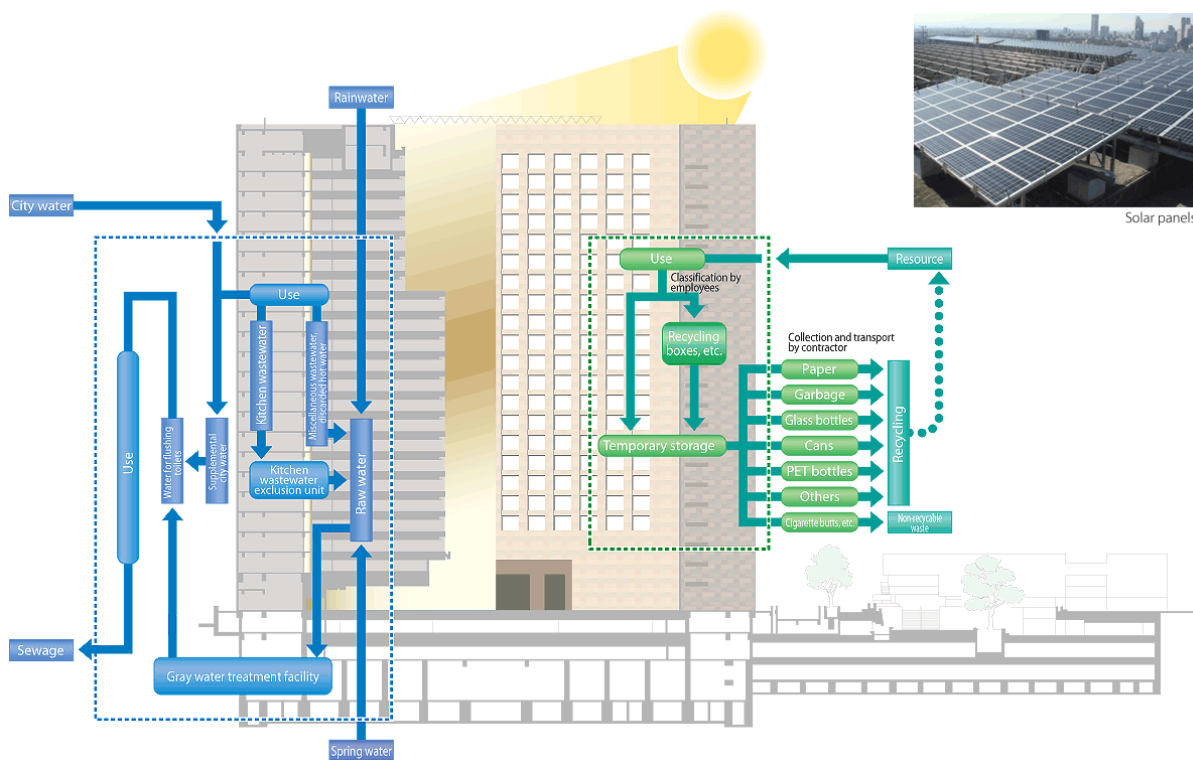
* If we do not know the wastewater discharge, we have calculated it assuming that it is the same as the volume of tap water consumption

* Due to the increase in the number of companies subject to aggregation, the figure for FYE 2019 has increased significantly compared to FYE 2018.

Effective Utilization of Water Resources

Gray water production facilities have been installed in the Tokyo Headquarters since the time when its construction was completed in 1980. These facilities use kitchen wastewater, rainwater, spring water, and non-fecal wastewater from washbasins and office kitchenettes as raw water. This processed gray water is then used for the flushing water of toilets to effectively utilize water resources.

Changes occur every year in the volume of gray water that can be secured from rainfall. Therefore, when there is not much rainfall, tap water is increasingly used. For that reason, we are striving to save tap water by newly installing equipment to save on the water when washing hands in washbasins in toilets and equipment to automatically save on the water flushed in toilets.



