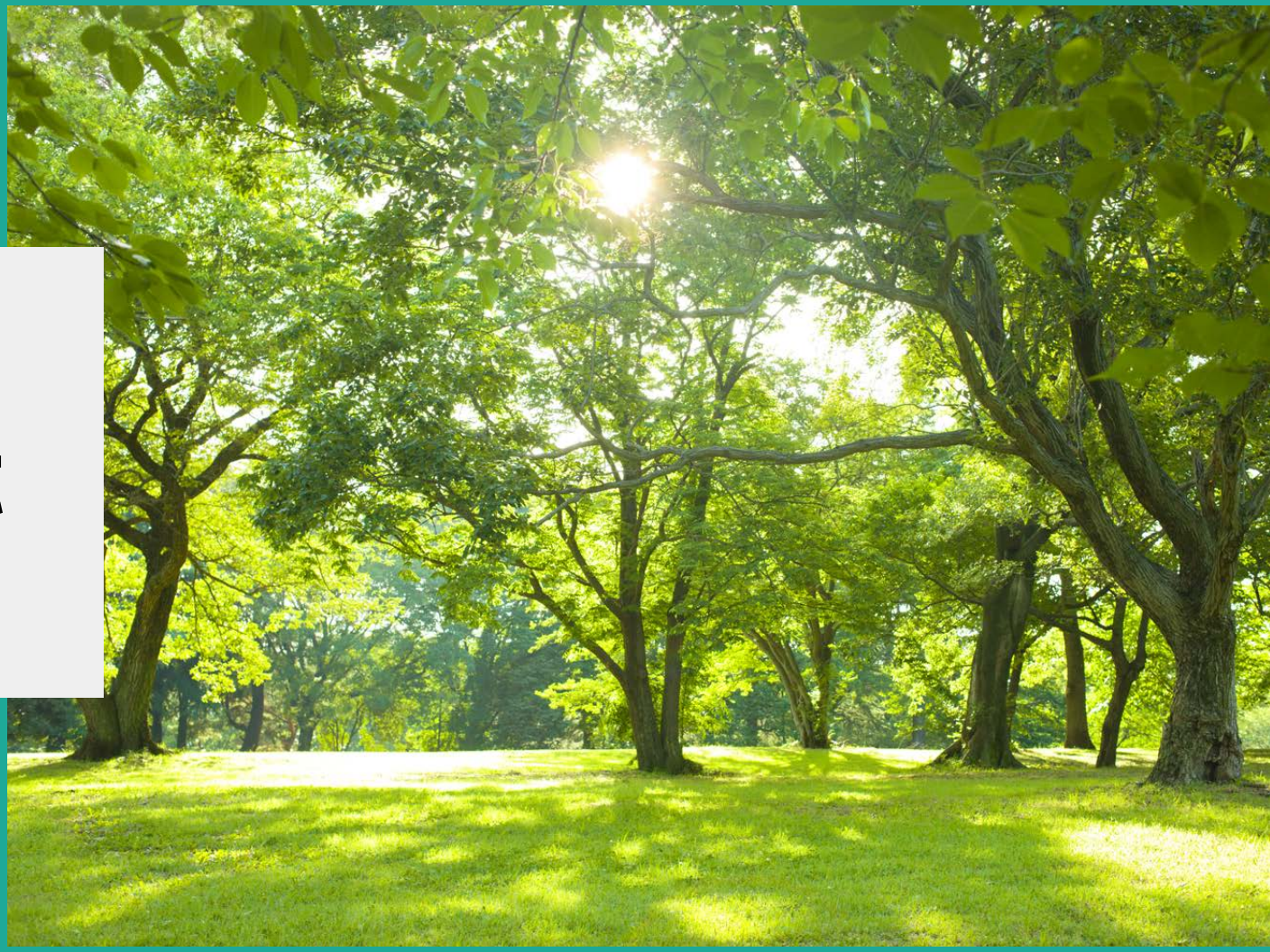
# Environment



# Environmental Policy

## Policy and Basic Concept

### The ITOCHU Group Environmental Policy

**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
Executive Vice President
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 refer to P31 for the ITOCHU Group Environmental Policy.

## Targets

### Targets and Achievements by Item in FYE 2021

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.

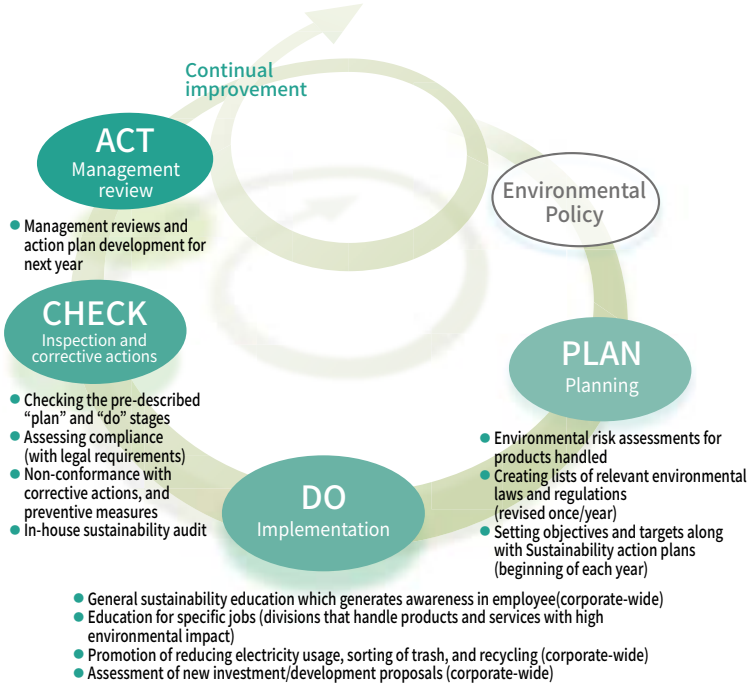
| Item | FYE 2021 Environmental Target | Review | Content Implemented in FYE 2021 |
|---|---|---|---|
| **Prevention of environmental pollution and compliance with laws and regulations** | To ensure thorough company-wide utilization of advance environmental risk assessments and the ESG Checklist for Investments when investing. To strengthen risk management awareness over the entire supply chain with environmental risk assessments by product and to ensure their thorough company-wide utilization. | ○ | We performed advance environmental risk assessment with the ESG Checklist for Investments in all investment projects. (The assessment items also include the energy consumption and $CO_2$ emissions situation.) The 33 check items conform to the core subjects of ISO26000 (Guidance on social responsibility). We gave feedback on ESG aspects to the departments making the applications for all investment projects. (We gave comments on 75 projects in FYE 2021.) |
| | 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 51 departments (including in the form of a self-check for 28 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 1 group companies and gave them a variety of advice. We implemented improvements on-site. |
| **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 29 overseas branches (including local subsidiaries), 238 group companies in Japan and 286 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 (October 2020 to February 2021 / 4,264 participants) and education for personnel with specific duties (June to December / 400 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 2020" for expatriates and some national staff (October 2020 to February 2021 / 1,000 trainees). |

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

# Environmental Management

## 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, $CO_2$ 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. Please refer to P12.

- 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: 74 out of 524 companies (14% of the entire group).
- Number of business sites in ITOCHU Group that have acquired ISO14001 certification: 695 out of 3,810 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 2021, 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 2021, we audited all 51 departments (including in the form of a self-check for 28 departments). Members of the Sustainability Management Division 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 Management

## Environmental Accounting

### Environmental Conservation Costs

The environmental conservation costs in all offices in Japan of ITOCHU in FYE 2021 are as follows.

(Unit: 1,000 yen)

| Classification | Amount |
|---|---|
| Costs inside business areas | 1,060,507 |
| Up/downstream costs | 11,360 |
| Management activity costs | 126,295 |
| Research and development costs | 500 |
| Social activity costs | 4,210 |
| Costs to address environmental damage | 10,483 |
| Total | 1,213,355 |

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, 2020 to March 31, 2021

### 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 2021 is as follows.

| | Environmental Conservation Effects | Economic Effects (Unit:1,000JPY) |
|---|---|---|
| Paper Usage | 7,746,000sheets | 6,193 |
| Electricity Usage | 499,000kWh | -33,752 |
| Waste Emissions | 302t | 1,510 |
| Water Usage | 32,210m$^3$ | 12,075 |

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 (P35), such as an Environmental and Social Risk Response Seminar, in FYE 2022.

## Initiatives

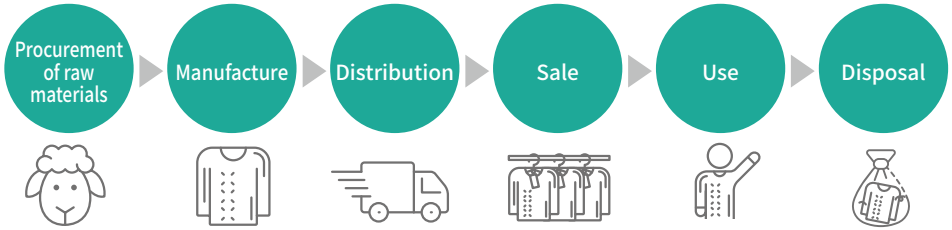
### Reduction of Environmental Risks in the Supply Chain

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 20 years up to the end of FYE 2021. 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 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 $CO_2$ emissions situation related to climate change risks). During FYE 2021, there were 75 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 2021, we received a total of 71 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, 13 from NGOs, and requests for ISO14001 certification from 30 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.

