



*Environment*

## Policy and Basic Concept

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### ITOCHU Group Environmental Policy

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Global environmental concerns such as climate change pose a critical threat to the sustainability of earth. Given the global nature of our operations, it is a top management priority for us to address these concerns and contribute to building a sustainable society. We will do so by committing to make continuous improvements to our environmental management system, reducing the environmental impacts of our businesses throughout their lifecycles, and engaging in business activities that make positive contributions to the environment.

#### (1) Compliance with Laws and Regulations

We shall comply with international declarations, agreements, and treaties, as well as with the laws and regulations of the countries and regions in which we operate. We shall also comply with any other agreements that we have consented to.

#### (2) Response to Climate Change

We shall reduce greenhouse gas emissions and increase the efficiency of energy use within our own operations, as well as externally provide products and services that contribute to the mitigation and adaptation to climate change.

#### (3) Environmental Pollution Prevention

We shall prevent and reduce environmental pollution caused by chemical substances and oils, reduce emissions of air pollutants, and reduce and properly process hazardous waste and wastewater.

#### (4) Promotion of Resource Circulation

We shall contribute to the formation of a circular society by promoting the sustainable use of resources (such as fossil fuels, minerals, food, animals and plants), resource conservation measures, and waste reduction and recycling across our business investments and the supply chain of our products and services.

#### (5) Conservation and Effective Use of Water Resources

We shall reduce water consumption through efficient water use and recycling, as well as take necessary measures to appropriately treat effluents.

#### (6) Biodiversity Conservation

We shall recognize the value of the benefits that we receive from the natural ecosystem, minimize our impact on biodiversity, and contribute to its conservation.

#### (7) Transparency

We shall proactively disclose environmental information and maintain a communicative relationship with our stakeholders.

April 2020

**Fumihiko Kobayashi**

Member of the Board

Senior Managing Executive Officer

Chief Administrative Officer

# Environmental Management

## Policy and Basic Concept

We strive initiatives to conserve the global environment to be a top management priority for us. 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 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 mission of "Sampo-yoshi." 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.

Please find the ITOCHU Group Environmental Policy at P32.

## Targets

### Targets and Achievements by Item in FYE 2020

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.

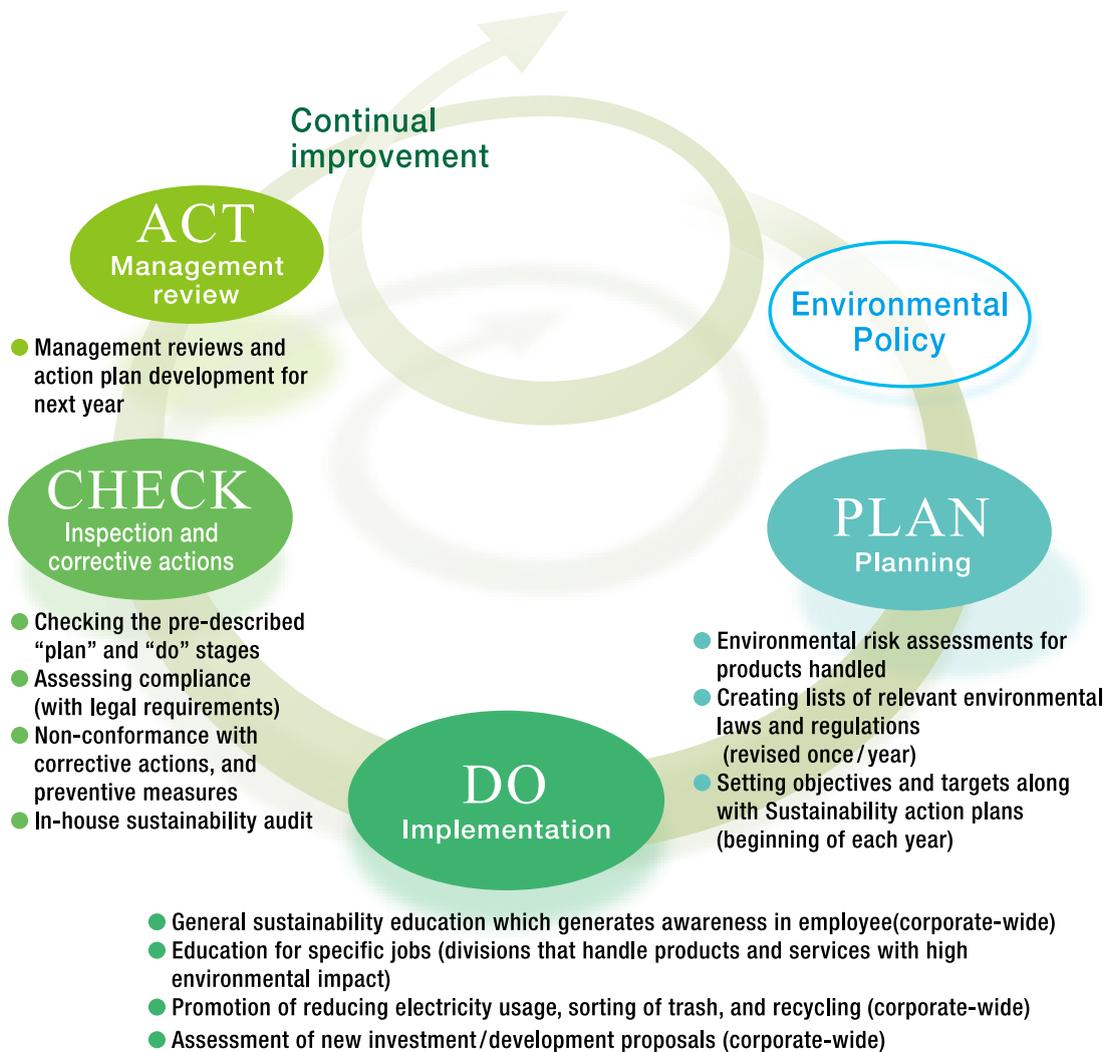
Item	FYE 2020 Environmental Target	Review	Content Implemented in FYE 2020
Prevention of environmental pollution and compliance with laws and regulations	To ensure thorough company-wide utilization of advance environmental risk assessments and the ESG Checklist for Investments when investing. To strengthen 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 <sub>2</sub> 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 99 projects in FYE 2020.)
	To promote initiatives 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 12 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 2 group companies and gave them a variety of advice. We implemented improvements on-site.

Item	FYE 2020 Environmental Target	Review	Content Implemented in FYE 2020
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 30 overseas branches (including local subsidiaries), 220 group companies in Japan and 282 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 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 education about sustainability (May to September / 3,280 participants) and education for personnel with specific duties (June to December / 410 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 e-learning "Promoting Global Sustainability in ITOCHU Group 2019" for expatriates and some national staff (December 2019 to February 2020 / 1,051 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, CO<sub>2</sub> 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 since April 2018. This has led to the establishment of a new structure to promote sustainability. You can find this from P9.

- Group companies subject to the environmental management system of ITOCHU Corporation: ITOCHU Automobile Corporation, ITOCHU Metals Corporation, and ITOCHU Taiwan Corporation
- Number of companies in ITOCHU Group that have acquired ISO14001 certification: 79 out of 554 companies (14% of the entire group).
- Number of business sites in ITOCHU Group that have acquired ISO14001 certification: 696 out of 3,819 business sites identified (18% of the entire group).

## External Audits

We undergo an ISO14001 certification review every year by the BSI Group Japan K.K. (BSI). In FYE 2020, we underwent a maintenance 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 maintenance of our certification.

## Internal Audits

We conduct internal sustainability audits every year based on ISO14001. In FYE 2020, we audited all 49 departments (including in the form of a self-check for 12 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 2020 are as follows.

(Unit: 1,000 yen)

Classification	Amount
Costs inside business areas	1,269,592
Up/downstream costs	9,912
Management activity costs	126,871
Research and development costs	500
Social activity costs	4,854
Costs to address environmental damage	13,221
Total	1,424,950

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, 2019 to March 31, 2020

### 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 2020 is as follows.

	Environmental Conservation Effects	Economic Effects (Unit: 1,000JPY)
Paper Usage	3,798,000sheets	5,393
Electricity Usage	256,000kWh	21,494
Waste Emissions	-87t	-434
Water Usage	3,296m <sup>3</sup>	1,538

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 2021.

# Initiatives

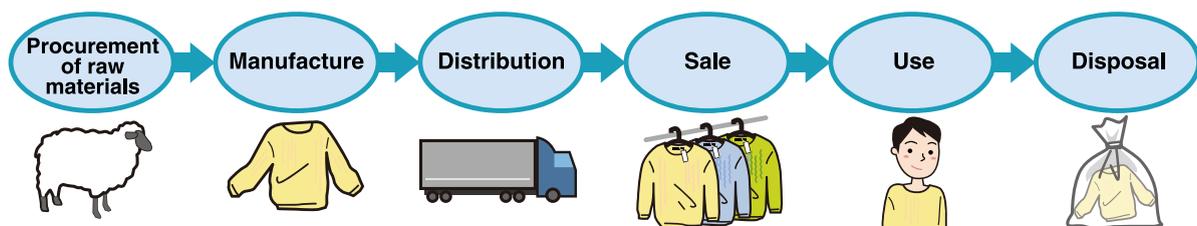
## Reduction of Environmental Risks in the Supply Chain

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 285 offices over the past 19 years up to the end of FYE 2020. 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 CO<sub>2</sub> emissions situation related to climate change risks). During FYE 2020, there were 99 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

In FYE 2020, we received a total of 69 inquiries from outside parties, including 6 from government authorities, 16 from companies (Business partners: 4, media: 3, finance: 8, others: 1), 6 from industry associations, 12 from NGOs, and requests for ISO14001 certification from 29 business partners. 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 (<https://www.itochu.com/uk/en/sustainability/>)
- ITOCHU Europe Green Finance Framework ([https://www.itochu.com/uk/en/sustainability/\\_\\_icsFiles/afieldfile/2020/08/13/ITOCHUEurope\\_GreenFinanceFramework202007clean.pdf](https://www.itochu.com/uk/en/sustainability/__icsFiles/afieldfile/2020/08/13/ITOCHUEurope_GreenFinanceFramework202007clean.pdf))
- Sustainalytics second-party opinion ([https://www.itochu.com/uk/en/sustainability/\\_\\_icsFiles/afieldfile/2019/05/30/ItochuEUROPEGreenBondFrameworkSecondPartyOpinion\\_29052019.pdf](https://www.itochu.com/uk/en/sustainability/__icsFiles/afieldfile/2019/05/30/ItochuEUROPEGreenBondFrameworkSecondPartyOpinion_29052019.pdf))

## 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 initiatives, 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 2020

Title	Dates	Main Targets	No. of Participants
Group ESG Managers Conference	April 2019	Group ESG managers	51
Basic Education about Sustainability	May to September 2019 Total of 49 times	Employees and group company employees	3,280
Education for Personnel with Specific Duties	June to December 2019 Total of 26 times	Employees and group company employees	410
e-learning	December 2019 to February 2020	Expatriates and some national staff	1,051

### — Sustainability Seminar

Please check Sustainability Awareness Activities at ITOCHU (P25-26) for details.