Solar panels

Paper

Paper Consumption

The table below gives our paper consumption for FYE 2016 to FYE 2019 (This is for the Tokyo Headquarters in FYE 2016 and for the total of all ITOCHU bases in Japan from FYE 2017 to FYE 2019). Our Tokyo Headquarters has set a target of reducing its paper consumption by 3% compared with FYE 2011 levels. We are working on reducing our paper consumption by going paperless and ending the use of unnecessary paper.

(Unit: Thousand sheets (A4 equivalent))

	FYE 2016	FYE 2017	FYE 2018	FYE 2019
Copy paper consumption	31,896	34,940	32,949	30,711

Waste

Waste Volume

The table below gives the waste volume generated in the Tokyo Headquarters, group companies in Japan, overseas offices and overseas group companies from FYE 2016 to FYE 2019. ITOCHU promotes the separation of garbage. Our Tokyo Headquarters has set a single year target of reducing its waste volume by 10% compared with FYE 2011 levels. We are working to reduce our waste volume through initiatives such as 2-in-1 and double-sided printing. The Tokyo Headquarters won the Minato Ward Waste Reducing Business Operator Commendation in FYE 2015.

		FYE 2016	FYE 2017	FYE 2018	FYE 2019
Tokyo headquarters building★	Waste volume (Unit: t)	711	674	698	680
	Waste non-recycled	36	38	43	48
	Waste recycled	675	636	655	632
	Recycling rate (Unit: %)	95	94.3	93.8	92.9
Group companies in Japan	Waste volume (Unit: t)	23,470	21,947	177,526	4,707,364
Overseas offices	Waste volume (Unit: t)	9	33	5	17
Overseas group companies	Waste volume (Unit: t)	14,569	10,016	141,392	3,118,634

* The waste volume of the Tokyo Headquarters includes the amount sold as valuables.

* Due to the increase in the number of companies subject to aggregation, the figure for FYE 2019 has increased significantly compared to FYE 2018.

Fuel consumption of the ITOCHU Group

		FYE 2018	FYE 2019
Kerosene (Unit: kL)		4,001	4,468
Light oil (Unit: kL)		35,577	39,362
Gasoline (Unit: kL)		10,774	12,598
Heavy oil A (Unit: kL)		25,699	18,289
Heavy oil B and C Unit: (kL)		11,711	16,551
Coal (Unit: t)		341,192	333,176
Petroleum gas	Liquefied petroleum gas (LPG) (Unit: t)	6,321	6,614
	Liquefied petroleum gas (LPG) (Unit: 1,000 m ³)	2,454	496
	Petroleum hydrocarbon gas (Unit: 1,000 m ³)	2,247	1,860
Combustible natural gas	Liquefied petroleum gas (LPG) (Unit: t)	1,645	3,161
	Other combustible natural gas (Unit: 1,000 m ³)	5,762	14,565
Town gas etc.	Town gas (Unit: 1,000 m ³)	204,481	33,552
	Other gas (Unit: 1,000 m ³)	0.017	158

Independent Assurance

Independent Assurance Report (P200): The data below marked with a ★ is independently assured through KPMG AZSA Sustainability Co., Ltd. This assurance conforms to the International Standard on Assurance Engagements (ISAE) 3000 and 3410 of the International Auditing and Assurance Standards Board (IAASB).

★: Total electricity consumption and total CO₂ emissions attributable to business facilities of the Tokyo Headquarters, the Osaka Headquarters, branches in Japan, domestic branches and other business facilities, CO₂ emissions (attributable to distribution), and the volume of waste discarded, recycling rate, water consumption, gray water production volume and wastewater volume for the Tokyo Headquarters.

Independent Assurance Report (P200): The data below marked with a ◆ is independently assured through KPMG AZSA Sustainability Co., Ltd. This assurance conforms to the International Standard on Assurance Engagements (ISAE) 3000 and 3410 of the International Auditing and Assurance Standards Board (IAASB).