## Issuance of USD-Denominated Senior Unsecured SDGs Bonds

ITOCHU has decided to issue US$500Million Senior Unsecured Bonds due 2026 to raise funds for projects that contribute to SDGs (the "SDGs Bonds"). To issue the SDGs Bonds, ITOCHU has established the SDGs Bond Framework in alignment with the Green Bond Principles, 2018, the Social Bond Principles, 2020 and the Sustainability Bond Guidelines, 2018 as administered by ICMA (the International Capital Market Association). And it has obtained an external evaluation (second party opinion) from Vigeo Eiris for the conformity of our Framework with principles such as the Sustainability Bond Guidelines.

## 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/files/ITOCHUEurope_GreenFinanceFramework202007clean.pdf)
- Sustainalytics second-party opinion (https://www.itochu.com/uk/en/files/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 2021**

| Title | Dates | Main Targets | No. of Participants |
|---|---|---|---|
| **Group ESG Managers Conference** | April 2020 | Group ESG managers | 49 |
| **Basic Education about Sustainability** | October 2020 to February 2021 | Employees and group company employees | 4,264 |
| **Education for Personnel with Specific Duties** | June to December 2020 Total of 26 times | Employees and group company employees | 400 |
| **e-learning** | October 2020 to February 2021 | Expatriates and some national staff | 1,000 |

### Sustainability Seminar

Please check Sustainability Awareness Activities at ITOCHU (P27) 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 Decarbonized Society) | 7, 13 | 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 continue to operate wind power projects in foreign countries (Butendiek and Cotton Plains).<br>• We continue to develop projects with Winch Energy Limited., a U.K. established company. Winch Energy Limited. specializes in handles small-scale solar power generation and distribution systems in non-electrified regions (e.g., Africa).<br>• We invested in wind farms consisting of Kimball Power Plant (Minnesota, U.S.) and South Fork Power Plant (Nebraska, U.S.) in March 2020.<br>• We acquired all equity interests in Bay4 Energy Services, LLC in December 2020. Bay4 Energy Services, LLC operates, maintains and provides asset management services for to approximately 1,400 solar power plants with a total capacity of 1.6 GW in the U.S.<br>• Our ratio of renewable energy as a percentage of our total net generation capacity is equivalent to based on our power generation business equity capacity is currently 14.1%. |
| | | | Zero emission vessels | We will contribute to reduce greenhouse gas emissions in the shipping and maritime transportation fields by promoting integrated project that include the development, owning, operation of ammonia-fueled vessels and development of supply chain of ammonia fuel. | Aim to materialize the pilot project which includes the development, owning and operation of ammonia fueled vessel led by Japanese industry players and development of supply chain of ammonia as an alternative marine fuel. | • Build a value chain centered on ammonia fuel through the owning and operation of ammonia fueled vessels and establishing fuel supply chain.<br>• Reduce carbon emissions from the maritime industry by promoting the spread of ammonia-fueled vessels from 2025 onward. | * Because of new commitment, review will be conducted from the next fiscal year. |
| | | | 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. | • We have been participating in a small electric truck demonstration experiment since January 2019 in Japan.<br>• We are deepening efforts with a company into which we invested in FYE 2018 in China where electric vehicles are spreading rapidly - Dishangtie Car Rental, an electric commercial vehicle rental and maintenance service.<br>• We have invested in a ride sharing service company 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 $CO_2$ emissions. We have been conducting a ride sharing service demonstration experiment on approximately 2,500 ITOCHU employees since October 2019 in Japan. In addition, we have introduced a system focused on transportation operators and logistics operators. We are currently promoting collaboration with a major logistics company (providing a system for new logistics services). This is improving the efficiency of movement and transportation to contribute as an aid in reducing our environmental burden. |
| | 6, 12 | Improving water and sanitation infrastructures | Water and environmental projects | We will contribute to improve the sanitary conditions, the development of economic activities, and the protection of the global environment through the appropriate treatment and effective use of water and waste. | Expand water and environment projects to promote the appropriate use and treatment of water and the effective utilization of resources, and reduce the burden on the environment. | Expand and diversify the investment portfolio in the water and environment field. | **Water Field**<br>We are developing have developed a water supply service business in the U.K. and seawater desalination business in Australia and Oman. We aim to continue contributing to stable water supply in regions through seawater desalination, and water supply/ and sewerage businesses. At the same time, we are looking to be involved in solutions-based business for water issues in each industrial sector accross a range of industries.<br><br>**Environmental Field**<br>• We operate four municipal solid waste incineration and power generation plants (waste to energy plant) in the U.K.<br>• We are currently constructing a municipal solid waste incineration and power generation plant (waste to energy plant) and a new leachate-controlled landfill in Serbia. We aim to start full commercial operations in 2022.<br>• We acquired a 20% stake in Environment Development Company Ltd. (EDCO) in November 2020. EDCO is providing integrated hazardous waste management services in Jubail Industrial City in Saudi Arabia. We are aiming to enhance the functions of our efforts that to capture strong demand for waste management services in light of intensifying environmental regulations in each the industrial sector and the growing awareness of ESG and SDGs more generally in the same way as in the water field. |

# Climate Change

## Action Plan

| Materiality | SDGs Targets | Issues to Address | Business Area | Commitment | Specific Approach | Performance Indicators | Degree of Progress |
|---|---|---|---|---|---|---|---|
| **Metals & Minerals Company** | | | | | | | |
| Address Climate Change (Contribute to Realization of Decarbonized Society) |  | Taking countermeasures against climate change | • Resource recycling business<br>• Mining business<br>• Environmental business<br>• Materials-related business | • We will realize stable resource supply as our social mission and responsibility while fully considering its environmental impact.<br>• We will contribute to climate change issues through businesses that help to reduce greenhouse gases (e.g., lighter-weight vehicles and electric vehicles (EVs)) and the stable supply of essential materials. | • Take the lead in developing recycling-orientated business.<br>• Promote efforts for the social implementation of hydrogen and ammonia as next-generation resources and raw materials in client industries (e.g. steel and power).<br>• Promote businesses to contribute to the stable supply of nickel, PGM and other materials necessary in the manufacture and supply of hydrogen, green materials and energy, and storage batteries.<br>• Continue to be involved in the development of technologies that contribute to the reduction of greenhouse gas emissions, including technologies for carbon dioxide capture and storage (CCS) and carbon dioxide capture and utilization (CCU).<br>• Promote efforts to completely withdraw from thermal coal mine interests while continuing to realize stable resource supply as our social mission and responsibility through trading in regards to our coal business.<br>• Implementation and expansion of businesses that contribute to developing lighter-weight vehicles and shifting to EVs (e.g., aluminum and copper). | • Promote recycling-orientated business.<br>• Promote efforts for the social implementation of hydrogen and ammonia as next-generation resources and raw materials in client industries (e.g., steel and power).<br>• Promote examination toward technological development and commercialization to contribute to a reduction in greenhouse gas emissions, including hydrogen, green material and energy production, and carbon dioxide capture and storage (CCS) and carbon dioxide capture and utilization (CCU).<br>• Strive to withdraw from thermal coal mine interests.<br>• Realize efforts in businesses that contribute to developing lighter-weight vehicles and shifting to EVs (e.g., aluminum and copper). | • We decided to conduct a commercialization survey of a by-product hydrogen project in northern Kyushu together with NIPPON COKE & ENGINEERING CO., LTD. and a Belgian maritime transportation company Compagnie Maritime Belge B.V. for the early social implementation of hydrogen.<br>• We are promoting a collaborative examination on the manufacturing of metal resources in an environmentally-friendly scheme with a major resource supplier.<br>• We are continuing to conduct a large overseas demonstration project to culture of euglena together with euglena Co., Ltd. as an effort to contribute to the promotion of carbon dioxide capture and utilization (CCU). We undertook this as a New Energy and Industrial Technology Development Organization (NEDO) project in October 2020.<br>• We are promoting the examination of other carbon dioxide capture, utilization and storage (CCUS) technologies and various efforts that will lead to a reduction in $CO_2$ emissions.<br>• We are continuing to examine a development plan to realize the Platreef project in the PGM/nickel business where demand is expected to grow significantly due to the worldwide spread of electric vehicles and fuel cell vehicles.<br>• We are contributing to the effective utilization of limited resources and the supply of environmental materials by promoting 3R+W (reduce / reuse / recycle + waste management) through our supply chains toward the realization of a sustainable society. Specifically, we are steadily promoting efforts in venous industries. This includes the reuse and recycling of FamilyMart store facilities and fixtures, the expansion and increase in sophistication of metal scrap and waste treatment, and strengthening of cooperation with the REVER HOLDINGS CORPORATION general recycling company we invested into last year.<br>• We conducted a continuous review of our thermal coal mine interests, based on our thermal coal business efforts policy that we announced in February 2019. As a result, we decided to divest our Drummond thermal coal mine interests in Colombia that accounts for the majority of the ITOCHU's thermal coal interests. We did this based on our new policy to completely withdraw from thermal coal mine interests with a perspective of strengthening contribution and efforts to SDGs as per the Outline of Medium-Term Management Plan that we announced in January 2021.<br>• We are currently promoting business in North America with Nikkeikin Aluminium Core Technology Company, Ltd. which we invested into in FYE 2020 for the manufacturing of aluminum parts for automobiles. In addition, we will continue to promote aluminum raw material and product trading to contribute to the development of lighter-weight vehicles. |
| **Energy & Chemicals Company** | | | | | | | |
| Address Climate Change (Contribute to Realization of Decarbonized Society) |  | Stably supplying energy taking into account climate change and the environment | Oil/gas interests and liquefied natural gas (LNG) projects | We will produce resources (transition fuels) taking into account a reduction in greenhouse gases. We will provide a stable supply of energy to contribute to the development of industry and the construction of infrastructure. | Work on resource development projects in collaboration with superior partners who have advanced technical capabilities and abundant experience. | Pursue opportunities to participate in LNG projects with a relatively low environmental burden in fossil fuels while keeping in mind the stable supply of energy in the transition phase toward the realization of a sustainable society. | We are continuing to hold discussions with superior partners to realize participation in new LNG projects. |
| |  | Efforts to optimally and continuously supply renewable energy | • Energy Storage System<br>• Power & Environmental Solution | • We will continue to stably supply the Energy Storage System that are the key to the efficient and optimal utilization of renewable energy.<br>• We will aim to strengthen our Energy Storage System business chain and establish a circular model through the battery recycling business in particular. | We will continue to sell Energy Storage System 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. | • Number of storage batteries sold.<br>• Use of recycled and reused batteries. | • We have sold a cumulative total of approximately 43,000 units (430 MWh) of energy storage systems as of the end of March, 2021.<br>• Our customers are making the maximum use of the solar power they generate in their homes for their own consumption with our grid share service (AI control) that we have been equipping as standard and selling in systems since November 2018.<br>• We started an effort to collect and resell rare metals (e.g., nickel and cobalt) contained in failed batteries in collaboration with an external recycling company. This is currently at the demo plant level. However, we are continuing to promote it with a view to commercialization.<br>• We procured approximately 1,300 kWh and are currently building a reuse scheme in this fiscal year in our reuse battery utilization business. |