# Climate Change

## Action Plan

Materiality	SDGs Targets	Issues to Address	Business Area	Commitment	Specific Approach	Performance Indicators	Degree of Progress
Machinery Company							
Address climate change (contribute to realization of low-carbon society)	 	Taking countermeasures 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.	We achieved a renewable energy rate of 12.5% through capital alliances with Winch Energy, which is a company in the U.K. that is involved in small-scale solar power generation and distribution systems in non-electrified areas such as Africa, and VPP Japan, which is a company involved in the solar distribution power business in Japan.
			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.	1) We have been participating in a small electric truck demonstration experiment since January 2019 in Japan. 2) We are deepening efforts with two companies into which we invested in FYE 2019 in China where electric vehicles are spreading rapidly - Dishangtie Car Rental, an electric commercial vehicle rental and maintenance service, and Zhicheauto Technology (Singulato Motors), an emerging electric vehicle manufacture. 3) We have invested in a ride sharing service called Via (2019). This is a convenient and cost-effective means of transportation. At the same time, it also contributes to alleviating urban congestion and reducing CO <sub>2</sub> emissions.
Metals & Minerals Company							
Address climate change (contribute to realization of low-carbon society)	 	Taking countermeasures against climate change	<ul style="list-style-type: none"> <li>Mining business</li> <li>Environmental business</li> <li>Material-related business</li> </ul>	<ul style="list-style-type: none"> <li>We will realize stable energy supply as our social mission and responsibility while fully considering its environmental impact.</li> <li>We will contribute to reducing greenhouse gases through businesses related to lighter-weight vehicles and Electric Vehicles (EVs).</li> </ul>	<ul style="list-style-type: none"> <li>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).</li> <li>Aim to develop an appropriate portfolio of coal assets by fully considering its environmental impact.</li> <li>Strengthen initiatives in businesses that contribute to the development of lighter-weight vehicles and shift to EVs (aluminum, copper, and other businesses).</li> </ul>	<ul style="list-style-type: none"> <li>Contribution to the development of a low-carbon society by committing to technologies that help reduce greenhouse gases emissions.</li> <li>Development of an optimal asset portfolio by fully considering social requirements, including those related to the shift to a low-carbon society.</li> <li>Implementation and expansion of businesses that contribute to developing lighter-weight vehicles and shifting to EVs.</li> </ul>	<ul style="list-style-type: none"> <li>We are working to start an overseas demonstration project to culture Euglena together with euglena Co., Ltd. This project will help promote Carbon dioxide Capture and Utilization (CCU) technologies.</li> <li>This project has potential to be applied over existing thermal power plants and manufacturing plants that emit carbon dioxide and is expected to be rolled out to a wide range of industries.</li> <li>We have properly reviewed our asset portfolio to see if it is duly in line with our policy announced in February 2019 (1) not to acquire any new thermal coal mining interest and (2) regarding the existing thermal coal mining business, 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.</li> <li>As a result the review, following on from the sale of our interests in the Rolleston thermal coal mine in the previous fiscal year, we have concluded this year an agreement for acquiring the interests in a new coking coal mine (Longview coking coal mine) in December 2019.</li> <li>The amount of transactions for aluminum castings/die-cast materials for vehicles has increased by 10% in FYE 2020 over FYE 2019, contributing to the development of light-weight vehicles.</li> </ul>
Energy & Chemicals Company							
Address climate change (contribute to realization of low-carbon society)		Taking countermeasures 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 are holding concrete discussions with regards to participation in new LNG projects.
		Efforts to optimally and continuously supply renewable energy	Storage battery related power and environmental solutions	<ul style="list-style-type: none"> <li>We will continue to stably supply the storage batteries that are the key to the efficient and optimal utilization of renewable energy.</li> <li>We will aim to strengthen our storage battery business chain and establish a circular model through the battery recycling business in particular.</li> </ul>	We will continue to sell storage batteries equipped with optimal charging/discharging software based on machine learning (AI) and we will establish a recycling and reuse business with repurposed batteries from EV.	<ul style="list-style-type: none"> <li>Number of storage batteries sold</li> <li>Use of recycled and reused batteries</li> </ul>	* Because of new commitment, review will be conducted from the next fiscal year.
Food Company							
Address climate change (contribute to realization of low-carbon society)		Taking countermeasures against climate change	Fresh food field	We will examine and promote measures that contribute to tackling climate change.	We will utilize green energy in our processed food business.	Utilization as a source of renewable energy for processed food manufacturing plants by generating biogas power using pineapple leftovers generated in the manufacturing process of the Dole processed food business.	We are currently building biogas power plants at two plants in the Philippines. These are scheduled to be completed in the first half of FYE 2021.
General Products & Realty Company							
Address climate change (contribute to realization of low-carbon society)		Taking countermeasures against climate change	Cement substitute material such as slag	We plan to expand the use of sustainable byproducts (slag) as a substitute material for the cement which is vital for construction and civil engineering.	Establish continuous, stable business between Steelworks as the supplier of slag and Users.	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.	<ul style="list-style-type: none"> <li>We expect a 65% increase year-on-year in the amount we handle to developing countries.</li> <li>We are currently in discussions concerning investment and participation in the slag business.</li> </ul>

## Policy and Basic Concept

Climate change is one of the most urgent global environmental issues and is a matter of human existence. Given the global nature of our operations, it is a top management priority for us to address these issues such as climate change. As stipulated in item (2) of our Environmental Policy, we shall reduce greenhouse gas emissions and increase the efficiency of energy use within our own operations, as well as externally provide products and services that contribute to the mitigation and adaptation to climate change. And as such, ITOCHU will fulfil its social responsibility by promoting responses to climate change.

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 our initiatives.

### Main Climate Change Related Risks and Opportunities

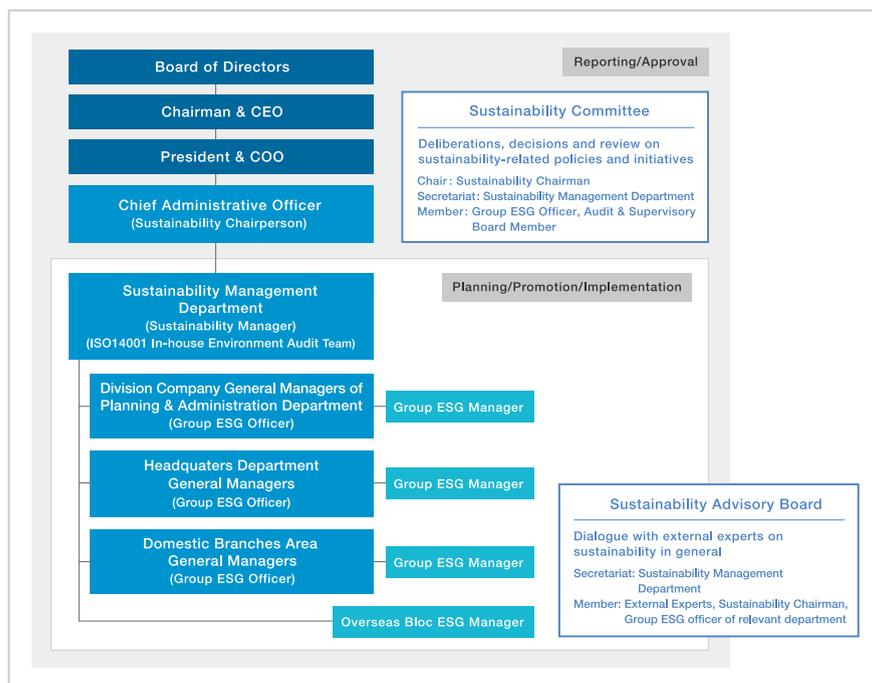
Risk	Opportunity
<p><b>Transition Risk</b></p> <ul style="list-style-type: none"> <li>● Reduction in demand for fossil fuels due to business restrictions on greenhouse gas emissions</li> </ul> <p><b>Physical Risk</b></p> <ul style="list-style-type: none"> <li>● Damage to business due to the increase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

### About the TCFD

The TCFD stands for the Task Force on Climate-related Financial Disclosures. It was established by the Financial Stability Board (FSB) at the request of the G20 to examine how to disclose climate-related information and how financial institutions should deal with this. The TCFD published its final report in June 2017. With that report, it made recommendations for the way information should be disclosed. The aim of this is to encourage companies to efficiently disclose climate-related financial information with consistency, comparability, credibility and clarity. ITOCHU considers climate change problems as one of the important challenges facing the world. Therefore, we signed up to support the information disclosure recommendations compiled by the TCFD in May 2019. We are utilizing these recommendations as one of the considerations of our business strategies and portfolio restructuring in light of the degree of relative priority with regards to businesses that need to address these recommendations from within our entire company. Moreover, we are utilizing the scenario analysis in the recommendations of the TCFD. We will also continue to enhance our information disclosure in line with these recommendations.

## Governance

The Sustainability Management Department plans and formulates company-wide action, including measures to tackle climate change, to further sustainability at ITOCHU Corporation, which the Sustainability Chairperson served by the Chief Administrative Officer, finalizes. Meanwhile, the ESG Officers and Managers in each unit carry out sustainability actions. 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 initiatives at advancing sustainability.



## Strategy

ITOCHU considers the climate change problems as one of the important challenges facing the world. Accordingly, we are examining the transition and physical risks concerning climate change. We then utilize scenario analysis of the TCFD recommendations as a tool when examining our business strategies and portfolio reorganization. We analyze scenarios in the following steps.

- (1) Scenario selection
- (2) Identification of ITOCHU's businesses conducting scenario analysis
- (3) Analysis of the scenarios (Business environment analysis, policies and initiatives in each scenario)

## Scenario Analysis

### (1) Scenario Selection

We established the two scenarios below with reference to the International Energy Agency (IEA) and Intergovernmental Panel on Climate Change (IPCC) when examining scenario analysis.

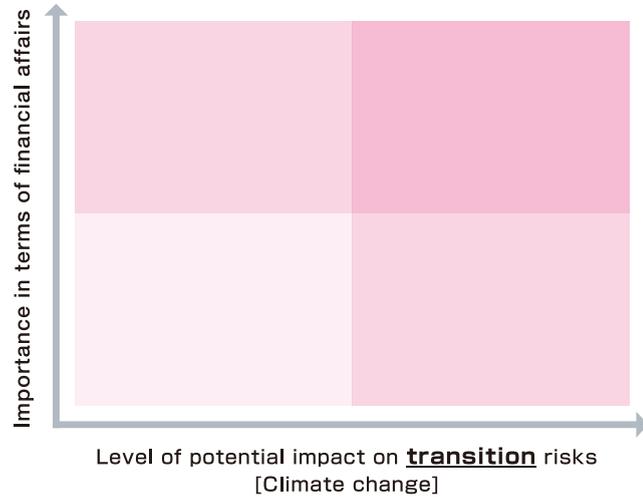
Scenario		4°C	<2°C
Image of society		The policies of countries, such as the Intended Nationally Determined Contributions (INDC) established in accordance with the Paris Agreement, are implemented. Nevertheless, the average temperature at the end of this century rises by 4°C. This is a society in which there is a high likelihood climate change (e.g., a rise in temperature) will impact business.	The average temperature rise is kept below 2°C until the end of this century. Bold policies and technological innovation are promoted. This is a society in which social changes due to the transition to a de-carbonized society are highly likely to impact business.
Reference scenarios	Transition aspects	<ul style="list-style-type: none"> <li>Stated Policies Scenario (IEA WEO2019)</li> <li>Reference Technology Scenario (IEA ETP2017)</li> </ul>	<ul style="list-style-type: none"> <li>Sustainable Development Scenario (IEA WEO2019)</li> <li>2°C Scenario (IEA ETP2017)</li> </ul>
	Physical aspects	<ul style="list-style-type: none"> <li>RCP8.5 (IPCC AR5)</li> </ul>	<ul style="list-style-type: none"> <li>RCP2.6 (IPCC AR5)</li> </ul>
Risks and opportunities		Risks and opportunities in terms of physical aspects will be more likely to surface	Risks and opportunities in terms of transition aspects will be more likely to surface

\* The IEA WEO 2019 Sustainable Development Scenario is the following scenario: The world works to keep the rise in temperature to less than 2°C – if possible, 1.5°C. At the same time, this is a scenario in which the targets of everyone being able to use energy and improving air pollution are achieved.