◆: Total electricity consumption and GHG emissions attributable to business facilities of the Tokyo Headquarters, Osaka Headquarters, branches in Japan, domestic branches, other business facilities, group companies in Japan, overseas offices and overseas group companies and the ITOCHU Group in total.

Realty business : Water Usage and Waste Volume

Item	Unit	FYE 2015	FYE 2016	FYE 2017	FYE 2018 (Reference year)	FYE 2019		
						Actual	Apples-to-apples comparison	Coverage (actual)
Water usage	Total amount (Unit: m ³)	140,987	154,546	193,347	199,537	208,277	201,383	25.0%
	Consumption rate (Unit: m ³ /m ²)	0.1557	0.1628	0.2027	0.2051	0.2136	0.8400	
Waste volume	Total amount (Unit: t)	-	2	5,934	6,436.4	6,837.4	6,759.6	65.1%
	Consumption rate (Unit: t/m ²)	-	0.0000	0.0062	0.0066	0.0070	0.0069	
	Recycling rate (Unit: %)	-	0.0	13.4	17.7	17.6	17.6	

* Data collection period

The data collection period is from April to March, and the results are updated annually in principle.

* Calculation method

1. The consumption rate is calculated as total usage or emissions/total floor area (m²).

2. Coverage is calculated as follows:

$$\text{Coverage (\%)} = (1) \text{ Data collection range (m}^2\text{)} / (2) \text{ Maximum possible data collection range (m}^2\text{)}$$

(1) Data collection range is the floor area of the data collected.

(2) The maximum possible data collection range is the total floor area of the applicable properties.

3. Comparison under the same conditions:

(1) This is the comparison of energy consumption, GHGs, water consumption and weight of waste for properties we have managed continuously for two years or properties for which we could obtain data for two years in our portfolio.

(2) This comparison does not include properties which we have acquired or disposed of in the past two years, properties which we have developed or refurbished on a large-scale basis, or properties with variations in the data acquisition rates for each reporting year in our portfolio.

Approaches to Conservation of Biodiversity

Policy Toward Biodiversity Conservation

The Aichi Targets for 2020 were determined at the 10th meeting of the Conference of the Parties (COP10) to the Convention on Biological Diversity that was held in Nagoya, Aichi Prefecture in 2010. With this serving as an impetus, the Sustainable Development Goals (SDGs), the Paris Agreement and other international agreements deeply important to biodiversity were also reached after that.

The ITOCHU Group, which operates business globally, perceives global environmental problems as one of the most important matters in our management policy. We will contribute to the realization of a sustainable society by promoting conservation of the global environment (e.g., protection of biodiversity and ecosystems) as indicated in the ITOCHU Group's Basic Policy on Promotion of Sustainability to fulfill our corporate philosophy of being committed to the global good. In order to achieve the realization of a sustainable society, we have established the Biodiversity Declaration.

Biodiversity Declaration

Target: To realize a sustainable society by building a society in harmony with nature

We will promote actions for biodiversity conservation more than ever before and will aim to further deepen them with our Biodiversity Declaration to make an international contribution.

- We will strive to prevent environmental pollution with consideration for the conservation of natural ecosystems and biodiversity when promoting our business activities from a global perspective.
- We will emphasize harmony between the workings of nature and our business activities. We will achieve this by promoting management integrated with the environment that incorporates extensive environmental activities (e.g., carbon reduction, resource recycling and biodiversity conservation) into our business activities.
- We will voluntarily and steadily take actions conducive to biodiversity and then disclose information and engage in dialogue.
- We will work on business activities that take into consideration local ecosystems while utilizing the natural capital of each region. We will endeavor to further promote efforts on nature conservation and biodiversity while linking up and cooperating with related organizations in Japan and overseas.
- We will foster a culture toward creating a society that cultivates biodiversity and improve awareness of this both inside and outside our company.