# Climate Change

## Action Plan

| Materiality | SDGs Targets | Issues to Address | Business Area | Commitment | Specific Approach | Performance Indicators | Degree of Progress |
|---|---|---|---|---|---|---|---|
| Address Climate Change (Contribute to Realization of Decarbonized Society) |  | Working on new fuel efforts toward the realization of a carbon-neutral society / recycling-orientated low-carbon society | Production and supply of hydrogen and fuel ammonia, and procurement and supply of renewable fuels | We will aim to build a production and supply structure for new fuels to contribute to the reduction of greenhouse gases on a life cycle assessment basis toward the realization of a sustainable society. | Work on hydrogen and ammonia which are expected to serve as next-generation energies and fuels that do not emit carbon dioxide when burned. Also work on renewable fuels (derived from waste oils) to contribute to the reduction of greenhouses gases emitted from aircraft and large vehicles that are difficult to convert from internal combustion engines. | Build a new fuel value chain to be able to realize production, efficient transportation and supply by utilizing collaboration with superior partners and our track record in development and trading. | * Because of new commitment, review will be conducted from the next fiscal year. |
| |  | Working on efforts in carbon dioxide capture and storage (CCS) business toward the realization of a carbon-neutral society and inclusive and sustainable economic growth | Building of $CO_2$ capture chains using CCS | We will aim to build $CO_2$ capture chains to contribute to the reduction of greenhouse gases toward the realization of a sustainable society. | Refine $CO_2$ storage technologies - an application of petroleum development technologies - and enhance access to $CO_2$ capture chains (e.g., collection and transportation) to link them to $CO_2$ storage technologies. | Build a $CO_2$ transportation and storage business model by uncovering $CO_2$ capture needs at places where $CO_2$ is emitted in client industries across our companies. | * Because of new commitment, review will be conducted from the next fiscal year. |
| |  | Working on efforts to optimally and continually supply renewable energy | Renewable energy independent power producers (IPPs) / renewable energy-related materials procurement / dispersed power source efforts | • We will realize a stable supply of renewable energies through the development, ownership and operation of renewable energy power plants (solar power, biomass and wind power).<br>• We will stimulate renewable energy power generation inside and outside of Japan through renewable energy-related materials procurement.<br>• We will realize a world where renewable energy is commonplace by spreading solar power generation as an independent power source that does not rely on the power gird through the deployment of solar power dispersed power sources. | Expand the scale of our renewable energy assets with the stable operation and new development of renewable energy plants and establish dispersed power sources in Japan with a focus on the conversion to virtual power plants (VPP). | • Scale of our renewable energy assets<br>• Scale of our dispersed power sources | * Because of new commitment, review will be conducted from the next fiscal year. |
| Food Company | | | | | | | |
| Address Climate Change (Contribute to Realization of Decarbonized 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. | • New boiler and power plant operating situation.<br>• Situation of the utilization of raw materials in boilers and power plants.<br>(1) Situation of the utilization of all food residue generated in pineapple processing factories.<br>(2) Situation of the utilization of non-standard products that cannot be sold as food, generated in banana plantations. | Starting of the plant operation was delayed due to restrictions of the movement of overseas engineers due to the COVID-19 pandemic. We expect full-scale operation to start at the beginning of 2022. |
| General Products & Realty Company | | | | | | | |
| Address Climate Change (Contribute to Realization of Decarbonized Society) |  | Taking countermea-sures 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. | We are currently in discussions concerning investment and participation in the slag business. |

# Climate Change

## Policy and Basic Concept

Climate change is one of the most pressing global issues today. Lack of urgency and commitment to addressing climate change concerns can potentially threaten not only the earth's ecosystems, but also the survival of humankind . 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.

The TCFD* Recommendations published in June 2017 encouraged companies to effectively disclose climate-related financial information in a consistent, comparable, reliable and clear manner to promote appropriate investment decisions by investors. This comes from the observation that climate change related risks and opportunities will increase in the future. ITOCHU regards climate change as one of the most important issues facing the world. In May 2019, we publicly announced our commitment to support the TCFD recommendations. As such, we are undergoing a comprehensive review of our climate change initiatives along the core elements outlined in the TCFD recommendations: governance, strategy, risk management and business evaluation metrics (Indicator) and targets (Goal). Where possible, we are continuously updating our climate-related information disclosure to better align with the recommendations.

This undertaking is providing us with insight into what climate-related risks and opportunities are material to ITOCHU Group as a whole. Moving forward, we will leverage the TCFD recommendations and its recommended tools such as scenario analysis to prioritize climate change actions and initiatives, as well as consider strategic directions on how we wish to evolve and adapt our portfolio.

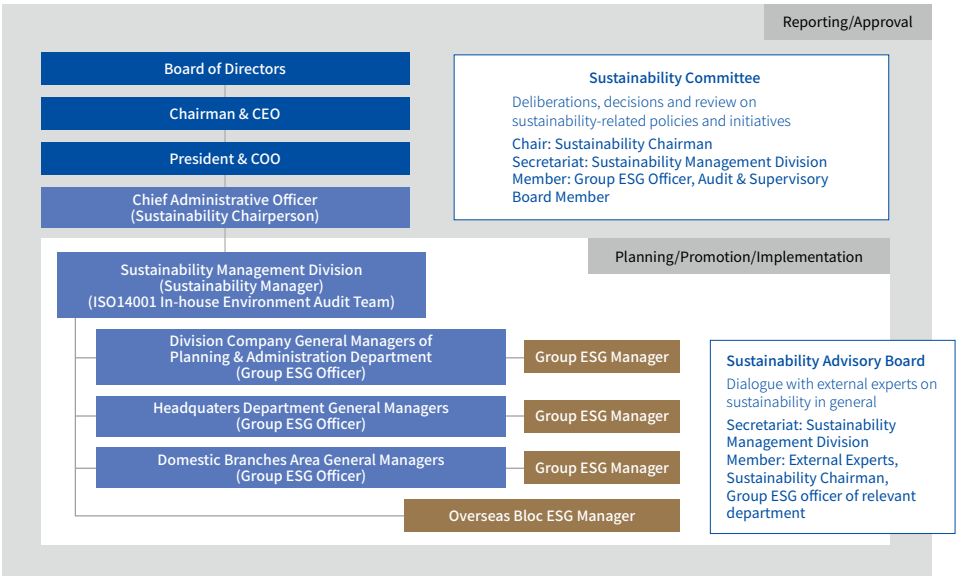
* TCFD stands for the Task Force on Climate-related Financial Disclosures. The TCFD was established by the Financial Stability Board (FSB) at the request of the G20 to examine how to best disclose climate-related information and how financial institutions should address climate-related risks and opportunities.

## Governance

At ITOCHU Corporation, the Sustainability Committee, which is one of our core internal committees, is assigned the highest level of executive responsibility regarding climate change issues. The Committee, chaired by our Chief Administrative Officer (CAO), deliberates and makes decisions on important items such as our policy and strategy on climate-related risk and opportunity management, greenhouse gas (GHG) emissions reduction targets, and other relevant initiatives. The CAO sits on the Board of Directors, and regularly reports on developments in our sustainability program to the Board, allowing the Board to have oversight of our social and environmental sustainability initiatives. The CAO also participates in the HMC and the Investment Consultative Committee, providing climate-related input into the business strategies and investment strategies we pursue.

ITOCHU Corporation's climate-related policies and company-wide action plans are planned and drafted by the Sustainability Management Division, and following the CAO's approval, is finalized upon deliberation at the Sustainability Committee. The Committee also assigns relevant responsibilities to the ESG Officers and Managers in each unit to carry out aspects of the plan.