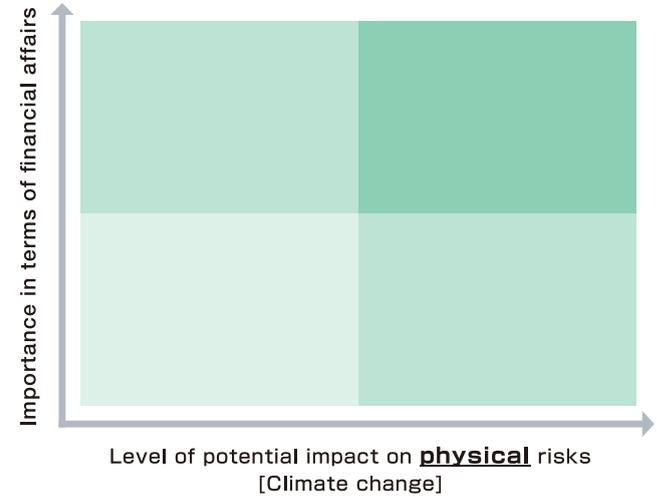
## ■ (2) Identification of ITOCHU's Businesses Conducting Scenario Analysis

We have worked to identify the following businesses from all the businesses promoted by ITOCHU. The potential impact on these businesses is large from either transition or physical risks concerning climate change. Moreover, these businesses have a high level of importance in terms of financial affairs.

### Identification of Businesses with a Large Transition Risk Impact



### Identification of Businesses with a Large Physical Risk Impact



When identifying businesses with a large transition risk impact, we organized them according to the level of potential impact on transition risks and importance in terms of financial affairs. We analyzed the coal business and power generation business in the previous fiscal year. Following on from that, we selected the oil and gas upstream development business and conducted scenario analysis on it in this fiscal year.

In addition, when identifying businesses with a large physical risk impact, we organized them according to the level of potential impact on physical risks and importance in terms of financial affairs. We selected the Dole business and pulp business as new businesses subject to scenario analysis in this fiscal year.

The aforementioned five businesses are found in four non-financial sectors (energy, transportation, materials and buildings, and agriculture, food and forest products) that will potentially be greatly impacted by climate change as designated by the TCFD.

## ■ (3) Analysis of the Scenarios (Business Environment Analysis, Policies and Initiatives in Each Scenario)

When analyzing scenarios, we identify risks and opportunities in terms of procurement, business operation and demand for each business not only for the short term but also the medium and long term from 2030. We organize and assess the factors with a high level of importance. We identify the high-impact variables in terms of transition and physical aspects for the factors with a high level of importance. Next, we use a financial model reflecting the conditions to analyze the scenarios. We measure the potential impact of climate change in regards to the analysis relating to the level of impact in terms of financial affairs. At the same time, we analyze the level of impact in terms of financial affairs including the effects from measures against risks and for opportunities.

## Results of Scenario Analysis

The following gives our business environment awareness and our initiatives to 2030. This takes into account climate change related measures from the results of the analysis on the coal business, power generation business, oil and gas upstream development business, Dole business and pulp business for which we analyzed with the scenarios. We recognized the business environment in both the <math>2^{\circ}\text{C}</math> and <math>4^{\circ}\text{C}</math> scenarios with a base in which reduction initiatives in each country are achieved. Upon that, we formulate initiatives for businesses to set the stage for each scenario and improve our business resilience.

## — Coal Business

Business Environment under the 4°C Scenario	Business Environment under the 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.</p>	

### Policy and Initiatives

- 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 the 4°C Scenario	Business Environment under the 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 Initiatives

- 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.

## — Oil and Gas Upstream Development Business

Business Environment under the 4°C Scenario	Business Environment under the 2°C Scenario
	
<p>Demand for crude oil is expected to shrink across the world under the 2°C scenario. Nevertheless, we will be able to increase revenue by capturing the opportunities of the global increase in demand for LNG and the increase in demand for new energies (e.g., biofuels).</p>	

### Policy and Initiatives

- We will carefully examine an expansion of our crude oil assets.
- We will aim to stabilize business by participating in excellent projects. We will then examine investment opportunities in gas projects (e.g., LNG).
- We will examine a business portfolio that anticipates an increase in demand in the new energies field (e.g., the capture of biofuel and hydrogen related business opportunities).

## — Dole Business

Business Environment under the 4°C Scenario	Business Environment under the 2°C Scenario
	
<p>We expect climate change (the impact on the amount of harvest per unit area due to the increase in the average temperature) to have the impact of reducing revenue under both the 4°C and 2°C scenarios. Nevertheless, we will be able to increase revenue by dispersing risks with diversification of production areas (e.g., Sierra Leone) and by striving to improve our cultivation technologies and cultivation efficiency.</p>	

### Policy and Initiatives

- We will diversify production areas (expand production in Sierra Leone).
- We will increase the yield by researching and selecting varieties and by improving production methods (e.g., by improving seedling cultivation methods).
- We will contribute to a low-carbon society through the promotion of biogas power generation utilizing pineapple dregs and solar power generation utilizing factory rooftops. We will aim to further improve the Dole brand and product superiority with the support of highly environmentally-conscious consumers.
- We will implement irrigation as necessary.
- We will examine production optimization by using drones and other ICT (e.g., early identification of agricultural chemical application points, yield prediction, and timely and accurate fertilization with monitoring).

## — Pulp Business

Business Environment under the 4°C Scenario	Business Environment under the 2°C Scenario
	
<p>We will increase revenue due to an increase in pulp production output in some afforestation areas where production output is expected to expand under the 4°C scenario. Nevertheless, our analysis shows that our revenue will decrease due to the impact of the reduction in production output in afforestation areas overall with the rise in the average global temperature.</p> <p>We will maintain production output at a certain level in afforestation areas with the suppression in the rise of the average temperature under the 2°C scenario. If the carbon prices are introduced in pulp manufacturing factories using biomass energy, we will be able to curtail costs. In addition, we will be able to increase profit by increasing revenue with an increase in our pulp production output in afforestation areas where production output is expected to expand.</p>	

### Policy and Initiatives

- We will examine a selection of varieties to respond to climate change.
- We will conduct on-site monitoring to examine measures before the impact of climate change becomes significant.

Moreover, we started work in FYE 2020 on organizing climate-related risks and opportunities in our apparel and ICT businesses – businesses which may potentially be affected by transition and physical risks concerning climate change – from the perspective of raising awareness of climate change and promoting our response to it on a company-wide basis. We have identified risk and opportunity factors with a high level of importance in the medium to long term. We plan to work on further analysis toward the next fiscal year.

## ■ Apparel Business

Currently, we assume the following will be the risks with a high level of importance: a reduction in the production output of raw materials (e.g., cotton) and an increase in costs due to a rise in emission prices. On the other hand, we assume that we can have expectations for the provision of products responding to climate change (e.g., low-carbon products) in terms of opportunities.

## ■ ICT Business

Currently, we assume the following will be the risks with a high level of importance: an increase in costs due to rising emission prices, an increase in power prices because of the introduction of a high carbon tax, an increase in information system facility damage from natural disasters (e.g., typhoons and floods) and a strengthening of CO<sub>2</sub> emission regulations in countries and regions accompanying climate change. On the other hand, we assume that we can have expectations for an expansion in the development and spread of energy-saving and highly efficient IT and data analysis technologies and an expansion in investment and lending that will contribute to a suppression of CO<sub>2</sub> emissions in terms of opportunities.

## ■ Future Plans

In the future, we will conduct analysis from both transition and physical aspects to confirm the impact of climate change on all the businesses of our company. We will then further identify and organize fields where there will be a significant impact. We plan to examine specific measure policies in the future based on the degree of relative priority for businesses for which a response is required from over the whole of ITOCHU – including our eighth company newly established with our existing seven companies.

# Risk Management

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Please see P199 for risk management relating to company-wide business including climate change.

# Metrics and Targets

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ITOCHU sets target values for a reduction in our electricity consumption. The targets are as below. ITOCHU has set a target of reducing our energy consumption by at least 1% on average annually. We are working to reduce our GHG emissions.

	FYE 2020 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 2.3% compared with FYE 2019 levels	Reduction of at least 1% annually	Reduction of 30% compared with FYE 2011 levels
	Reduction of 44% 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. (FYE 2020: Renewable energy ratio 13%)

# Initiatives

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

## Initiatives in Business tackling Climate Change

### 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, and storage batteries business that are expected to grow as a necessary supporter of energy supply in the future. Please see P76-84 for details on those businesses.

### 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 CO<sub>2</sub> injected as of the end of June 2020 is approximately 300,000 tons).

### 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 initiatives 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 CO<sub>2</sub> emissions by approximately 395 tons. Consequently, a reduction in CO<sub>2</sub> 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.

## ■ Initiatives for the Tokyo Metropolitan Government Program to Prevent Global Warming

ITOCHU submitted a plan to the Tokyo Metropolitan Government to reduce the CO<sub>2</sub> 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-CO<sub>2</sub>. 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 2016 to FYE 2020 (Submitted in November 2016) (Japanese Only) (<https://www.itochu.co.jp/en/files/ondanka-201611.pdf>)
- Greenhouse Gas Emission Reduction Plan for FYE 2016 to FYE 2020 (Submitted in November 2017) (Japanese Only) (<https://www.itochu.co.jp/en/files/ondanka-201711.pdf>)
- Greenhouse Gas Emission Reduction Plan for FYE 2016 to FYE 2020 (Submitted in November 2018) (Japanese Only) (<https://www.itochu.co.jp/en/csr/pdf/ondanka-201811.pdf>)
- Greenhouse Gas Emission Reduction Plan for FYE 2016 to FYE 2020 (Submitted in November 2019) (Japanese Only) (<https://www.itochu.co.jp/en/csr/pdf/ondanka-201911.pdf>)

\* 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.

## Cooperation with Stakeholders

### ■ 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.



### ■ 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.

## 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.



## Performance Data

### Energy Consumption

#### Scope of Aggregation

○:in scope of aggregation

		Energy Consumption			Electricity Consumption		Fuel Consumption	GHG Emission	Greenhouse Gases Other Than CO <sub>2</sub> from Energy Consumption (6.5 Gases)
		Energy Consumption in the Japanese Bases of ITOCHU	Energy Consumption Attributable to Business Facilities	Target for a Reduction in Our Electricity Consumption	Electricity Consumption of ITOCHU Group	CO <sub>2</sub> Emissions Per MWh of Electricity Consumption		GHG Emissions from Business Facilities	
Tokyo headquarters		○	○	○	○	○	○	○	○
Osaka headquarters		○		○	○	○	○	○	○
Branches in Japan	All five domestic branches (Hokkaido, Tohoku, Chubu, Chugoku & Shikoku, and Kyushu)	○		○	○	○	○	○	○
Other branches and business facilities in Japan*1	The number of offices including domestic branches: FYE 2016: 8, FYE 2017: 8, FYE 2018: 6, FYE 2019: 8, FYE 2020: 7	○		○	○	○	○	○	○
Group companies in Japan*2	Number of target companies: FYE 2016: 70, FYE 2017: 65, FYE 2018: 208, FYE 2019: 220, FYE 2020: 238				○	○	○	○	○
Overseas offices	Numbers of overseas offices: FYE 2016: 16, FYE 2017: 16, FYE 2018: 15, FYE 2019: 30, FYE 2020: 29				○	○	○	○	○
Overseas group companies*2	Number of target companies: FYE 2016: 44, FYE 2017: 46, FYE 2018: 299, FYE 2019: 282, FYE 2020: 286				○	○	○	○	○
Exclusion	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 CO <sub>2</sub> 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.								

\*1 The other business facilities cover business facilities owned or leased by ITOCHU (except facilities for residences).

\*2 The group companies in Japan and overseas cover consolidated subsidiaries directly invested in by ITOCHU (as of March 31, 2017) for FYE 2016 to FYE 2017. All consolidated subsidiaries are covered since FYE 2018 (coverage 100%).