Targets

CSR Issues/ Societal Issues	FYE 2019 action plans	FYE 2019 results	FYE 2020 action plans	SDGs
Implementation and follow-up on social contribution programs aimed at environmental conservation [Basic Activity Guidelines 2 Environmental Conservation]	Discover and promote new projects targeting environmental protection in Japan and overseas.	<p>Started a project for protecting green turtles, an endangered species</p> <ul style="list-style-type: none"> ● For the purpose of conserving biodiversity, ITOCHU Corporation support activities for protecting green turtles, designated as an endangered species in the Red Data Book from the Ministry of the Environment of Japan. The support is provided via Everlasting Nature (ELNA), a certified NPO. ● From August 25 to August 30, 2018, ITOCHU conducted a Green Turtle Protection Tour on Chichijima in the Ogasawara archipelago, the largest green turtle breeding ground in Japan. 	Continue to support activities for protecting green turtles, an endangered species, through ELNA	13. 14. 15.

Structures and Systems

We have established items to assess what impact investment projects will have on the natural environment in the ESG Checklist for Investment — a checklist that must be submitted when entering into new business investment projects. We check whether or not there will be an impact on ecosystems attributable to the applicable project and whether or not there will be an impact on the natural environment (e.g., depletion of resources). If an impact is recognized, we perform risk management in advance of executing the project. For example, upon risk analysis, we make requests to external specialist organizations for additional due diligence if necessary.

Efforts

Consideration for Biodiversity in the Pulp Manufacturing Business

For more information see Wood, Wood Products, Papermaking Raw Material, and Paper Products Example 1: Celulose Nipo-Brasileira S.A. (P142)

Guidelines for Mine Closure

In our mineral resource development business, we have prepared a guideline for mine closure based on international standards*. In addition to land reclamation, mine closure plans should be designed so that there is as little negative impact and maximum profit as possible on the local society and economy. To achieve that, such proper measures should be taken as to prepare funds for closure, ensure the safety of waterways constructed at the time of the mine's operation, and to prevent contaminations with chemicals being used. Towards future mining closure, we have cooperated with partners, assessed the environmental impact and formulate mine closure plans as stipulated by the countries where projects are, and put the system in order to check the implemented process of the plan.

* EHS Guidelines (Mining) of the International Finance Corporation (IFC)

Support for a Biodiversity Conservation Program in the Amazon

ITOCHU has supported the Field Museum Concept since FYE 2017. This is a biodiversity conservation program in the tropical rainforest of the Amazon being advanced by the Wildlife Research Center of Kyoto University together with the National Institute of Amazonian Research in Brazil for environmental conservation and biodiversity.

The Amazon is an area equivalent to more than half of the tropical rainforests on the earth — it is also known as a treasure trove of ecosystems. However, rapid economic development and local residents cutting down the forest due to their lack of environmental education has led to the gradual loss of this precious ecosystem over the last few years. The Wildlife Research Center of Kyoto University is working together with the National Institute of Amazonian Research to conduct research and dissemination activities to maintain the precious ecosystem of the Amazon. Japan and Brazil have been working together to conduct research and develop facilities for conservation using the advanced technologies that are the specialty of Japan.

We supported the construction of the Field Station. This is a base for the natural observation and research of the diverse creatures and ecosystem of the Amazon in the Cuieiras region at a branch of the Amazon River. This facility was developed through industry, government and academia collaboration. In addition to a multipurpose building with a facility where visitors gather for seminars and research presentations (visitor center), there is also an accommodation building. The opening ceremony for this facility was held in May 2018. The station has made the long-term monitoring of animals and plants possible in an excellent region where a submerged forest and terra firme (solid ground) both exist. This has seen it attract attention both in Brazil and elsewhere around the world. In the future, advanced research will be conducted on the Amazon's tropical rainforest in the medium-to-long term. At the same time, environmental educational activities will be further simulated. It is hoped that this will lead to the conservation of the biodiversity in the Amazon. In addition to research on the Amazon's aquatic life (river dolphins and manatees) and upper reaches of the tropical rainforest that were difficult to study until now, many plans are being considered for the future.