We furthermore regularly engage in dialogue with internal and external stakeholders such as through the Sustainability Advisory Board to gain a better understanding stakeholder expectations and general trends. Feedbacks received through these engagements are leveraged in updating our climate change program.




| Committee and Reporting to the Board of Directors | Frequency of Meetings and Reports | Main Items Deliberated or Reported on (FYE 2019 to FYE 2021) |
|---|---|---|
| **Sustainability Committee** | • Usually held 1 ~ 2 times a year<br>• Results<br>Once in FYE 2019<br>2 times in FYE 2020<br>Once in FYE 2021 | • FYE 2019<br>Announcement of support for the TCFD recommendations<br>• FYE 2020<br>Disclosure based on the TCFD recommendations, calculation of Scope 3 GHG emissions<br>• FYE 2021<br>GHG reduction target, Disclosure based on the TCFD recommendations |
| **Reporting to the Board of Directors** | • Periodic reports are made at least once a year<br>• Results<br>Once in FYE 2019<br>2 times in FYE 2020<br>Once in FYE 2021 | • FYE 2019<br>Announcement of support for the TCFD recommendations<br>• FYE 2020<br>Disclosure based on the TCFD recommendations, calculation of Scope 3 GHG emissions<br>• FYE 2021<br>GHG reduction target, Disclosure based on the TCFD recommendations |

# Climate Change

## 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.

### Climate Change-related Risks and Opportunities

■ **Major Climate Change-related Risks and Opportunities**

| Short, Medium and Long-term Climate-Related risks and Opportunities | | Impact of Climate-related Risks and Opportunities on the Organization's Business, Strategy, and Financial Planning |
|---|---|---|
| **Transition Risks and Opportunities** | Policy and Legal Risks | If countries around the world take a more aggressive approach in their GHG emissions reduction targets and subsequently strengthen laws and regulations regarding corporate emissions, fossil fuel demand may see a sharp decrease |
| | Technology Risk | Business opportunities that contribute to combatting and adapting to climate change are expected to increase (e.g. renewable energy) |
| | Market Risk | Demand for certain products and services may decrease due to market risks related to public policy, laws and regulations, or technological advancements (e.g. clean technology) |
| **Physical Risk** | Acute Risk | Operations may be impacted or damaged by increased occurrences of abnormal weather patterns (e.g. droughts, floods, typhoons, hurricanes, etc.) |
| | | We may be able to strengthen customer retention and/or attraction by strengthening our supply chain resilience to extreme weather patterns and promoting stable supply as a value proposition |
| | Chronic Risk | Our capability to maintain and increase the quantity of agricultural and forestry-related harvests, as well as products manufactured using these yields, may be impacted by climate-related changes such as increasing temperatures and likelihood of droughts. |

## Scenario Analysis

### Scenario Selection

We conducted a scenario analysis for our business segments that are likely to be heavily affected by regulatory and physical climate change impacts, regardless of the size of the segment business. Selection of business segments with high climate-related risk exposure was conducted by referencing the TCFD recommendations' list of non-financial industries potentially most affected by climate change and the transition to a lower-carbon economy (i.e. energy, transportation, materials and buildings, and agriculture, food, and forest products).

Following the first round of scenario analyses we conducted in FYE 2019, which were conducted for the coal business and the power generation business, in FYE 2020 we decided to cover the oil and gas upstream development business due to its exposure to transition risks (i.e. public policy and legal risks). In addition, in FYE 2020, we newly selected the Dole business and the pulp business as projects subject to scenario analysis due to their high exposure to climate-related physical risks.

### Definition of Scenario Groups

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** | ● Stated Policies Scenario (IEA WEO2019)<br>● Reference Technology Scenario (IEA ETP2017) | ● Sustainable Development Scenario (IEA WEO2019)<br>● 2°C Scenario (IEA ETP2017) |
| | **Physical aspects** | ● RCP8.5 (IPCC AR5) | ● RCP2.6 (IPCC AR5) |
| **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.

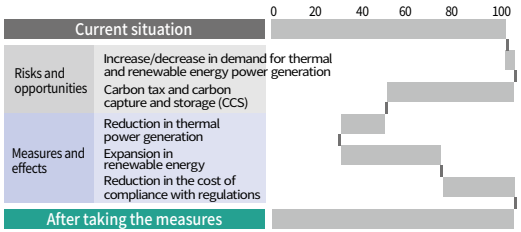
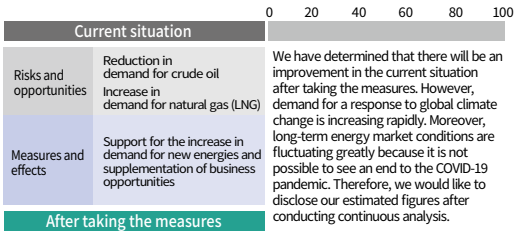
# Climate Change

## Scenario Analysis Results

We identified the mid-to-long term (short-term to beyond 2030) risks and opportunities relevant to each business type, broken down by items pertaining to procurement, business operations, and market demand. We then prioritized these risk and opportunity items by severity of impact. Regarding items of high importance, we identified variables that have a large impact on the transition and physical aspects and conducted a scenario analysis using financial models that reflect the conditions. Financial impacts were analyzed by measuring the potential impacts of climate change, as well as the outcomes of mitigation and counter-measures we plan to implement. The quantitative information referenced in the scenario analysis leverages data from scenario-based forecasts provided publicly such as by the IEA, but in doing so also reflects our own assumptions and expectations. We are committed to upholding the best analytic accuracy where we can, and will continue to improve upon our scenario analysis approach moving forward.

### 1. Businesses for Which Transition Risks Are the Main Issues

The main issues for fossil fuel-related businesses are transition risks in the <2°C temperature band scenario.

| Company / Business Profile | | Machinery Company / Power Generation Business | Energy & Chemicals Company / Energy (Crude Oil, Gas and LNG) Development Business |
|---|---|---|---|
| Timeframe | | By 2040 | By 2050 |
| Temperature band scenario | | <2°C scenario | |
| Main risks and opportunities | Transition | Risk: Thermal power generation costs may increase due to the impact of carbon taxes and mandatory capture and storage of carbon dioxide (CCS).<br>Opportunity: The competitive advantage of renewable energy may increase. This also includes technological progress and cost reduction.<br>Opportunity: It may be necessary to increase investment in storage batteries and grids for a significant shift to renewable energy. | Risk: Countries may introduce regulations on fossil fuels (e.g., carbon taxes). This may lead to global demand for crude oil shrinking.<br>Opportunity: Demand for LNG may increase centered on Asia as a transition fuel to realize a low-carbon society and as a fuel to support industrial development. This is because it has a relatively low environmental impact for a fossil fuel.<br>Opportunity: Demand for new energies other than fossil fuels (e.g., hydrogen, ammonia and renewable fuel) may increase. |
| | Physical | Risk: Power generation facilities may be damaged by natural disasters (abnormal weather). | Risk: Upstream development is focused on projects with excellent partners (e.g., major oil companies in the Middle East and Russia). Accordingly, the impact on outdoors work may be limited because of the measures. We also assume the possibility of increasingly serious climate disasters due to climate change will be low. |
| Business environment under the scenario Business impact assessment | | Transition risks will greatly squeeze income with carbon taxes and carbon capture and storage (CCS) costs. Therefore, the income of thermal power generation may decrease. However, cumulative income is expected to improve due to an increase in renewable energy sales and a decrease in carbon taxes and CCS costs by switching to measures emphasizing renewable energy.<br>**Analysis according to the EBITDA indicator (%)***<br>  | Global demand for crude oil is expected to shrink under the 2°C scenario. Nevertheless, we may be able to maintain earnings by seizing opportunities in the worldwide increase in demand for LNG and the increase in demand for new energies (e.g., renewable fuels). (We have examined multiple scenarios with respect to energy price fluctuations up to 2050.)<br>**Analysis according to the EBITDA indicator (%)***<br>  <br>We have determined that there will be an improvement in the current situation after taking the measures. However, demand for a response to global climate change is increasing rapidly. Moreover, long-term energy market conditions are fluctuating greatly because it is not possible to see an end to the COVID-19 pandemic. Therefore, we would like to disclose our estimated figures after conducting continuous analysis. |
| Measures and policies Business opportunities | | • We will aim to achieve a renewable energy ratio of more than 20% (equity interest basis) by FYE 2031. We will reflect this in future efforts.<br>• We will not develop any new coal-fired power generation business. Part of the reason we will do this is to contribute to the development of a sustainable society. | • We will accelerate our shift to new energies in our energy business portfolio. We will do this by seizing business opportunities through pursuing synergies with group companies and participating in initiatives in the new energies (e.g., hydrogen, ammonia and renewable fuels) field.<br>• We will strengthen efforts on carbon capture and storage (CCS) toward the realization of a carbon-free society in addition to shifting to new energies.<br>• We will carefully consider switching to excellent assets with the intention of improving the efficiency of our assets in relation to upstream oil and gas development. We will do this in consideration of the environment. |

* Earnings before interest, taxes, depreciation and amortization (This refers to earnings calculated by adding interest expenses and depreciation expenses to earnings before tax.)