## — Energy Consumption

### Energy Consumption in the Japanese Bases of ITOCHU

	FYE 2016	FYE 2017	FYE 2018	FYE 2019	FYE 2020
Purchased and consumed non-renewable fuel (Unit:MWh)	805	765	610	525	691
Purchased non-renewable power (Unit:MWh)	25,955	30,282	29,558	29,306	28,747
Other purchased non-renewable energy (e.g., steam, heat and cooling water) (Unit:MWh)	11,286	8,299	8,206	7,605	7,385
Generated renewable energy (solar power generation) (Unit:MWh)	87	58	58	51	54
Energy consumption cost total (Unit:million yen)	580	564	576	404	537

### Energy Consumption Attributable to Business Facilities

(Unit:GJ)

	FYE 2016	FYE 2017	FYE 2018	FYE 2019	FYE 2020
Tokyo headquarters	129,084	134,076	130,977	127,824	126,135

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

## — Electricity Consumption

Our electricity consumption and CO<sub>2</sub> emissions attributable to business facilities in FYE 2016 to FYE 2020 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	FYE 2020
Tokyo headquarters	9,169	9,331	9,200	9,178	9,055
Osaka headquarters	442	434	409	396	384
Branches in Japan	326	291	292	295	285
Other branches and business facilities in Japan	1,300	1,270	1,184	1,145	1,034
Total of domestic bases of ITOCHU corporation❖	11,237	11,326	11,084	11,014	10,759
Group companies in Japan	484,755	471,432	798,054	878,025	1,204,830
Overseas offices	3,424	3,087	2,224	2,118	2,098
Overseas group companies	147,665	143,485	500,777	590,175	447,462
Grand total of ITOCHU Group◆	647,081	629,329	1,312,139	1,481,382	1,665,148

\* 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 CO<sub>2</sub> 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.

## CO<sub>2</sub> Emissions Per MWh of Electricity Consumption

(Unit:t-CO<sub>2</sub>/MWh)

	FYE 2017	FYE 2018	FYE 2019	FYE 2020
Grand total of ITOCHU group	0.524	0.506	0.524	0.502

## Solar Power Generation

ITOCHU has installed solar panels on the roof of our Tokyo Headquarters and the roof of the adjacent ITOCHU Garden (ex 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).

## Fuel Consumption of the ITOCHU Group

Fuel consumption of the entire Group is as follows.

		FYE 2018	FYE 2019	FYE 2020
Kerosene (Unit: kL)		4,001	4,468	2,609
Light oil (Unit: kL)		35,577	39,362	41,790
Gasoline (Unit: kL)		10,774	12,598	12,759
Heavy oil A (Unit: kL)		25,699	18,289	20,432
Heavy oil B and C (Unit: kL)		11,711	16,551	25,942
Coal (Unit: t)		341,192	333,176	315,148
Petroleum gas	Liquefied petroleum gas (LPG) (Unit: t)	6,321	6,614	11,966
	Liquefied petroleum gas (LPG) (Unit: 1,000 m <sup>3</sup> )	2,454	496	472
	Liquefied petroleum gas (LPG) (Unit: kL)	-	-	186
	Petroleum hydrocarbon gas (Unit: 1,000 m <sup>3</sup> )	2,247	1,860	340
Combustible natural gas	Liquefied petroleum gas (LPG) (Unit: t)	1,645	3,161	5,698
	Other combustible natural gas (Unit: 1,000 m <sup>3</sup> )	5,762	14,565	14,115
Town gas etc.	Town gas (Unit: 1,000 m <sup>3</sup> )	204,481	33,552	26,692
	Other gas (Unit: 1,000 m <sup>3</sup> )	0.017	158	242

## Greenhouse Gas (GHG) Emissions

### GHG Emissions Attributable to Business Facilities

(Unit:t-CO<sub>2</sub>e)

FYE 2020	Scope 1	Scope 2
Total of all Japanese bases in ITOCHU❖	151	6,740

(Unit:t-CO<sub>2</sub>e)

FYE 2020	Scope 1	Scope 2
ITOCHU Group◆	1,202,508	835,916

(Unit:t-CO<sub>2</sub>e)

	FYE 2016	FYE 2017	FYE 2018	FYE 2019	FYE 2020
Tokyo headquarters	6,229	6,459	6,307	6,168	6,089
Osaka headquarters	235	221	208	172	135
Branches in Japan	208	180	175	170	176
Other branches and business facilities in Japan	664	641	582	550	491
Total of domestic bases of ITOCHU corporation❖	7,336	7,501	7,273	7,060	6,891
Intensity figures per employee (Total of domestic bases of ITOCHU corporation)	1.714	1.737	1.660	1.622	1.596
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	0.068
Group companies in Japan	369,775	340,559	1,280,241	1,174,507	1,526,279
Overseas offices	1,907	2,238	1,674	2,769	1,523
Overseas group companies	102,372	98,427	628,021	800,263	503,731
Grand total of ITOCHU Group◆	481,389	448,725	1,917,209	1,984,599	2,038,424

\* 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.)

\* From FYE 2020, the data has been calculated based on the CO<sub>2</sub> conversion coefficient according to the data of 2017 by country of the International Energy Agency (IEA) for overseas offices and overseas group companies. The data before FYE 2019 has been calculated based on the average of the CO<sub>2</sub> conversion coefficient between 2010 and 2012.

\* The denominators of Intensity figures per one square meter of all floor space are as follows:  
 FYE 2016 116,585m<sup>2</sup>, FYE 2017 116,528m<sup>2</sup>, FYE 2018 115,905m<sup>2</sup>, FYE 2019 115,842m<sup>2</sup>, FYE 2020 101,545 m<sup>2</sup>

\* From the FYE 2019 data, 6.5 gases, which are greenhouse gases other than CO<sub>2</sub> from energy consumption, are also included. 6.5 gases from group companies that emit more than 3,000 t-CO<sub>2</sub>e per year are aggregated and disclosed.

\* The calculation of GHG uses the GHG protocol developed by WRI (World Resources Institute) and WBCSD (World Business Council for Sustainable Development).

## Greenhouse Gases Other Than CO<sub>2</sub> from Energy Consumption (6.5 Gases)

### Scope1 Emission (Only 6.5 Gases) Data for each GHG

(Unit:t-CO<sub>2</sub>e)

			FYE 2019	FYE 2020
Total 6.5 gases (t-CO <sub>2</sub> e)			52,393	44,225
Breakdown	non-energy consumption carbon dioxide (CO <sub>2</sub> )		0	0
	methane (CH <sub>4</sub> )		0	1,459
	dinitrogen monoxide (N <sub>2</sub> O)		17,932	18,439
	hydrofluorocarbon (HFCs)		34,461	24,327
	perfluorocarbon (PFCs)		0	0
	sulfur hexafluoride (SF <sub>6</sub> )		0	0
	nitrogen trifluoride (NF <sub>3</sub> )		0	0

\* 6.5 gases from group companies that emit more than 3,000 t-CO<sub>2</sub>e per year are aggregated and disclosed.

\* Greenhouse gas emissions other than CO<sub>2</sub> have several tens to several tens of thousands of times of greenhouse effect compared to CO<sub>2</sub>, and t-CO<sub>2</sub>e is used as a unit for expressing that greenhouse effect equivalent to CO<sub>2</sub>.

\* In addition to the above 6.5 gases, Group companies emit 8,967 t-CO<sub>2</sub>e as HCFCs, etc.

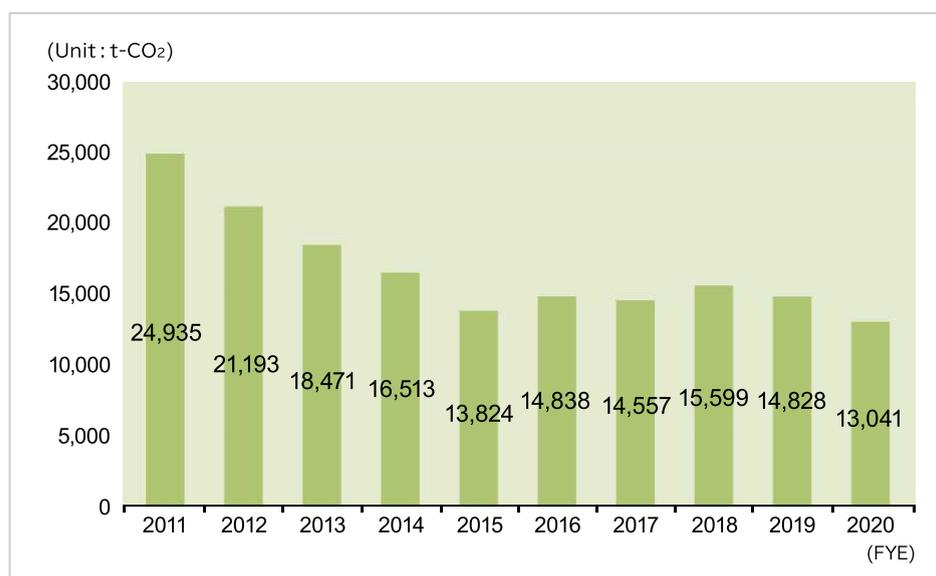
## Initiatives Toward Environmental Distribution

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.

#### CO<sub>2</sub> Emissions Attributable to Distribution ◆



## — 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.

<b>Transportation Method Selection</b>	Promotion of the use of railroads and domestic shipping
<b>Measures to Improve Transportation Efficiency</b>	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
<b>Cooperation with Freight Transportation Operators and Recipients of Freight</b>	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 initiatives 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.

## | Independent Assurance

Independent Assurance Report (P216): 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 CO<sub>2</sub> emissions attributable to the domestic bases of ITOCHU corporation (business facilities of the Tokyo Headquarters, the Osaka Headquarters, branches in Japan, domestic branches and other business facilities), and the waste volume, waste non-recycled, waste recycled, recycling rate, water consumption, gray water production volume and wastewater volume for the Tokyo Headquarters.

Independent Assurance Report (P216): 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 ITOCHU Group in total, and CO<sub>2</sub> emissions attributable to distribution of ITOCHU Corporation.

# Prevention of Pollution and Resource Circulation

## Action Plan

Risks	Opportunities
<ul style="list-style-type: none"> <li>Negative impacts on the natural environment including those related to resource circulation</li> <li>Deterioration of relations with local communities and subsequent loss of social license to operate</li> <li>Industry exhaustion due to increased price competition</li> </ul>	<ul style="list-style-type: none"> <li>Increased resource demand due to population growth and enhanced living standards in emerging economies</li> <li>Creation of customer trust and new business opportunities through stable and sustainable supply chain practices</li> </ul>

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 strengthened the supply chain from raw materials to products with a focus on sustainable raw materials. We launched the RENU project and are currently expanding the marketing of recycled polyester globally.
Machinery Company							
Respect human rights	 	Improving hygiene infrastructures	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 waste.	Expand environment projects to promote the appropriate use and treatment of the effective utilization of resources, and reduce the environmental impact.	Expand and diversify the investment portfolio in the environment field.	<b>Environment Field</b> We operate four waste incineration and power generation business projects in the U.K. In addition to this, we entered into a financing contract for a public-private partnership (PPP) waste disposal power generation project in Belgrade, Serbia in September 2019. We are aiming for operation in 2022.
Energy & Chemicals Company							
Ensure stable procurement and supply		Efforts leading to solutions to social problems	Plastic-related environmental response	We will aim to establish a recycling and reuse model.	We will supply recycled resin in collaboration with brand owners.	Establishment of a recycling program and sales of recycled resin.	* Because of new commitment, review will be conducted from the next fiscal year.

## Policy and Basic Concept

### Prevention of Pollution

ITOCHU's Environmental Policy states in item (3) that within its business activities, ITOCHU shall prevent and reduce environmental pollution caused by chemical substances and oils, reduce emissions of air pollutants, and reduce and properly process hazardous waste and wastewater. In addition, as stipulated in item (1) of our Environmental Policy, ITOCHU will fulfil its responsibility by enacting the following statement: We shall comply with international declarations, agreements, and treaties, as well as with the laws and regulations of the countries and regions in which we operate. We shall also comply with any other agreements that we have consented to.