In addition, for the purpose of saving the vulnerable species of the Amazon manatee, ITOCHU supports a program to reintroduce the Amazon manatee into the wild. The number of manatees being protected due to injuries associated with poaching is increasing. On the other hand, autonomous reintroduction into the wild is difficult. Accordingly, there was a pressing need to establish a project to reintroduce manatees into the wild. This project was aiming to reintroduce into the wild nine or more manatees and to semi-reintroduce into the wild 20 or more manatees during the period of the project over three years from FYE 2017. In reality, it has reintroduced into the wild 27 manatees and semi-reintroduced 28 manatees.



Amazon Rainforest: World's Largest Rainforest — Said to Supply One Third of the Oxygen on the Earth



The logo of Manatee Homecoming Project



Completed Field Station



Endangered Species of the Amazon
Manatee

Project for Protecting Green Turtles, an Endangered Species

For the purpose of conserving biodiversity, ITOCHU Corporation support activities for protecting green turtles, designated as an endangered species.

Green turtles lay their eggs in Japan on the sandy beaches of Ogasawara Islands. People's lives are deeply connected to the natural environment surrounding green turtles. For instance, coastal development has reduced the availability of sandy beaches used as spawning grounds, the green turtles are caught as bycatch and eat refuse on the coast, mistaking it for food. The probability that a green turtle will reach maturity over a period of around 40 years is between 0.2% and 0.3% (the survival rate of young naturally hatched turtles). In order to cultivate an awareness of the environment on the part of employees, from August 25 to 30, 2018, ITOCHU conducted a Green Turtle Protection Tour on Chichijima in the Ogasawara archipelago, the largest green turtle breeding ground in Japan. Ten ITOCHU employees and family members took part in the tour.

Through ongoing support of activities to protect green turtles in the future, ITOCHU will contribute to the protection of marine and coastal ecosystems and halting of biodiversity loss, which make up part of the sustainable development goals (SDGs) adopted by the United Nations.



Green Turtles, an Endangered Species
in Ogasawara in the Ogasawara
archipelago



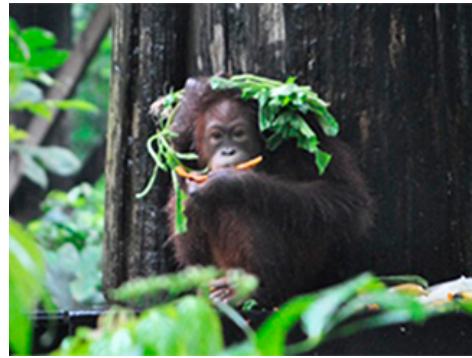
Green Turtle Protection Tour

Tropical Forest Regeneration and Ecosystem Conservation Activities on Borneo

Borneo is a tropical forest region spanning three countries — Malaysia, Indonesia and Brunei. Its area is approximately double that of Japan. This makes it the third largest island in the world. Borneo, which is called a treasure trove of biodiversity, is developing. This has led to damage to the tropical forest to the extent that conservation of the ecosystem is not possible with natural regeneration alone. The WWF, a worldwide nature protection organization, is collaborating with the Forest Department in the local Sabah State to conduct an activity to regenerate a forest of approximately 2,400 hectares. This is taking place in North Ulu Segama, Sabah State in Malaysia in the northeastern part of Borneo — a forest regeneration area that has continued to be protected by the ITOCHU Group since 2009. The ITOCHU Group has supported the regeneration of 967 hectares of this land. The afforestation work was completed in 2014 and all on-site work, including maintenance and management work, was finished in January 2016. This is the largest area in which afforestation activities are supported by a regular company. This land is also home to the endangered species of the orangutan. The regeneration of this forest will also lead to the protection of many creatures living here in addition to this orangutan.