**[ Efforts in the Coal Business ]**

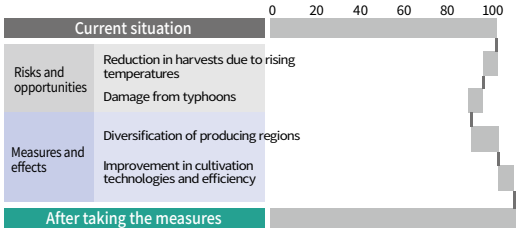
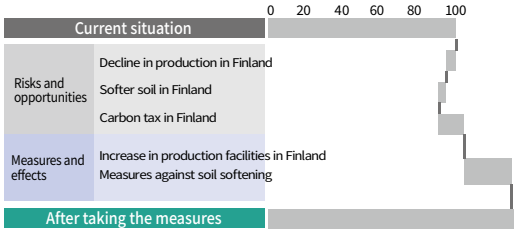
The business environment and measures under the 2°C scenario in the coal business is as below.

| | |
|---|---|
| Business environment under the scenario | The amount of thermal coal used may decrease in response to technological innovation and regulatory trends under the 2°C scenario. |
| Measures and policies | • We will not acquire new thermal coal mining business.<br>• We have already sold our interests in Drummond to realize a carbon-free society ahead of others in the industry even in our existing thermal coal mining business. We did this from the point of view of strengthening our contribution and efforts for SDGs. We will aim to sell our other thermal coal interests by FYE 2024 to completely withdraw from thermal coal interests.<br>• We will strongly promote efforts toward technological development and social implementation to contribute to a reduction in greenhouse gas emissions. This includes carbon capture and storage (CCS) and carbon capture and utilization (CCU). On the other hand, there will continue to be a need for thermal power generation as regulated power supplies and backup power supplies for the time being for the large-scale spread of renewable energy. Therefore, we will continue to fulfill our duty to stably supply resources through thermal coal trading. |

# Climate Change

## 2. Businesses for Which Physical Risks Are the Main Issues

The main issues for agriculture- and forestry-related businesses are physical risks in the 4°C scenario.

| Company / Business Profile | | Food Company / Dole Business | General Products & Realty Company / Pulp Business |
|---|---|---|---|
| Timeframe | | By 2030 | |
| Temperature band scenario | | 4°C scenario | |
| Main risks and opportunities | Transition | Opportunity: An expansion in the introduction of recycled clean energies (biogas power generation and biomass boilers) utilizing our own organic resources (including pineapple, banana and other food residues, and waste factory liquids) and renewable energies (e.g., solar power generation) may help to lower carbon levels and protect water resources. This may lead to us obtaining the support of consumers with a high level of environmental awareness and to improving our brand value. Furthermore, we may then secure a price advantage when carbon taxes and emission trading systems are introduced. | Opportunity: If a carbon tax is introduced in Finland, we will have a competitive advantage. That is because we already use 100% biomass energy in pulp manufacturing. |
| | Physical | Risk: There may be a reduction in yields due to abnormal weather (e.g., typhoons and droughts) in banana and pineapple plantations in the Philippines. | Risk: The suitable areas for growing trees change for each species with a rise in temperature. In addition, the amount produced decreases depending on the type of tree and region (pine trees in Finland and spruce trees in the south of the country).<br>Risk: Heavy machinery farming in the winter in Finland is premised on frozen soil. However, the soil may soften due to the rise in temperature and harvesting costs may increase. |
| Business environment under the scenario Business impact assessment | | Decreases in yields due to abnormal weather will be compensated for by an increase in unit yields through improved production methods. Moreover, we will start pineapple production business in West Africa (e.g., Sierra Leone) as part of the diversification of our producing areas in preparation for weather risks. This will allow us to increase earnings.<br>**Analysis according to the EBITDA indicator (%)***<br>  | The amount produced is expected to decrease in some areas due to the rise in the global average temperature. Nevertheless, we can continue to improve earnings by increasing the amount of pulp we produce with the augmentation of facilities in afforestation regions where the amount produced is expected to increase and by curtailing the rise in harvesting costs with measures against soil softening.<br>**Analysis according to the EBITDA indicator (%)***<br>  |
| Measures and policies Business opportunities | | • We will diversify producing areas in preparation for weather risks (e.g., Sierra Leone in West Africa).<br>• We will increase unit yields by improving production methods (e.g., improving seedling cultivation methods and introducing irrigation facilities).<br>• We will use drones and ICT (agricultural chemical spraying location identification, yield prediction and timely and accurate fertilization) to increase the efficiency of production. | • The impact on the amount produced will vary between the north and south in Finland. Therefore, we will enhance monitoring of yield changes and examine a flexible production structure including the construction of a new factory.<br>• We will give training on the use of special heavy machinery for soft soil and examine even more efficient methods for harvesting in Finland. |

* Earnings before interest, taxes, depreciation and amortization (This refers to earnings calculated by adding interest expenses and depreciation expenses to earnings before tax.)

### Impact on Existing Strategies and Future Initiatives

As a result of the scenario analyses we conducted on projects likely to be subject to high climate-related risks, we identified no critical impacts that warrant drastic changes in our business strategy. We are also aware that the scope of our scenario analysis comes with limitations, and that we engage in various other business activities subject to climate-related risks worldwide. However, in the current social and environmental climate, we believe that the impact of risks associated with these individual business activities on the Group's overall performance is limited.

Moving forward, we plan to analyze the transition and physical risks of climate change on all projects in our company. We will then further identify and prioritize businesses and projects where particularly significant impacts are anticipated. Based on findings from this exercise, we plan to devise specific measures and initiatives to address climate-related risks across ITOCHU as a whole.

# Climate Change

## Risk Management

As a global company, ITOCHU continuously monitors the risks and opportunities relevant to its business. This requires following the developments of climate change-related public policies in various countries, abnormal weather conditions around global business sites, and long-term changes in average temperatures. Climate change risks and opportunities are identified based on information on climate change regulations, abnormal weather, and other information obtained through risk analysis process within the Group, including internal companies. Identified climate change risks are incorporated into the overall risk management framework as one of our 18 key risks (Environmental & Social Risk) and are considered and evaluated during business & investment decision process. Thereafter, we respond to them by building information management and monitoring systems at each department responsible for managing these risks on a consolidated basis.

### Identification of Climate Change Risks

At ITOCHU Corporation, the Sustainability Management Division and each company collects information on climate-related risks and opportunities in our relevant geographies such as those related to regulatory changes, abnormal weather, technology trends and clean tech market trends. Findings are shared with internal companies, Group companies, and subsidiaries in the supply chain to assess the potential size and scope of the risks and opportunities. Finally, we engage with the Sustainability Advisory Board to receive advisory input, and finally report on our overall findings to the Sustainability Committee, which identifies key climate-related risks upon deliberation.

### Corporate Risk Management

The ITOCHU Group is exposed to various risks (e.g. market risk, credit risk, and investment risk) due to the wide-ranging nature of its business. In order to manage these risks, we have established various internal committees and departments. We have also developed an enterprise risk management system and relevant protocols to manage risks comprehensively and individually, such as investment standards, risk and transaction limits, and reporting and monitoring systems.

As part of risk management at the corporate level, the Sustainability Committee engages with other internal committees and responsible departments on the identified climate change risks, such as those related to natural disasters, and ESG investments. The Committee focuses on gathering input on the company's climate change policy, its response plan, its awareness and assessment of climate change impacts on its enterprise risks (e.g. market risks, credit risks, investment risks, etc.), and the cultural integration of risk management systems. Based on deliberations at the Committee regarding the input it gathered, the Sustainability Committee chairman (the CAO) reports to the Board of Directors on major developments more than once a year.

Please refer to P168 for risk management relating to company-wide business including climate change.

### Business Investment Management

ITOCHU has established a multilayered decision-making process that seeks to realize swift decision-making by delegating discretionary power to each internal company, while pursuing investment returns and controlling investment risks. Depending on the size and terms of a project, a review is conducted at the internal company level or by the HMC (Headquarters Management Committee) and the Investment Consultative Committee. In all cases, ESG risk assessments, including climate change risk, are incorporated into considerations when making investment decisions in the business investment process, which includes climate change risks.

As a member of the HMC and the Investment Consultative Committee, the CAO (Chief Administrative Officer), who chairs the Sustainability Committee, participates in the screening of projects that exceed the authority of the company president. This system reflects the content of deliberations at the specific stage of climate change risk and at the assessment stage of climate change risk for company-wide risk management.

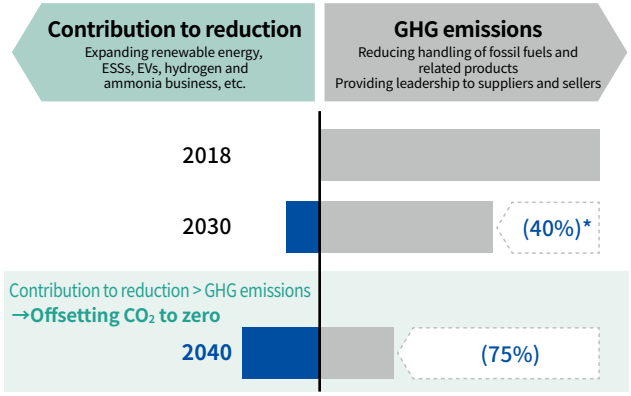
Please refer to P170 for details of our activities.

## Metrics and Targets

ITOCHU sets target values for a reduction in our GHG emissions and electricity consumption. The targets are as below.

### GHG Emissions Reduction Targets

- Achieving net zero GHG emissions by 2050 to comply with the Japanese government's target. In addition, aiming to offset $CO_2$ to zero by 2040 by actively promoting businesses that contribute to the reduction of GHG emissions.
- Complying with the Japanese government's interim target by achieving a 40% reduction from 2018 levels by 2030.




Scope: Scopes 1/2/3 + Fossil fuel businesses and interests (affiliates and general investments)

* The Japanese government's target of a "46% reduction"from the 2013 level by 2030 is a "39% reduction" based on the year 2018.

# Climate Change

## Energy Consumption Reduction Targets

| | FYE 2021 Results | Single Year Target | Target for the Year Ended March 2022 |
|---|---|---|---|
| **Electricity Consumption of Tokyo and Osaka Headquarters, Branches in Japan and Other branches and business facilities in Japan** | Reduction of 4.6% compared with FYE 2020 levels | Reduction of at least 1% annually | Reduction of 30% compared with FYE 2011 levels |
| | Reduction of 47% compared with FYE 2011 levels | | |

## ITOCHU Group's Clean-tech goals

ITOCHU has set the following targets for 2030 for the ITOCHU Group's clean tech-related businesses and projects.

- In the power generation business as a whole, we aim to increase the ratio of renewable energy based on equity capacity from 14.5% in FYE 2021 to over 20% by FYE 2031.
- By the end of FYE 2031, we aim to sell Energy Storage System (ESS) that functions as a regulator in stabilizing renewable energy supply, with a total electric power capacity 5GWh or more.

Please refer to P79 for details of our activities.