### Resource Circulation

As per item (4) of our Environmental Policy, ITOCHU "contributes to the formation of a circular society by promoting the sustainable use of resources (such as fossil fuels, minerals, food, animals and plants), resource conservation measures, and waste reduction and recycling across our business investments and the supply chain of our products and services."

On April 2018, we announced material ESG (environment, society, and governance) issues that must be managed for the sustainability of the business and society. Among them, the topic of "stable procurement and supply" stood out as one of our most important issues. We therefore aim to realize a circular society by incorporating environmental considerations, including biodiversity, making effective use of natural resources, and stably procuring and supplying resources in line with the demands of each country.

## Ensuring Legal Compliance by the Chemicals Division

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 three items as environmental targets for pollution prevention and resource circulation and is promoting initiatives to this effect.

- (1) Prevention of environmental pollution and compliance with laws and regulations:**  
We will perform advance environmental risk assessments according to the ESG Checklist for Investments for all investment projects. We strive 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) Resource conservation, promotion of resource circulation, and understanding of results**  
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.

In our Tokyo Headquarter building, we are implementing resource saving measures. Targets and indicators we track to manage our performance are noted in the table below. ITOCHU sets numerical targets for the reduction of the waste we discard, the promotion of recycling, and the reduction of our paper consumption.

	FYE 2020 (Results)	Single Year Target	Target for the Fiscal Year Ending March 31, 2021
Volume of waste discarded by our Tokyo Headquarters	Reduction of 27% compared to FYE 2011	Reduction of 10% compared to FYE 2011	Reduction of 20% compared to FYE 2011
Recycling rate in our Tokyo Headquarters	94%	90%	90%
Paper consumption in our Tokyo Headquarters	Reduction of 26% compared to FYE 2011	Reduction of 3% compared to FYE 2011	Reduction of 3% compared to FYE 2011

## Structures and Systems

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### Due Diligence Regarding Pollution Prevention and Resource Circulation in Business Investment Projects

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, which includes assessment criteria to evaluate performance on pollution prevention and resource circulation among potential investments. 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 considers ensuring stable procurement and supply to be a material issue. We work to effectively utilize and to ensure stable procurement and supply of resources 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.

### Compliance with Laws and Regulations in the Divisions Handling Chemical Substances

At ITOCHU, the Chemicals Division has cross-functional oversight of our management of chemical substances. This includes oversight of the sales departments that handle chemical substances, which sit within the Chemicals Division, as well as relevant subsidiaries that handle chemical substances. In addition, the Chemicals Division has oversight of any sales divisions and subsidiaries outside of their direct control if chemical substances are used. We strive to comply with laws and regulations through a management method based on a combination of thorough inquiries to specialized external consulting organizations and the use of a centralized management system to track environmental legal compliance. The management system was developed internally in 2016 and allows us to confirm and record applicable laws and measures at the chemical substance level for each product. We also provide training and educational opportunities to relevant sales staffs, supplemented by e-learning materials and handbooks that summarize the main points of relevant laws.

The external consulting organization that we currently employ for chemical substance management is Techno Hill Co., Ltd. (Headquartered in Chuo-ku, Tokyo; Representative Director: Kazuyuki Suzuki). Techno Hill has comprehensive knowledge regarding the field of chemical substances and provides us with informed advice on management systems, applicable laws and regulations for each product, and general trends movements in the industry.

### Management Structure for Emergency Response and Accident Response

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

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.

## Initiatives

### 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 initiatives, 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

### 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 2017	FYE 2018	FYE 2019	FYE 2020
Quantity recycled	Waste volume generated (Unit: t)	828.2	1,816.9	869.0	992.8
	Amount of recycling (Unit: t)	544.9	620.6	454.9	744.4
	Waste volume (Unit: t)	283.3	1,196.3	414.1	248.4
Target (recycling rate target by individual food related operator)	Reference rate	75.8%	76.8%	77.8%	78.8%
Percentage recycled	Recycling rate	70.6%	34.2%	52.3%	75.1%

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

\* FYE 2021 recycling rate target: 79.8%

## 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 CO<sub>2</sub> 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

## 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 initiative 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 CO<sub>2</sub>. This greatly contributes to a reduction in our environmental burden.



Bento Box with Side Shrink Packaging

\* FYE 2020 results (comparison with conventional wrap film): Approximately 533 ton reduction in plastic raw materials and an approximately 1,904 ton reduction in CO<sub>2</sub>.

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.

## 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 2018	Recycling	704,782				29,327	1,057,941	1,792,050
	Contribution	9,344				102		9,446
	Total amount	714,126				29,429	1,057,941	1,801,496
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

### 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.

## Performance Data

### 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	FYE 2020
Copy paper consumption	31,896	34,940	32,949	30,711	26,913

## 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	FYE 2020
Tokyo headquarters building❖	Waste volume (Unit: t)	711	674	698	680	767
	Waste non-recycled	36	38	43	48	44
	Waste recycled	675	636	655	632	723
	Recycling rate (Unit: %)	95	94.3	93.8	92.9	94.3
Group companies in Japan	Waste volume (Unit: t)	23,470	21,947	177,526	4,707,364	16,024,632
Overseas offices	Waste volume (Unit: t)	9	33	5	17	9
Overseas group companies	Waste volume (Unit: t)	14,569	10,016	141,392	3,118,634	803,643

\* 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.

## Waste Recycling Rate

		FYE 2020
Grand total of ITOCHU Group	Waste volume (Unit: t)	16,829,051
	Waste non-recycled (Unit: t)	12,706,490
	Waste recycled (Unit: t)	4,122,557
	Recycling rate (Unit: %)	24

## Hazardous Waste

(Unit: t)

		FYE 2020
Grand total of ITOCHU Group	Hazardous waste	749

## Emissions of NOx, SOx, and VOC

(Unit: t)

		FYE 2018	FYE 2019	FYE 2020
Grand total of ITOCHU Group	NOx (Nitrogen Oxides)	13,838	13,392	12,278
	SOx (Sulfur Oxides)	6,174	6,412	6,928
	VOC (Volatile Organic Compounds)	500	524	520

## Scope of Aggregation

○:in scope of aggregation

		Waste Volume	Emissions of NOx, SOx, and VOC	Paper Consumption
Tokyo headquarters		○	○	○
Osaka headquarters		—	○	—
Branches in Japan	All five domestic branches (Hokkaido, Tohoku, Chubu, Chugoku & Shikoku, and Kyushu)	—	○	—
Other branches and business facilities in Japan <sup>*1</sup>	The number of offices including domestic branches: FYE 2016: 8, FYE 2017: 8, FYE 2018: 6, FYE 2019: 8, FYE 2020: 7	—	○	—
Group companies in Japan <sup>*2</sup>	Number of target companies: FYE 2016: 70, FYE 2017: 65, FYE 2018: 208, FYE 2019: 220, FYE2020: 238	○	○	—
Overseas offices	Numbers of overseas offices: FYE 2016: 16, FYE 2017: 16, FYE 2018: 15, FYE 2019: 30, FYE2020: 29	○	○	—
Overseas group companies <sup>*2</sup>	Number of target companies: FYE 2016: 44, FYE 2017: 46, FYE 2018: 299, FYE 2019: 282, FYE2020: 286	○	○	—
Exclusion	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 CO <sub>2</sub> 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.			

\*1 The other business facilities cover business facilities owned or leased by ITOCHU (except facilities for residences).

\*2 The group companies in Japan and overseas cover consolidated subsidiaries directly invested in by ITOCHU (as of March 31, 2017) for FYE 2016 to FYE 2017. All consolidated subsidiaries are covered since FYE 2018 (coverage 100%).

## Independent Assurance

Independent Assurance Report (P216): 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 CO<sub>2</sub> emissions attributable to the domestic bases of ITOCHU corporation (business facilities of the Tokyo Headquarters, the Osaka Headquarters, branches in Japan, domestic branches and other business facilities), and the waste volume, waste non-recycled, waste recycled, recycling rate, water consumption, gray water production volume and wastewater volume for the Tokyo Headquarters.

## E-learning Concerning Compliance with Chemicals-related Laws and Regulations

### Legal Compliance Status

- There were no major violations (e.g., license suspensions)

### Results of E-learning on Laws and Regulations Related to Chemical Substances

- We hold chemicals related law and regulation e-learning every year  
Chemicals Division alone (participants: 130 / period: October 1 to 31, 2019)
- 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

### Handbook on Chemical-related Regulations

The first edition was issued in 2012, and a revised edition was released in 2016 and is currently being distributed. There are 32 laws and regulations covered in this handbook, each of which outlines important aspects of compliance requirements. The purpose of this handbook is to educate our employees, especially new recruits and sales personnel, on the laws and regulations specific to the chemical industry.



# Water Resources Conservation

## Action Plan

Materiality	SDGs Targets	Issues to address	Business area	Commitment	Specific approach	Performance indicators	Degree of Progress
Machinery Company							
Respect human rights	 	Improving water and hygiene infrastructures	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.	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.	<b>Water Field</b> We own a water supply service business in the U.K. and Spain and a seawater desalination business in Australia and Oman. We are continuing to work to expand our seawater desalination and water supply/sewerage business.

## Policy and Basic Concept

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. Item (5) of our Environmental Policy states that "We shall reduce water consumption through efficient water use and recycling, as well as be take necessary measures to appropriately treat effluents." 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 initiatives will allow us to contribute to solving water stress and shortage issues around the world.

## Targets

ITOCHU sets numerical targets for the reduction of 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
Water consumption in our Tokyo Headquarters (water supply)	Reduction of 22.1% compared to FYE 2011	Reduction of 10% compared to FYE 2011	Reduction of 15% compared to FYE 2011

## Structures and Systems

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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 include water usage situation.) 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 considers ensuring stable procurement and supply to be a material issue. We are committed to improving the efficiency of our water consumption and taking necessary measures depending on the abundance of water supply in certain regions. By committing to giving these due considerations, we aim to contribute to the global water crisis.

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

## Initiatives

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### 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.

Water usage at sites identified as extremely high risk is at P68.

Overall Water Risk	Number of Sites
Low risk (0-1)	26
Low to medium risk (1-2)	82
Medium to high risk (2-3)	8
High risk (3-4)	21
Extremely high risk (4-5)	2
Total	139

### Water Related Business

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.

## List of Water-related Businesses

Business	Content of Initiatives
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>
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 m<sup>3</sup>. 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 Initiatives

#### 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 m<sup>3</sup> 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.

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.