Afforestation with Tour Participants



Endangered Species of the Orangutan

Hunting World's Borneo Support Activity

Hunting World, a luxury brand deployed by ITOCHU, has been using a logo with the motif of a young elephant without its tusks since the foundation of the brand in 1965. While serving as a symbol of freedom and revival, it also represents the challenge of looking toward the future in terms of the protection of endangered species. It contains the founder's love and respect for nature. Hunting World Japan, which sells Hunting World goods in Japan, has been supporting a biodiversity conservation activity being promoted by an NPO called the Borneo Conservation Trust (BCT) since 2008 to support the realization of coexistence with nature as called for by the founder. The company plans and sells charity goods and then provides 1% of those proceeds to the BCT. This helps with the funds to purchase land for a green corridor and the costs to rescue Borneo elephants that have gone astray in plantations. The company also independently acquired four acres of land in the green corridor project zone with its assistance funds up to that point in the fall of 2011 to create the Hunting World Kyosei no Mori (Symbiotic Forest of Hunting World). These donations have also helped with the funds to establish the Borneo Elephant Sanctuary. This is the first facility in the Wildlife Rescue Center that has been promoted by BCT Japan, which supports the BCT, since September 2013.

* Green corridor: This is an activity to conserve biodiversity. The land between forest protection zones and forest reserves are purchased back. Divided forests are then connected to create a movement route for animals.



Endangered Species of the Borneo Elephant (We provide support for the construction of facilities to temporarily protect, treat and acclimatize Borneo elephants until they return to the wild)



Kinabatangan River in Northeastern Borneo: Target Area of the Green Corridor (The plan is to secure 20,000 ha of land overall)

Cooperation with Stakeholders

Initiative Participation (Activities Through Business and Industry Groups)

We participate in the Japan Business Federation (Keidanren). We support nature conservation projects in developing areas mainly in the Asia-Pacific region and in Japan through the Keidanren Committee on Nature Conservation that was established in 1992 when the United Nations Conference on Environment and Development (Earth Summit) was held in Rio de Janeiro in Brazil. The Keidanren Committee on Nature Conservation has been working to build an environment in which the business community strives to conserve nature. This has included exchanges with NGOs, the holding of seminars and symposia, and the announcement of the Declaration of Nature Conservation by Keidanren, the Declaration of Biodiversity by Keidanren and the action guidelines for them (revised in October 2018). In addition, in recent years, the committee has also undertaken a tree-planting activity in the Tsunami Memorial Park Nakanohama (Miyako, Iwate Prefecture) that was affected by a tsunami as reconstruction support for Tohoku through the restoration of nature.

Cooperation with External Organizations toward Sustainable Palm Oil

ITOCHU joined the Roundtable on Sustainable Palm Oil (RSPO) in 2006. We have set a target of handling only RSPO certified palm oil or palm oil equivalent to that by 2025. We are working on the procurement and supply of sustainable palm oil through cooperation and collaboration with other member companies.

We are also participating in the Sustainable Palm Oil Transparency Toolkit (SPOTT). This is a project by the Zoological Society of London (ZSL) that assesses major palm oil related companies in terms of more than 50 indicators based on data released to the public. We disclose information to stakeholders relating to the palm oil industry through two-way communication.

Participation in the CDP

We participate in the CDP. This is an NGO with the largest database in the world related to environmental information (e.g., climate change measures of companies). We do this as part of our work to proactively disseminate information about our efforts on ESG for various stakeholders around the world. We have been answering the written inquiries of CDP Forests to assess forest management in the supply chain of companies since FYE 2014.

Aside from our business activities, the ITOCHU Group also conducts activities to conserve biodiversity through activities to contribute to society.