## Initiatives

### Initiatives in Business tackling Climate Change

#### Toward Sustainable Plantation Operation in Response to Climate Change

ITOCHU 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 – our largest production base of major products, which resulted in decrease of the production volume of bananas compared with that of the pre-acquisition. We have continuously looked to restore and increase this production volume by taking various countermeasures such as introduction of new irrigation facilities, expansion of farmland, measures against damage from disease and harmful insects for bananas. In addition, we have invested in facilities for plantations and reviewed cultivation methods for pineapples to improve productivity. We have also been promoting the diversification of production areas to prepare for the risk of unpredictable weather. Furthermore, we have proactively improved our business management through the selection and concentration of businesses and products, and the disposal of unprofitable businesses.

We will continue to aim to be the largest agricultural product integrator in Asia. We will achieve this by developing a structure to increase production of bananas and pineapples in the Philippines.

We are proactively introducing recycled clean energies (biogas power generation and biomass boilers) utilizing our own organic resources (including pineapple, banana and other food residues, and waste factory liquids) and renewable energies (e.g., solar power generation). This serves as a measure against climate change necessary for sustainable business operations. We plan to operate renewable energy facilities with a total capacity of 16 MWe using biogas and solar power generation by the end of FYE 2022. We aim to provide environmentally-friendly products adapted to the low-carbon society of the future.

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 $CO_2$ emissions by approximately 395 tons. Consequently, a reduction in $CO_2$ 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.

# Climate Change

### Full Switchover to Real $CO_2$-free Electricity at Tokyo Head Office

ITOCHU is sourcing its real $CO_2$-free electricity, together with a Non-Fossil Fuel Energy Certificate showing the environmental value of not emitting $CO_2$, from TEPCO Energy Partner, Incorporated, which supplies electricity to the Tokyo Head Office since January 2020. The Non-Fossil Fuel Energy Certificate includes the tracking information (information about type of energy sources and power plant location) of Maebashi Biomass Power Plant (Maebashi, Gunma Prefecture), which is operated by a subsidiary of Kandenko Co., Ltd., and is used at the Tokyo Head Office building in combination with purchased electricity. This initiative can also be used to prove compliance with "RE100," a global initiative of businesses committed to 100% renewable electricity, in response to the global trend towards decarbonization.
For more information:

- ITOCHU Announces Full Switchover to Real $CO_2$-free Electricity at Tokyo Head Office (https://www.itochu.co.jp/en/csr/news/2019/191217.html)

## Contributing to Emissions Reductions in the Value Chain through Projects and Investments

### Renewable Energy Initiatives

ITOCHU is working to resolve social issues through investments in power generation assets and storage batteries utilizing renewable energy sources such as geothermal and wind power, which are expected to grow in the future as key players in energy supply.

Please refer to P79 for details of our activities.

### CCS (Carbon Dioxide Recovery and Storage)

We recognize that CCS is an indispensable technology for achieving a decarbonized society. We have invested in Japan CCS Co., LTD. which is conducting a demonstration test in Tomakomai, and are pursuing the commercialization of CCS technology. (By November 2019, cumulative injected $CO_2$ volume reached the target volume of 300,000 tons, and it is currently in the monitoring phase of such injected $CO_2$ under the reservoir.)

Moreover, ITOCHU has entered into an agreement with the Australia-based company Mineral Carbonation International ("MCi") to collaborate on projects to apply carbon utilization technology. MCi's carbon utilization technology produces calcium carbonate, magnesium carbonate, Silica and other useful solid products by combining by-products of the steelmaking process (slag), coal ash produced by thermal power plants or other industrial wastes containing magnesium or calcium such as waste concrete with $CO_2$ to permanently lock away $CO_2$ in a solid form. Carbon utilization has attracted attention from the steel, cement and electricity industries as a technology that could accelerate the global trend towards decarbonization. The materials such as the calcium carbonate manufactured using this technology also serve as raw material for cement, concrete and other construction materials, and are thus expected to cut $CO_2$ emissions in the building, construction and manufacturing industries.

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

ITOCHU submitted a plan to the Tokyo Metropolitan Government to reduce the $CO_2$ 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 2020 were 6,089 t-$CO_2$. 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)
- Greenhouse Gas Emission Reduction Plan for FYE 2016 to FYE 2020 (Submitted in January 2021) (Japanese Only) (https://www.itochu.co.jp/en/csr/pdf/ondanka-202101.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.

# Climate Change

## 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. Climate change-related targets set out in the Global Environment Committee are as follows.

#### 2030 Reduction Targets for Domestic Business Activities (Trading Industry)

- In FYE 2031, we will strive to reduce unit power consumption (Electric power consumption per floor area for the entire company) by 15.7% from FYE 2014 level. (Reestablished July 2018)
- 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 CDP (Climate Change)

ITOCHU is actively providing information on ESG initiatives to various stakeholders around the world. As part of these initiativess, we participate in the CDP, an NGO that is recognized worldwide as a global standard for corporate environmental information disclosure. Since FYE 2014, we have been responding to the CDP's climate change questionnaire.

### Participation in COOL CHOICE

ITOCHU participates in the Ministry of the Environment-led COOL CHOICE climate change campaign aimed at realizing a decarbonized 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.

# Climate Change

## Performance Data

### Scope of Aggregation

○:in scope of aggregation

| | | Energy Consumption | | | | | GHG Emission | |
|---|---|---|---|---|---|---|---|---|
| | | Energy Consumption in the Japanese Bases of ITOCHU | Energy Consumption Attributable to Business Facilities | Electricity Consumption | Heat and Steam Consumption | Fuel Consumption | GHG Emissions from Business Facilities | Scope1 Total Emissions Breakdown by Greenhouse Gas Type |
| Tokyo headquarters | | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Osaka headquarters | | ○ | | ○ | ○ | ○ | ○ | ○ |
| Branches and business facilities in Japan*1 | The number of offices including domestic branches: FYE 2017: 13, FYE 2018: 11, FYE 2019: 13, FYE 2020: 12, FYE 2021: 11 | ○ | | ○ | ○ | ○ | ○ | ○ |
| Group companies in Japan*2 | The number of target companies: FYE 2017: 65, FYE 2018: 208, FYE 2019: 220, FYE 2020: 238, FYE 2021: 232 | | | ○ | ○ | ○ | ○ | ○ |
| Overseas offices | The number of overseas offices: FYE 2017: 16, FYE 2018: 15, FYE 2019: 30, FYE 2020: 29, FYE 2021: 49 | | | ○ | ○ | ○ | ○ | ○ |
| Overseas group companies*2 | The number of target companies: FYE 2017: 46, FYE 2018: 299, FYE 2019: 282, FYE 2020: 286, FYE 2021: 274 | | | ○ | ○ | ○ | ○ | ○ |
| 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, 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 for FYE 2017. All consolidated subsidiaries are covered since FYE 2018 (coverage 100%).

### Energy Consumption

■ **Energy Consumption in the Japanese Bases of ITOCHU**

| | FYE 2017 | FYE 2018 | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|---|
| Purchased and consumed non-renewable fuel (Unit:MWh) | 765 | 610 | 525 | 691 | 640 |
| Purchased non-renewable power (Unit:MWh) | 30,282 | 29,558 | 29,306 | 28,747 | 27,320 |
| Other purchased non-renewable energy (e.g., steam, heat and cooling water) (Unit:MWh) | 8,299 | 8,206 | 7,605 | 7,385 | 7,401 |
| Generated renewable energy (solar power generation*) (Unit:MWh) | 58 | 58 | 51 | 54 | 60 |
| Energy consumption cost total (Unit:million yen) | 564 | 576 | 404 | 537 | 571 |

* 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).

■ **Energy Consumption Attributable to Business Facilities**

(Unit:GJ)

| | FYE 2017 | FYE 2018 | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|---|
| Tokyo headquarters | 134,076 | 130,977 | 127,824 | 126,135 | 121,290 |

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

# Climate Change

## Electricity Consumption

Our electricity consumption and $CO_2$ emissions attributable to business facilities in FYE 2017 to FYE 2021 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 2017 | FYE 2018 | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|---|
| Tokyo headquarters*1 | 9,331 | 9,200 | 9,178 | 9,055 | 8,685 |
| Osaka headquarters | 434 | 409 | 396 | 384 | 356 |
| Branches and business facilities in Japan | 1,561 | 1,476 | 1,440 | 1,319 | 1,190 |
| Total of domestic bases of ITOCHU corporation★ | 11,326 | 11,084 | 11,014 | 10,759 | 10,231 |
| Group companies in Japan | 471,432 | 798,054 | 878,025 | 1,204,830 | 1,248,258 |
| Overseas offices | 3,087 | 2,224 | 2,118 | 2,098 | 3,515 |
| Overseas group companies | 143,485 | 500,777 | 590,175 | 447,462 | 437,030 |
| Grand total of ITOCHU Group◆ | 629,329 | 1,312,139 | 1,481,382 | 1,665,148 | 1,699,034 |

* 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, non-manufacturing site offices with 10 or fewer employees are quantitatively insignificant. Accordingly, they are not included in the scope of the data.

*1 ITOCHU is sourcing its real $CO_2$-free electricity together with a Non-Fossil Fuel Certificate since January 2020. The Non-Fossil Fuel Certificate includes the tracking information of Maebashi Biomass Power Plant (Maebashi, Gunma Prefecture) and is used at the Tokyo Head Office building in combination with purchased electricity.

## Heat and Steam Consumption

Heat and Steam consumption of the entire Group is as follows.