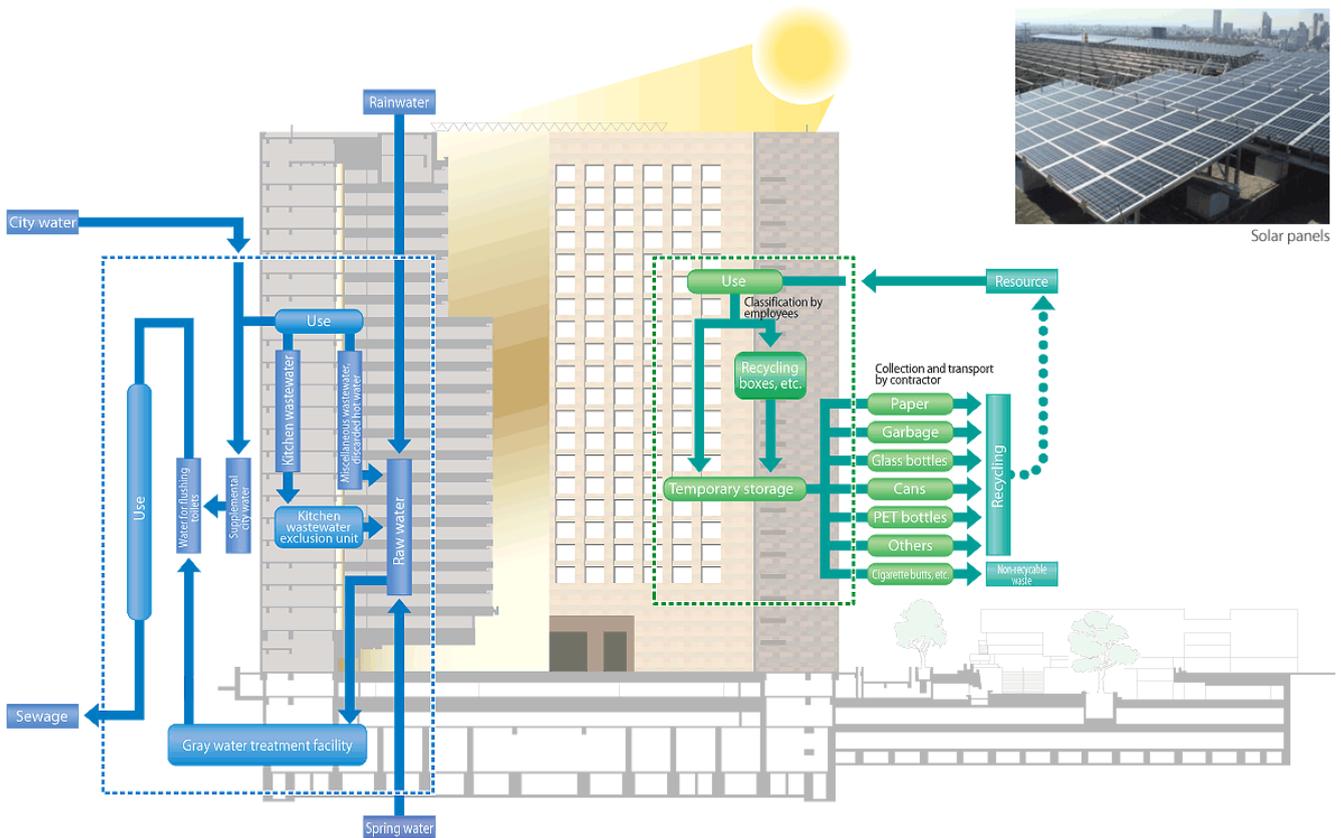


Seawater Desalination Plant (During Construction)

## 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.



## 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 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 (Water Security)

We participate in the CDP, 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 initiatives on ESG for various stakeholders around the world. We have been answering the written inquiries of CDP Water Security since FYE 2014.

## Performance 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:m<sup>3</sup>)

	FYE 2016	FYE 2017	FYE 2018	FYE 2019	FYE 2020
City water usage by the Tokyo headquarters❖	46,922	52,248	43,039	46,573	42,223
Gray water usage by the Tokyo headquarters❖	35,729	30,736	33,830	31,225	34,446
Wastewater discharge by the Tokyo headquarters❖	62,857	63,446	58,129	58,779	59,833
Wastewater discharge by group companies in Japan*	981,549	846,700	14,628,762	51,913,278	59,210,778
Wastewater discharge by overseas offices*	5,932	5,722	5,863	5,366	5,225
Wastewater discharge by Overseas group companies*	205,394	207,267	11,831,598	34,380,149	16,394,403

\* 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.

### Usage Amount by Intake Source

(Unit:m<sup>3</sup>)

		FYE 2018	FYE 2019	FYE 2020
Grand total of ITOCHU Group	Supplied water usage, industrial water	12,951,719	9,559,683	10,597,620
	Groundwater withdrawal (recycled)	0	0	30,158,408
	Groundwater withdrawal (non-recycled)	17,118,206	92,899,470	93,675,043
	Water taken from rivers, lakes, rainwater	43,919,437	31,739,550	26,318,495
	Water taken from seawater	0	4,339,200	10,268,731
	Others (produced water, etc.)	0	0	11,370
Total		73,989,363	138,537,904	171,029,667

## Discharge Amount by Discharge Destination

(Unit:m<sup>3</sup>)

		FYE 2019	FYE 2020
Grand total of ITOCHU Group	Water discharged to treatment facility (e.g. sewage)	57,669,021	3,728,982
	Water discharged to groundwater	9,243,455	5,730,762
	Water discharged to rivers, lakes	12,991,648	60,080,592
	Water discharged to sea	6,453,448	6,129,903
Total		86,357,572	75,670,239

## Water Consumption in Water-stressed Areas

The amount of water used at sites with extremely high water stress (4-5) identified using the Aqueduct tool developed by WRI (World Resources Institute) (P64) is as follows.

	FYE 2019	FYE 2020
Number of sites	0	2
Water consumption (m <sup>3</sup> )	0	18,837

## Scope of Aggregation

○:in scope of aggregation

		Water Consumption and Wastewater Discharge
Tokyo headquarters		○
Osaka headquarters		—
Branches in Japan	All five domestic branches (Hokkaido, Tohoku, Chubu, Chugoku & Shikoku, and Kyushu)	—
Other branches and business facilities in Japan*1	The number of offices including domestic branches: FYE 2016: 8, FYE 2017: 8, FYE 2018: 6, FYE 2019: 8, FYE 2020: 7	—
Group companies in Japan*2	Number of target companies: FYE 2016: 70, FYE 2017: 65, FYE 2018: 208, FYE 2019: 220, FYE2020: 238	○
Overseas offices	Numbers of overseas offices: FYE 2016: 16, FYE 2017: 16, FYE 2018: 15, FYE 2019: 30, FYE2020: 29	○
Overseas group companies*2	Number of target companies: FYE 2016: 44, FYE 2017: 46, FYE 2018: 299, FYE 2019: 282, FYE2020: 286	○
Exclusion	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 CO <sub>2</sub> 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.	

\*1 The other business facilities cover business facilities owned or leased by ITOCHU (except facilities for residences).

\*2 The group companies in Japan and overseas cover consolidated subsidiaries directly invested in by ITOCHU (as of March 31, 2017) for FYE 2016 to FYE 2017. All consolidated subsidiaries are covered since FYE 2018 (coverage 100%).

## Independent Assurance

Independent Assurance Report (P216): 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 CO<sub>2</sub> emissions attributable to the domestic bases of ITOCHU corporation (business facilities of the Tokyo Headquarters, the Osaka Headquarters, branches in Japan, domestic branches and other business facilities), and the waste volume, waste non-recycled, waste recycled, recycling rate, water consumption, gray water production volume and wastewater volume for the Tokyo Headquarters.

## Environmental Costs Related to Water

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 10,170 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

# Approaches to Conservation of Biodiversity

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## Policy and Basic Concept

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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.

Given the global nature of our operations, it is a top management priority for us to address global environment problems. In order to promote conservation of biodiversity as indicated in our Environmental Policy, we have established the Biodiversity Declaration. As such, we will contribute to building a sustainable society.

## | 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 initiatives 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

Targets	FYE 2020 Action Plans	FYE 2020 Results	FYE 2021 Action Plans	SDGs
Implementation and follow-up on social contribution programs aimed at environmental conservation [Basic Activity Guidelines 2 Environmental Conservation]	<ol style="list-style-type: none"> <li>Promote the Project for Protecting Green Turtles, An Endangered Species.</li> <li>Continue supporting the project to reintroduce manatees into the wild of the new concept Field Museum ecosystem conservation program in the tropical forests of the Amazon.</li> </ol>	<ol style="list-style-type: none"> <li>We launched the Project for Protecting Green Turtles, an Endangered Species in FYE 2019. We gave green turtle conservation tours participated in by employees and their families for the second time on Chichijima in the Ogasawara Archipelago again in FYE 2020. The aim of this was also to foster the environmental conservation awareness of our employees. Since FYE 2017, we have continued to support a survey monitoring the number of green turtle spawns and a post-hatching survey conducted by the Ogasawara Marine Center of Everlasting Nature of Asia certified NPO that is working on marine conservation in the Asian region. The survey results suggest that the number of green turtles in Ogasawara is continuing to increase.</li> <li>We continued to support a project to reintroduce manatees into the wild of the new concept Field Museum ecosystem conservation program in the tropical forests of the Amazon. After capture and rearing, 28 manatees (cumulative total) were released into a semi-captive lake. Furthermore, 27 manatees were released into the Amazon River. This project provided more than 870 local residents with learning opportunities. In particular, it encouraged local fishermen to understand the importance of manatee conservation and got them to participate in this project.</li> </ol>	<ol style="list-style-type: none"> <li>Promote the Project for Protecting Green Turtles, An Endangered Species.</li> <li>Promote other environmental conservation projects.</li> </ol>	<p>14.</p> <p>15.</p>

## 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.

## Initiatives

### Consideration for Biodiversity in the Pulp Manufacturing Business

For more information see Wood, Wood Products, Papermaking Raw Material, and Paper Products Celulose Nipo-Brasileira S.A.(P156).

### 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 July 23 to 28, 2019, 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



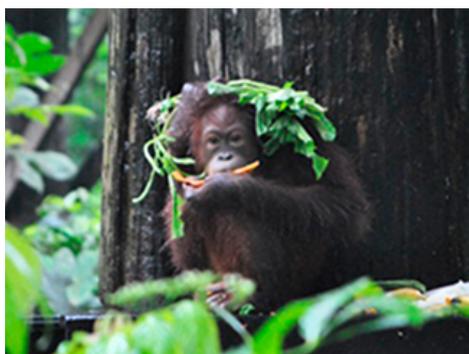
Green Turtle Protection Tour

## 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.

In addition, we have declared our approval of the Keidanren's Biodiversity Initiative announced on June 11, 2020.

## 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 initiatives 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"> <li>Release of 20 or more manatees into semi-captive lake.</li> <li>Establishment of a lake and preserve for return to a semi-captive environment.</li> </ul>	<ul style="list-style-type: none"> <li>Launch of establishment of lake for return of manatees to a semi-captive environment in Manacapuru.</li> <li>Health check of 13 manatees living in the semi-captive lake.</li> <li>Release of 6 manatees in semi-captive lake.</li> </ul>	<ul style="list-style-type: none"> <li>Began meeting for setting up a lake in Manacapuru.</li> <li>Conducted health checks of 12 manatees.</li> <li>Released nine manatees into the lake to keep them in a semi-wild state.</li> </ul>	<ul style="list-style-type: none"> <li>Conduct health checks of 17 manatees.</li> <li>Release eight manatees into the lake to keep them in a semi-wild state.</li> </ul>	<ul style="list-style-type: none"> <li>Conducted health checks of 24 manatees.</li> <li>Released 12 manatees into the lake where they remain in a semi-captive state.</li> </ul>	<ul style="list-style-type: none"> <li>Release five manatees into the lake to keep them in a semi-wild state.</li> </ul>	<ul style="list-style-type: none"> <li>Released 14 manatees into the lake where they remain in a semi-captive state.</li> </ul>
Return to the wild	Release of manatees into the Amazon River.	<ul style="list-style-type: none"> <li>Release of 10 or more manatees into the Amazon River.</li> </ul>	<ul style="list-style-type: none"> <li>Release of 3 or more manatees into the Amazon River.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>Released five manatees into the Amazon River.</li> </ul>	<ul style="list-style-type: none"> <li>Release five manatees into the Amazon River.</li> </ul>	<ul style="list-style-type: none"> <li>Released 10 manatees into the Amazon River.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Release five manatees into the Amazon River.</li> </ul>	<ul style="list-style-type: none"> <li>Released 12 manatees into the Amazon River.</li> </ul>
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"> <li>Provide at least 100 local residents with learning opportunities every year.</li> <li>Have local fishermen understand the importance of protecting manatees, aiming to have two of them participate in this project.</li> </ul>	-	<ul style="list-style-type: none"> <li>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.</li> <li>Encouraged local fishermen to understand the importance of protecting manatees and had two of them participate in this project.</li> </ul>	<ul style="list-style-type: none"> <li>Provide 100 local residents with learning opportunities.</li> <li>Have local fishermen understand the importance of protection of manatees, aiming to have two of them participate in this project.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>Two local fishermen took part in this project, continuing their practice from the previous year.</li> </ul>	<ul style="list-style-type: none"> <li>Provide 100 local residents with learning opportunities.</li> <li>Have local fishermen understand the importance of protection of manatees, aiming to have two of them participate in this project.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>Two local fishermen took part in this project, continuing their practice from the previous year.</li> </ul>

# ITOCHU's Clean-tech Business

We engage in environmental clean-tech businesses that are projected have sustainable growth from a business perspective and are projected to contribute to society's shift toward decarbonization and circular economy. In doing so we employ a mid-to-long-term perspective in our business outlook and aim to leverage the latest technology available.