Performance Data

Performance Data on Biodiversity

Amazonian manatee reintroduction performance indicators

Theme	Activities	Three-year (FYE 2017-2019) performance indicators	FYE 2017 performance indicators	FYE 2017 Results	FYE 2018 performance indicators	FYE 2018 Results	FYE 2019 performance indicators	FYE 2019 Results
Return to semi-captive environment	Release of manatees into a semi-captive lake (Manacapuru) or a preserve established in a river (Rio Cuieiras).	<ul style="list-style-type: none"> Release of 20 or more manatees into semi-captive lake. Establishment of a lake and preserve for return to a semi-captive environment. 	<ul style="list-style-type: none"> Launch of establishment of lake for return of manatees to a semi-captive environment in Manacapuru. Health check of 13 manatees living in the semi-captive lake. Release of 6 manatees in semi-captive lake. 	<ul style="list-style-type: none"> Began meeting for setting up a lake in Manacapuru. Conducted health checks of 12 manatees. Released nine manatees into the lake to keep them in a semi-wild state. 	<ul style="list-style-type: none"> Conduct health checks of 17 manatees. Release eight manatees into the lake to keep them in a semi-wild state. 	<ul style="list-style-type: none"> Conducted health checks of 24 manatees. Released 12 manatees into the lake where they remain in a semi-captive state. 	<ul style="list-style-type: none"> Release five manatees into the lake to keep them in a semi-wild state. 	<ul style="list-style-type: none"> Released 14 manatees into the lake where they remain in a semi-captive state.
Return to the wild	<ul style="list-style-type: none"> Release of manatees into the Amazon River. 	<ul style="list-style-type: none"> Release of 10 or more manatees into the Amazon River. 	<ul style="list-style-type: none"> Release of 3 or more manatees into the Amazon River. 	<ul style="list-style-type: none"> Conducted a health check on a manatee that was recaptured after being released into the Amazon River and confirmed that both the length of its body and its weight had increased and that the manatee had adapted to the natural environment after being released into the river. Released five manatees into the Amazon River. 	<ul style="list-style-type: none"> Release five manatees into the Amazon River. 	<ul style="list-style-type: none"> Released 10 manatees into the Amazon River. Recaptured one manatee that had been released into the Amazon River and conducted health checks on it. Confirmed through the health checks that the recaptured manatee had grown in both body length and weight and that it had adapted to the natural environment smoothly after its release into the River. 	<ul style="list-style-type: none"> Release five manatees into the Amazon River. 	<ul style="list-style-type: none"> Released 12 manatees into the Amazon River.
Providing environmental training for local residents and raising their environmental awareness	Raising awareness of biodiversity conservation among local residents through a project for returning manatees to the wild.	<ul style="list-style-type: none"> Provide at least 100 local residents with learning opportunities every year. Have local fishermen understand the importance of protecting manatees, aiming to have two of them participate in this project. 	-	<ul style="list-style-type: none"> Asked more than 200 local residents to join us when we released the manatees. Through the protection of manatees, we raised their awareness of the importance of preserving biodiversity. Encouraged local fishermen to understand the importance of protecting manatees and had two of them participate in this project. 	<ul style="list-style-type: none"> Provide 100 local residents with learning opportunities. Have local fishermen understand the importance of protection of manatees, aiming to have two of them participate in this project. 	<ul style="list-style-type: none"> Raised awareness for biodiversity preservation through an environmental education program and a ceremony for releasing manatees at which 301 and 370 local residents participated, respectively. Two local fishermen took part in this project, continuing their practice from the previous year. 	<ul style="list-style-type: none"> Provide 100 local residents with learning opportunities. Have local fishermen understand the importance of protection of manatees, aiming to have two of them participate in this project. 	<ul style="list-style-type: none"> Raised awareness for biodiversity preservation through an environmental education program and a ceremony for releasing manatees at which 350 and 500 local residents participated, respectively. Two local fishermen took part in this project, continuing their practice from the previous year.