(unit: GJ)

| | FYE 2018 | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|
| Industrial steam | 513,564 | 494,035 | 541,932 | 488,429 |
| Non-industrial steam | 17,706 | 13,998 | 14,452 | 15,462 |
| Hot water | 10,566 | 4,781 | 4,860 | 5,710 |
| Cold water | 106,416 | 82,139 | 75,227 | 67,618 |

# Climate Change

## Fuel Consumption

Fuel consumption of the entire Group is as follows.

| | | FYE 2018 | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|---|
| Kerosene (Unit:kL) | | 4,001 | 4,468 | 2,609 | 3,387 |
| Light oil (Unit:kL) | | 35,577 | 39,362 | 41,790 | 48,460 |
| Gasoline (Unit:kL) | | 10,774 | 12,598 | 12,759 | 12,688 |
| Heavy oil A (Unit:kL) | | 25,699 | 18,289 | 20,432 | 18,969 |
| Heavy oil B and C (Unit:kL) | | 11,711 | 16,551 | 25,942 | 25,546 |
| Coal (Unit:t) | | 341,192 | 333,176 | 315,148 | 325,431 |
| Petroleum gas | Liquefied petroleum gas (LPG) (Unit:t) | 6,321 | 6,614 | 11,966 | 11,294 |
| | Liquefied petroleum gas (LPG) (Unit:1,000 m³) | 2,454 | 496 | 472 | 469 |
| | Liquefied petroleum gas (LPG) (Unit:kL) | — | — | 186 | 1,209 |
| | Petroleum hydrocarbon gas (Unit:1,000 m³) | 2,247 | 1,860 | 340 | 3 |
| Combustible natural gas | Liquefied petroleum gas (LPG) (Unit:t) | 1,645 | 3,161 | 5,698 | 4,524 |
| | Other combustible natural gas (Unit:1,000 m³) | 5,762 | 14,565 | 14,115 | 12,761 |
| Town gas etc. | Town gas (Unit:1,000 m³) | 204,481 | 33,552 | 26,692 | 46,793 |
| | Other gas (Unit:1,000 m³) | 0.017 | 158 | 242 | 404 |

## Greenhouse Gas (GHG) Emissions

### GHG Emissions Attributable to Business Facilities

(Unit:t-CO2e)

| | | FYE 2018 | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|---|
| Total of all Japanese bases in ITOCHU★ | Scope1 | 98 | 91 | 151 | 152 |
| | Scope2 | 7,174 | 6,969 | 6,740 | 6,466 |
| | Scope1+2 | 7,272 | 7,060 | 6,891 | 6,619 |
| ITOCHU Group◆ | Scope1 | 1,299,390 | 1,213,395 | 1,202,508 | 1,522,339 |
| | Scope2 | 617,818 | 771,204 | 835,916 | 799,562 |
| | Scope1+2 | 1,917,209 | 1,984,599 | 2,038,424 | 2,321,901 |

# Climate Change

## GHG Emissions by Each Business Facility (Scope1+2)

(Unit:t-$CO_2$e)

| | FYE 2017 | FYE 2018 | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|---|
| Tokyo headquarters | 6,459 | 6,307 | 6,168 | 6,089 | 5,846 |
| Osaka headquarters | 221 | 208 | 172 | 135 | 121 |
| Branches and business facilities in Japan | 821 | 757 | 720 | 667 | 651 |
| Total of domestic bases of ITOCHU corporation★ | 7,501 | 7,273 | 7,060 | 6,891 | 6,619 |
| Group companies in Japan | 340,559 | 1,280,241 | 1,174,507 | 1,526,279 | 1,611,214 |
| Overseas offices | 2,238 | 1,674 | 2,769 | 1,523 | 2,860 |
| Overseas group companies | 98,427 | 628,021 | 800,263 | 503,731 | 701,209 |
| Grand total of ITOCHU Group◆ | 448,725 | 1,917,209 | 1,984,599 | 2,038,424 | 2,321,901 |

* GHG emissions of the ITOCHU Group are calculated according to the Management Control Standards (the control approach).
* 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 2021, the data has been calculated based on the $CO_2$ conversion coefficient according to the data of 2018 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 $CO_2$ conversion coefficient between 2010 and 2012.
* From the FYE 2019 data, GHG emissions other than $CO_2$ from energy consumption, are also included. GHG emissions other than $CO_2$ from energy consumption from group companies that emit more than 3,000 t-$CO_2$e per year are aggregated and disclosed.
* We initiated collecting data on non-energy related greenhouse gases emissions on a step-by-step basis, starting with FYE 2019 data. Specifically, we started including "$CH_4$ and $N_2O$ emissions associated with pig breeding and excrement management" and "HFC emissions due to leaks from refrigerating equipment, etc." with FYE 2019 data, and started further including "$CH_4$ emissions associated with wastewater treatment", "$CH_4$ emissions associated with composting and landfilling waste" and "$N_2O$ emissions associated with the use of fertilizer on farms" with FYE 2021 data.
* The calculation of GHG uses the GHG protocol developed by WRI (World Resources Institute) and WBCSD (World Business Council for Sustainable Development).

## Intensity Figures

### ■ $CO_2$ Emissions from ITOCHU's Domestic Sites and ITOCHU Group (Intensity Unit)

(Unit:t-$CO_2$e)

| | FYE 2017 | FYE 2018 | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|---|
| Per employee (Total of domestic bases of ITOCHU corporation) | 1.737 | 1.660 | 1.622 | 1.596 | 1.538 |
| Per one square meter of all floor space (Total of domestic bases of ITOCHU corporation) | 0.064 | 0.063 | 0.061 | 0.068 | 0.057 |
| Per MWh of Electricity Consumption (Grand total of ITOCHU group) | 0.524 | 0.506 | 0.524 | 0.502 | 0.471 |

* The denominators of Intensity figures per one square meter of all floor space are as follows:
FYE 2017 116,528m², FYE 2018 115,905m²,
FYE 2019 115,842m², FYE 2020 101,545 m²,
FYE 2021 114,920 m²

### ■ $CO_2$ Emissions by Beverage Manufacturing Companies (Intensity Unit)

| Business Profile | Company Name (Boundary) | Unit | FYE 2018 | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|---|---|
| Beverage Manufacturing | Clear Water Tsunan Co., Ltd. (Soft drink manufacturing and sales business) | ($CO_2$e/production capacity kL) | Non-consolidated | 0.091 | 0.081 | 0.088 |

# Climate Change

## Scope1 Total Emissions Breakdown by Greenhouse Gas Type

(Unit:t-$CO_2e$)

| | | | Global Warming Potential (GWP) | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|---|---|
| Scope1 Total emissions | | | — | 1,213,395 | 1,202,508 | 1,522,339 |
| Energy consumption carbon dioxide($CO_2$) | | | — | 1,161,002 | 1,158,283 | 1,233,868 |
| Total GHG emissions other than $CO_2$ from energy consumption (t-$CO_2e$) | | | — | 52,393 | 44,225 | 288,471 |
| | Breakdown | non-energy consumption carbon dioxide ($CO_2$) | 1 | 0 | 0 | 0 |
| | | methane ($CH_4$) | 25 | 0 | 1,459 | 118,224 |
| | | dinitrogen monoxide ($N_2O$) | 298 | 17,932 | 18,439 | 119,278 |
| | | hydrofluorocarbon (HFCs) | 7,390～10,300 | 34,461 | 24,327 | 50,969 |
| | | perfluorocarbon (PFCs) | — | 0 | 0 | 0 |
| | | sulfur hexafluoride ($SF_6$) | — | 0 | 0 | 0 |
| | | nitrogen trifluoride ($NF_3$) | — | 0 | 0 | 0 |

* GHG emissions other than $CO_2$ from energy consumption from group companies that emit more than 3,000 t-$CO_2e$ per year are aggregated and disclosed.
* We initiated collecting data on non-energy related greenhouse gases emissions on a step-by-step basis, starting with FYE 2019 data. Specifically, we started including "$CH_4$ and $N_2O$ emissions associated with pig breeding and excrement management" and "HFC emissions due to leaks from refrigerating equipment, etc." with FYE 2019 data, and started further including "CH4 emissions associated with wastewater treatment", "$CH_4$ emissions associated with composting and landfilling waste" and "$N_2O$ emissions associated with the use of fertilizer on farms" with FYE 2021 data.
* The global warming potential (GWP: Global Warming Potential) for the calculation of GHG emissions other than $CO_2$ from energy consumption is based on GWP 100 of the IPCC 4th Assessment Report (AR4).
* Greenhouse gas emissions other than $CO_2$ have several tens to several tens of thousands of times of greenhouse effect compared to $CO_2$, and t-$CO_2e$ is used as a unit for expressing that greenhouse effect equivalent to $CO_2$.
* In addition to the above greenhouse gas, group companies emit 8,967 t-$CO_2e$ as HCFCs, etc.

## Costs Associated with Climate Change

Among the environmental conservation costs disclosed as a part of our environmental accounting, costs (P34) associated with climate change (FYE 2021) are as follows:

- Administrative costs of the power generator installed in the Tokyo Headquarters: 1,770 thousand yen
- Research and development (R&D) 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

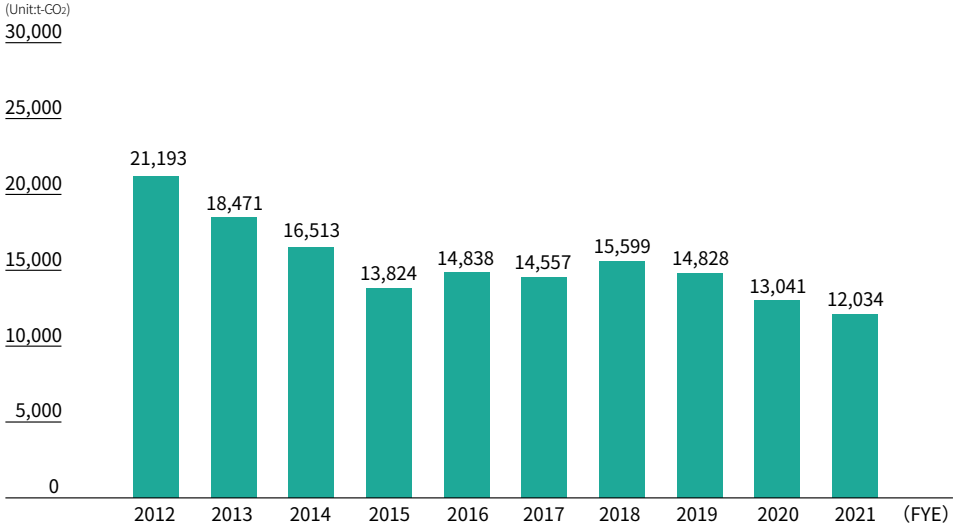
## Initiatives Toward Environmental Distribution

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.