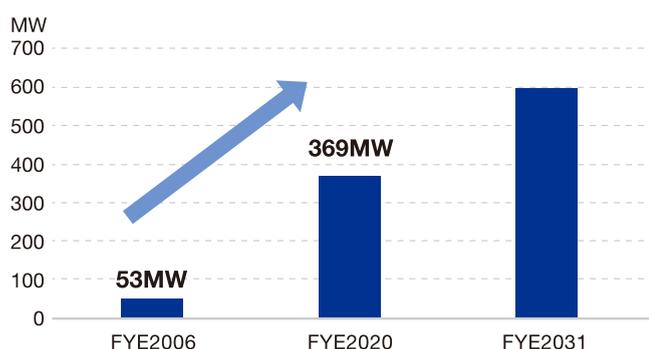
- 1. Renewable Energy (P76-77)
- 2. Ammonia Fuel (P78)
- 3. Energy-from-Waste (P78-79)
- 4. Energy Storage Systems (ESS) (P79-80)
- 5. Water Infrastructure (P80-81)
- 6. Green Buildings (P81-82)
- 7. Other Clean-tech Areas (P82-84)

## 1. Renewable Energy

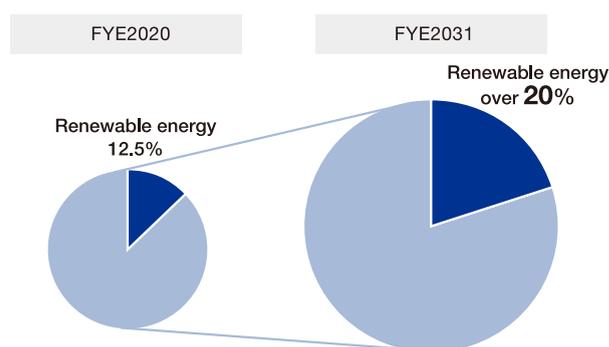
ITOCHU is involved in various aspects of power generation projects, aiming to optimize and maximize power generation efficiency. These include construction and refurbishment projects for all types of power plants worldwide, Independent Power Producer (IPP) businesses, as well as the operation and maintenance of power plants. Within the business activities introduced above, we are proactively promoting power generation methods that leverage renewable energy sources such as geothermal, wind, solar, and biomass. We are aiming for a renewable energy ratio of over 20% (equity interest basis) by FYE 2031 from 12.5% in FYE 2020 within our overall power generation business.

ITOCHU will continue to proactively promote power generation businesses that utilizes renewable energy in and outside of Japan. This will allow us to contribute to global sustainability agreements that aim to create a decarbonized economy to mitigate climate-related impacts.

### Renewable Energy Generation (Equity Interest Basis)



### Target for Renewable Ratio of Total Generation



### Breakdown of ITOCHU's Total Generation in FYE 2020 and Breakdown Target for FYE 2031

	FYE 2020	FYE 2020	FYE 2031 (Target)
	Generation Capacity on Equity Interest Basis (MW)	Ratio (%)	Ratio (%)
Wind	185	12.5%	20%<
Solar/PV Power	83		
Geothermal	83		
Biomass	20		
<b>Renewable Energy (Total)</b>	<b>369</b>		
Natural gas	1,621	87%	80%>
Coal-fired power	955		
<b>Thermal Power (Total)</b>	<b>2,576</b>		
<b>Grand Total</b>	<b>2,945</b>	100%	100%

For a list of our renewable energy-related businesses please visit P84.

We have announced a policy to not engage in new coal-fired power plant developments or the acquisition of interests in coal-fired power plants\*.

\* Policy statement regarding our involvement in coal-fired power generation (<https://www.itochu.co.jp/en/csr/news/2019/190214.html>)

## Renewable Energy Highlights

### — Wind Power

ITOCHU has continued involvement in wind power (offshore and onshore) from the late 1990s. Currently, ITOCHU has interests in six power plants in Japan, the United States, and Germany, some of which are currently under development.

#### **Butendiek Offshore Wind Farm in the North Sea of Germany**

The demand for renewable energy is increasing. Against this backdrop, we have signed a strategic business and capital alliance with the CITIC Group to cooperate in a top-scale offshore wind farm (288MW) operating in the North Sea of Germany. The wind farm supplies power to approximately 370,000 standard German households, contributing to the transition to a low-carbon society.



The Butendiek Offshore Wind Farm

### — Solar Power/PV Power

ITOCHU is involved in six large-scale solar power plants in Japan, the United States, and in Spain. ITOCHU also has a capital alliance with VPP Japan, owning roof-top solar panels worth approximately 10MW. We aim to increase this to 100MW by FYE 2022.

#### **Supplying Clean Energy with the Power of Sunlight Saga-Ouchi Solar Power Plant**

##### **– ITOCHU's Fourth Solar Power Plant in Japan –**

The commercial operation of the Saga-Ouchi Solar Power Plant (power generation output: approximately 17,000 kilowatts) began in April 2018. Located in Ouchi, Karatsu, at the date of construction, this power plant was the largest mega solar (large solar power plant) in Saga Prefecture – the fourth mega solar we operate in Japan following those in Ehime, Oita and Okayama. The plant is projected to operate for 20 years under the cooperation of ITOCHU and Kyudenko Corporation. The estimated amount of annual power generation for this plant is approximately 24 million kilowatt-hours, equivalent to the annual power consumption of approximately 4,200 standard households, while at the same time contributing to the CO<sub>2</sub> emissions reduction of approximately 11,000 tons per year.



Saga-Ouchi Solar Power Plant

### — Geothermal Power

ITOCHU has interests in an IPP project for Indonesia's Sarulla Geothermal Power Plant, one of the largest of its kind in the world. The financial closure of the \$1.17bn project was announced in May 2014, being co-financed by the Japan Bank for International Cooperation (JBIC), the Asian Development Bank (ADB), and other commercial banks. This the first of its kind aimed at the IPP of a geothermal power plant.

### — Biomass

ITOCHU aims to contribute to the sustainable supply of biomass fuel by streamlining financing processes and leveraging construction and operation knowledge regarding such power plants.

## 2. Ammonia Fuel

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With international momentum towards the transition to a decarbonized society on the increase since the Paris Agreement came into effect in 2016, the International Maritime Organization (IMO) adopted a strategy for the reduction of greenhouse gas (GHG) emissions within the shipping industry in 2018. This strategy sets targets to reduce CO<sub>2</sub> emissions per transport work - as an average across international shipping - by at least 40% by 2030 (compared to 2008 levels), by 50% by 2050, and to phase them out entirely (zero-emissions) during this century. In order to achieve these goals, the early adoption of ammonia as a suitable zero emission, alternative fuel for marine fuel in ships is one of the key elements. Also, the early development of zero-emission ships is anticipated with ammonia a prime candidate for a suitable zero-emission, alternative fuel is another key elements as well.

### Developing Ships Equipped with a Main Engine Using Ammonia as Its Main Fuel

ITOCHU Corporation announced today that it has come to an agreement with Imabari Shipbuilding Co., Ltd. , MAN Energy Solutions, Mitsui E&S Machinery Co., Ltd., ClassNK, ITOCHU ENEX Co. Ltd. on jointly developing ships equipped with a main engine using ammonia as its main fuel (hereinafter "Ammonia-fueled Engine").

The purpose of the joint agreement is not limited to the development of ships equipped with an Ammonia-fueled Engine, but also extends to the question of owning and operating the ships, supplying ammonia fuel and developing ammonia supply facilities. The consortium intends to promote initiatives to reduce GHGs with the cooperation of domestic and overseas companies, as well as the relevant government agencies.

### Developing an Infrastructure to Support the Use of Ammonia as an Additional Source of Marine Fuel for Vessels

ITOCHU ENEX Co. Ltd., ITOCHU Corporation and Vopak Terminals Singapore Pte Ltd signed a non-binding memorandum of understanding to jointly study the feasibility of developing an infrastructure on 8 June 2020, to support the use of ammonia as an additional source of marine fuel for vessels in Singapore.

The purpose of the joint agreement is not limited to the development of establishment of supply chain of ammonia marine fuel in Singapore but also key element of the integrated project with development of zero-emission ship by ITOCHU and ITOCHU ENEX with other partners. ITOCHU group intends to promote initiatives to reduce GHGs with the cooperation of domestic and overseas companies, as well as the relevant government agencies.

## 3. Energy-from-Waste

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ITOCHU has been expanding its involvement in the waste management business around the world to contribute to address the global waste management challenges and to realize a sustainable community. The energy-from-waste entails properly managing and incinerating municipal waste collected from homes and retail facilities, and utilizing the thermal heat to generate clean energy. Directing garbage straight into landfill sites without being incinerated or properly treated produces greenhouse gases comprised mainly of methane and causes leaching of toxic substances that pollutes soil and water sources. Therefore, it helps ease greenhouse gases emissions significantly by reducing the amount of landfill waste, maintains and improves public health, and produces a stable clean energy using their daily waste as a "resource". We will continue to contribute to the realization of a low-carbon society and circular economy.

### Energy-from-Waste Projects in the United Kingdom

We are involved as a developer, investor, and operator in 4 energy-from-waste projects for local governments in the UK. In aggregate, these projects treat around 1.3 million tons of municipal waste annually, accounting for roughly for 15% of the UK's waste incineration market and generating enough electricity to power 160,000 British households.

## Energy-from-Waste Public-Private Partnership Project in the Republic of Serbia

We are developing and executing a similar waste management and resource recovery PPP project alongside the city of Belgrade, the Republic of Serbia in Central Europe. The project will address one of the biggest environmental and social problems in Serbia—closing and remediating the existing landfill at the Vinča Dumpsite, an environmental catastrophe on the bank of the Danube River. It will also build and operate an energy-from-waste facility to treat municipal waste generated in Belgrade, and utilize the thermal heat to generate clean energy.

In September 2019, we achieved financial close for around EUR 300 million loan facility in project financing from the International Finance Corporation, a member of the World Bank Group, the European Bank for Reconstruction and Development, and the Development Bank of Austria. We are now moving forward with the construction of new waste management facilities that including energy-from-waste facility, demolition waste recycling unit and engineered landfill with biogas recovery and water treatment unit, which it will operate for 25 years following their completion.

The methane gas that until now has been a factor in environmental degradation will be captured and used, alongside the waste itself, as a source of energy to generate heat and electricity. The project will greatly reduce the amount of buried waste while supplying enough electricity to power 30,000 homes in Belgrade and providing heat in winter. Over a period of 25 years, the clean, fossil fuel-free power from project will reduce CO<sub>2</sub> emissions approximately 4 million tons, while the reduction in landfill waste will realize an additional greenhouse gas emission reduction equivalent to approximately 3 million tons CO<sub>2</sub>. Furthermore, the contaminated water that previously drained into the Danube will be purified at a leachate treatment facility before being discharged. This helps to solve environmental and social problems in and around Belgrade. This business forms the core of Serbia's environmental and waste management policy going forward. We at ITOCHU hope that it will serve as a starting point for deep-reaching change in Serbia's waste management systems, the ways that citizens think about waste, and recycling initiatives.

ITOCHU aims to expand its involvement in the waste management business around the world to contribute to creating a sustainable community and to help reduce the burden on the environment.

## 4. Energy Storage Systems (ESS)

ITOCHU aims to promote de-carbonization and reduce environmental footprint by selling energy storage systems (ESS) that enhance and optimize the sustainable supply of renewable energy. As a demonstration of our commitment, we have set a clear sales target for ESS: 50 billion JPY by FYE 2030. Subsequently, by FYE 2031 we aim to reach a cumulative energy storage of 5,850,000kwh, which is approximately 22 times that of our baseline FYE 2020 performance.

Moving forward, we plan to strengthen our global energy procurement and sales network outreach. We also plan to expand our presence in foreign markets (especially in growing markets such as the United States and Australia), as well as our presence in application areas such as industrial use, ESS for large-scale commercial power supply, and the reuse and recycling of car batteries. ITOCHU believes that the culmination of these efforts will enhance our social impacts as well as elevate our corporate value proposition.



Vinča Dumpsite, Belgrade, Republic of Serbia. Continued to receive municipal waste from the capital for more than 40 years, and now requires emergency action.



Construction site for energy-from-waste facility, Belgrade, Republic of Serbia.

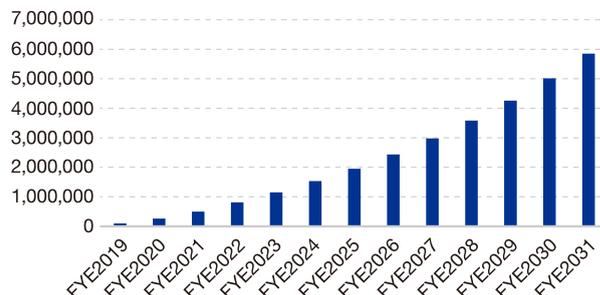
## Sales and Cumulative Energy Capacity of Our ESS products

In cooperation with NF Corporation, ITOCHU Corp. developed Smart Star, a unique ESS approximately 30,000 units as of March 2019. With Smart Star being one of our main product lines, we have shown a steady increase in sales and cumulative energy capacity of the ESS products we have sold.

**Annual Sales of ESS (1m JPY)**



**Cumulative Capacity of ESS Units Sold (kwh)**



### Other Initiatives

#### The Launch of Next-generation ESS Products Using AI Technology

ITOCHU signed a capital partnership with UK company Moixa Energy Holdings Ltd., NF Corporation and TRENDE Inc. to create a next-generation ESS that utilizes AI technology. This project has allowed for us to build upon the high performance of our Smart Star L during power-outages, and further enhance it by employing an AI system that analyzes weather forecasts, fluctuations in power consumption rates, and fluctuations in solar power generation to optimize its control mechanisms and maximize efficiency.

For more details please visit <https://www.smartstar.jp/> (Japanese only).



External View of the Smart Star

#### Capital and Business Alliance with Sunnova Energy Corporation to Promote the Service and Capabilities of Energy Storage Systems in the United States

ITOCHU has made an equity investment in Sunnova Energy Corporation, the leading privately-held residential solar power and storage services provider in the United States. ITOCHU's investment in Sunnova, and the two company's proposed strategic partnership, furthers both company's support of solar plus storage services and products that can be deployed at scale.

As more utilities seek to decrease net metering credits offered to customers in the United States, ITOCHU believes that ESS demand will increase for households that need to store solar-powered energy generated and for households that require energy savings in the event of a short or long-term grid outage. Against this backdrop, Sunnova and ITOCHU intend to collaborate on the development of ESS solutions suitable for the U.S. market. Together, we intend to leverage "GridShare Client," the AI software of Moixa Energy Holdings Ltd. (U.K.) in which ITOCHU owns an equity stake, for Sunnova's solar systems.

## 5. Water Infrastructure

ITOCHU identifies water-related businesses as a strategic priority. This is due to our understanding that such demands will increase given global climate change trends projecting drastic changes in rainfall as well as changes in demography especially in emerging economies. We globally engage in water-related businesses such as seawater desalination, water treatment, and contracting projects, aiming to contribute solutions to the increasing water problems around the world.

## Contracting Projects for Water Supply and Distribution in Europe

In 2012, ITOCHU acquired an equity position in the Bristol Water Group (U.K.), making us the first Japanese company to participate in water service businesses in the U.K. The Bristol Water Group provides comprehensive 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.

In 2014, ITOCHU acquired an equity position in CANARAGUA CONCESIONES S.A. (Spain), making us the first Japanese company to participate in water service businesses in Spain as well. CANARAGUA CONCESIONES S.A. provides water supply and distribution services to a total of 1.3 million people in the Canary Islands under a concession agreement with the local government.

## Seawater Desalination

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, supporting the stable supply of water in the area since 2012.

We have invested and are participating as the largest shareholder in a seawater desalination project with the Oman Power and Water Procurement Company (OPWP), which is under the umbrella of the Oman government. The project, situated in Barka, a northern region of the country, is the largest seawater desalination project in the country, subject to a daily volume of 281,000 m<sup>3</sup>. The facilities involved use reverse osmosis membrane (RO membrane) to desalinate the water and are projected to operate for 20 years. The plant has started commercial operation in June 2018.

### — Other Initiatives

#### **The Development and Sales of Seawater Desalination Plants and Reverse Osmosis Membranes Stable Supply of Life-sustaining Water**

##### **– Seawater Desalination Business Largest in Oman –**

We have invested and are participating as the largest shareholder in a seawater desalination project with the Oman Power and Water Procurement Company (OPWP), which is under the umbrella of the Oman government. The project, situated in Barka, a northern region of the country, is the largest seawater desalination project in the country, subject to a daily volume of 281,000 m<sup>3</sup>. The facilities involved use reverse osmosis membrane (RO membrane) to desalinate the water and are projected to operate for 20 years. The plant has started commercial operation in June 2018.



Seawater Desalination Plant

## 6. Green Buildings

ITOCHU's construction and real estate group and its subsidiaries are committed to providing real estate and distribution services, especially in housing and commercial facilities as well as distribution facilities and housing complexes, that are sustainable and relevant to everyday life. We aim to do so by being involved throughout the value chain, from the development to the operation and management of real estate products to streamline and optimize the solutions where we can, utilizing smart city concepts and emerging technologies such as IoT (Internet of Things).

## Real Estate Business in Japan

ITOCHU engages in real estate primarily through its subsidiaries. Advance Residence Investment Corporation, a listed residential real estate investment trust (REIT) that is a subsidiary to ITOCHU, identifies sustainability as a top priority and is well regarded for its performance. For example, it participates in GRESB, a sustainability rating framework for real estate investors, and has 15 real estate assets with DBJ Green Building certifications, which accounts to 25.3% in surface area, and 5.6% in number of units among its entire portfolio. At ITOCHU Advance Logistics Investment Corporation, a listed REIT focused on logistics assets, we own 5 assets with DBJ Green Building certifications, which accounts to 65.5% in surface area, and 55.6% in number of units among its entire portfolio.

## Overseas Housing Complex Business

ITOCHU is involved in housing complexes throughout Asia, from the development, management, and operation of assets. In Indonesia, we are involved in the Karawang International Industrial City (KIIC) project, which covers a surface area of 1,400ha with residents from more than 150 companies. The KIIC is equipped with infrastructures to ensure its stability, such as an industrial water plant, effluents water plant, and an emergency backup water reserve. Furthermore, we have taken measures to ensure the safety and security of the residents by implementing 24-hour security, maintaining a cooperate and communicative relationship with the local police authorities, securing emergency lines to request fire and medical related assistance. We have also considered an environmental sustainability perspective in the design of the KIIC by implementing smart street lights<sup>\*</sup>, the first of its kind in Indonesia's housing complexes.

\* Smart street lights: An IoT solution that maximizes the efficiency and efficacy of LED its brightness adjustments. To date approximately 1,200 have been installed in KIIC.

## 7. Other Clean-tech Businesses (Links)

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### Renewables

- Investment in Wind Power Generation Plants in Nebraska and Minnesota ([https://www.itochu.co.jp/en/news/press/2020/200317\\_2.html](https://www.itochu.co.jp/en/news/press/2020/200317_2.html))
- Establishment of a joint venture company for the Operation of Mutsu Ogawara Onshore Wind Farm Project in Aomori (<https://www.itochu.co.jp/en/news/press/2019/191216.html>)

### Alternative Fuels

- Start of an Overseas Demonstration Project to Culture Euglena (<https://www.itochu.co.jp/en/news/press/2019/191127.html>)
- Conclusion of a Memorandum with euglena Co., Ltd. for the Start of an Overseas Demonstration Project to Culture Euglena (<https://www.itochu.co.jp/en/news/press/2019/190619.html>)

### Power Management

- Initiative for Distributed Solar Power Supply Projects in Japan and Asia (<https://www.itochu.co.jp/en/news/press/2019/190328.html>)
- Expansion of Energy Storage Systems in North America, Australia and Europe :Investment in Eguana Technologies Inc. (<https://www.itochu.co.jp/en/news/press/2020/200316.html>)
- Strategic Investment in Winch Energy Limited Promoting Development of Non-Electrified Regions (<https://www.itochu.co.jp/en/news/press/2020/200210.html>)
- Establishment of joint venture for energy storage system (<https://www.itochu.co.jp/ja/news/press/2019/191125.html>) (Japanese only)
- Capital and Business Alliance with Automotive Battery Reuse and Recycling Company (<https://www.itochu.co.jp/en/news/press/2019/191028.html>)

## Fuel Economy

- Next-Generation Mobility Business in China  
Capital Contribution to Singulato, an EV Manufacturer, and DST, a Company Providing Rental and Maintenance Service for Commercial EVs  
(<https://www.itochu.co.jp/en/news/press/2018/180829.html>)
- Family Mart began demonstration tests using electric trucks  
([https://www.family.co.jp/company/news\\_releases/2018/20181217\\_01.html](https://www.family.co.jp/company/news_releases/2018/20181217_01.html)) (Japanese only)

### **At the end of January 2019, Family Mart began demonstration tests using electric trucks.**

– The first 2 rooms and 2 temperature zones (chilled food / rice delivery) installed in an electric commercial vehicle with a high-power rapid charger –

With the aim of contributing to a low-carbon society, Family Mart Co., Ltd., one of ITOCHU's subsidiaries, will introduce electric trucks. The trucks are the first commercial vehicles of its kind to employ 2 rooms and 2 temperature zones (chilled food / rice delivery) and also the first to install a rapid chargeable compatible with CHAdeMO Ver 1.2\*. The trucks will be deployed for a test run spanning 2 years from January 2019 and will serve deliveries 3 times a day in designated regions of Tokyo, Saitama, and Ibaraki prefecture. Results from the test run will inform decisions on wider deployment of electric trucks in Family Mart's operations.

\* CHAdeMO is the brand name of the EV quick charging method and the international standard for quick charging. Ver 1.2 is the latest standard for quick charging up to 150 kW.

## Water Infrastructure & Distribution

- Equity Position in the UK's Bristol Water  
(<https://www.itochu.co.jp/en/news/press/2012/120511.html>)
- Equity Position in CANARAGUA CONCESIONES S.A. in Spain  
(<https://www.itochu.co.jp/en/news/press/2014/140226.html>)

## Water Treatment & Purification

- PPP Desalination Project in Victoria, Australia  
(<https://www.itochu.co.jp/en/news/press/2009/090803.html>)
- Acquisition of Recycled Wastewater Treatment Facility in Australia  
(<https://www.itochu.co.jp/en/news/press/2015/151221.html>)
- Start of Commercial Operation of Oman's Largest Seawater Desalination Plant in Barka  
(<https://www.itochu.co.jp/en/news/press/2018/181031.html>)

## List of Renewable Energy Related Efforts (Power Generation Capacity Basis)

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 (Under Construction)	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