■ **$CO_2$ Emissions Attributable to Distribution★**



# Climate Change

## Energy Saving Measures for Distribution

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

| | |
|---|---|
| **Transportation Method Selection** | Promotion of the use of railroads and domestic shipping |
| **Measures to Improve Transportation Efficiency** | Use of transportation with the freight of multiple shippers on one vehicle and mixed loading<br>Selection of appropriate vehicle types<br>Increase in the size of vehicles<br>Optimal transportation routes<br>Improvement in the loading ratio |
| **Cooperation with Freight Transportation Operators and Recipients of Freight** | Review of transportation plans and frequency |

### ■ Concrete Measures

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

(2) Measures to Improve Transportation Efficiency
- We will survey the conditions of transportation. We will then consider the selection of appropriate vehicle types and the selection of appropriate transportation routes to further improve loading efficiency and to reduce the energy consumption rate.

(3) Cooperation with Freight Transportation Operators and Recipients of Freight
- We have decided to check the 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** (P183)**:**
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 $CO_2$ 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, and $CO_2$ emissions attributable to distribution of ITOCHU Corporation.

**Independent Assurance Report** (P183)**:**
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.

# Prevention of Pollution and Resource Circulation

## Action Plan

| Risks | Opportunities |
|---|---|
| • Negative impacts on the natural environment including those related to resource circulation.<br>• Deterioration of relations with local communities and subsequent loss of social license to operate.<br>• Industry exhaustion due to increased price competition. | • Increased resource demand due to population growth and enhanced living standards in emerging economies.<br>• Creation of customer trust and new business opportunities through stable and sustainable supply chain practices. |

| Materiality | SDGs Targets | Issues to Address | Business Area | Commitment | Specific Approach | Performance Indicators | Degree of Progress |
|---|---|---|---|---|---|---|---|
| Textile Company | | | | | | | |
| Ensure stable procurement and supply |  | Reducing our environmental burden in manufacturing processes | Textile products in general | We will promote the building of value chains starting from raw materials focused on sustainable materials. | Promote the RENU project aiming to realize a circular economy in textile industry. Aim to further enhance and expand the handling of sustainable materials. | Contribute to fostering of environmental awareness and reducing our environmental burden by promoting the RENU project and further enhancing and expanding the handling of sustainable materials. | Several well-known brands have adopted the recycled materials of the RENU project we started in FYE 2020. Various media organizations also featured the project. We have contributed to fostering environmental awareness through this. |
| Machinery Company | | | | | | | |
| Ensure stable procurement and supply |  | Improving water and sanitation infrastructures | Water and environmental projects | We will contribute to improve the sanitary conditions, the development of economic activities, and the protection of the global environment through the appropriate treatment and effective use of water and waste. | Expand water and environment projects to promote the appropriate use and treatment of water and the effective utilization of resources, and reduce the burden on the environment. | Expand and diversify the investment portfolio in the water and environment field. | **Environmental Field**<br>• We operate four municipal solid waste incineration and power generation plants(waste to energy plant) in the U.K.<br>• We are currently constructing a municipal solid waste incineration and power generation plant(waste to energy plant) and a new leachate-controlled landfill in Serbia. We aim to start full commercial operations in 2022.<br>• We acquired a 20% stake in Environment Development Company Ltd. (EDCO) in November 2020. EDCO is providing integrated hazardous waste management services in Jubail Industrial City in Saudi Arabia. We are aiming to enhance the functions of our efforts that to capture strong demand for waste management services in light of intensifying environmental regulations in each the industrial sector and the growing awareness of ESG and SDGs more generally in the same way as in the water field. |
| Energy & Chemicals Company | | | | | | | |
| Ensure stable procurement and supply |  | Efforts leading to solutions to social problems | Plastic-related environmental response | We will contribute to solving social problems (e.g., marine plastics and waste plastics) that urgently require measures with a plastic-related environmental response. | Supply environmental materials and establish a recycling/reuse program in collaboration with brand owners. | Build a recycling-oriented-model by enhancing our handling of environmental materials and establishing a recycling/reuse program. | • We announced plans to jointly market bioplastics with Borealis AG. (September 2020). We are currently developing this for adoption with brand owners and retailers.<br>• We have developed garbage bags and shopping baskets made with marine plastics (November 2020 and February 2021). We are continuing to promote project development and expansion of efforts.<br>• We announced development of recycling technology for multi-layer film packing materials in collaboration with Toyo Ink Group (December 2020). We are currently discussing future deployment with brand owners. |

# Prevention of Pollution and Resource Circulation

## 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

"Ensure Stable Procurement and Supply" was one of the important ESG issues identified as a material sustainability topic that ITOCHU identified in its April 2018 assessment. 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," pointing to our commitment to promote resource efficiency in accordance with our various business operations.

### Ensuring Legal Compliance by the Chemicals Division

The chemicals handled in the Chemicals Division are those that have potentially serious impacts on human health and the natural environment and have become subject to various laws and regulations that aim to ensure appropriate handling across the supply chain – including during manufacturing, sales, transportation, and storage. Furthermore, the appropriate management of chemicals is crucial from a business perspective for our Chemicals Division as well, as violations and cases of non-compliance can impact the regulatory approvals we require on certain products.

There is an international trend to minimize risks at every 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 sets qualitative management targets and qualitative performance targets to promote better practices in pollution prevention and resource efficiency. The environmental targets and achievements in FYE 2021 are as follows.

■ **Qualitative Targets**

| Item | | Boundary | Target | FYE 2021 Results and Evaluation |
|---|---|---|---|---|
| Prevention of Environmental Pollution and Compliance with Laws and Regulations | Risk Assessment for Investment and Financing Projects | ITOCHU Corporation | Perform pre-investment/financing assessments based on the ESG Checklist, which includes environmental assessment criteria. | Properly implemented |
| | Raising Management Levels through Auditing | ITOCHU Group | Conduct internal audits on environmental management systems to ensure compliance, improved environmental efficiency, and better overall management. | Properly implemented |
| | On-Site investigations of Group Companies | ITOCHU Group | Select appropriate Group companies and conduct on-site environmental management investigations for them. | Properly implemented (Visited on the web) |
| Promotion of Awareness Activities | Raising Awareness of Laws and Regulations | ITOCHU Group | Increase internal awareness on the Waste Management and Public Cleansing Act and the Soil Contamination Countermeasures Act, as well as other relevant regulatory developments by providing learning opportunities such as seminars and courses. We will also monitor and review participation/uptake rates of these trainings in relevant segments of the company. | Properly implemented |
| Resource Conservation, Promotion of Resource Circulation, and Monitoring of performance | Office Waste Reduction | ITOCHU Corporation | Reduce waste and promote recycling in office activities based on ISO 14000. | Properly implemented |
| | Paper Consumption Reduction Target | ITOCHU Corporation | Reduce paper consumption by raising awareness of our targets internally. | Properly implemented |
| | Enhancement of Data Collection | ITOCHU Corporation | Gain a better understanding of our performance by expanding the scope of the environmental performance data that we collect from group companies in Japan and overseas offices. | Properly implemented |

■ **Quantitative Targets**

| Item | | Boundary | Target Period | Target | Progress in FYE 2021 Against Targets | Assessment |
|---|---|---|---|---|---|---|
| Prevention of Pollution | Serious Environmental Accident | ITOCHU Corporation* | Every Fiscal Year | Zero Serious Environmental Accident | Zero | Achieved |
| Resource Circulation・Waste Discarded | Volume of Waste Discarded | Tokyo Headquarters | March 2025 | 6% Reduction Compared to FYE 2019 | 32% Reduction Compared to FYE 2019 | Achieved |
| | Recycling Rate | | March 2025 | 90% | 93% | Achieved |
| Resource Conservation | Paper Consumption | ITOCHU Corporation | March 2025 | 3% Reduction Compared to FYE 2019 | 38% Reduction Compared to FYE 2019 | Achieved |

* Including domestic and overseas branches and Group companies subject to compliance reporting

# Prevention of Pollution and Resource Circulation

## Structures and Systems

### 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.

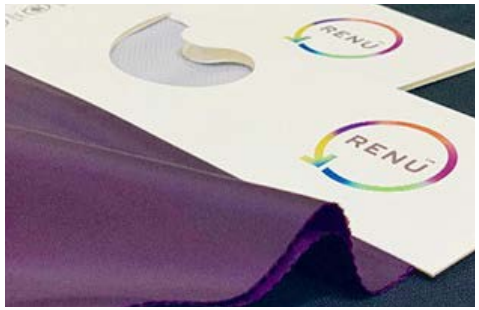
- We will make reports as necessary according to the emergency contact network in the above manual. In addition, we will take prompt action to limit the risks caused by toxic and hazardous substances.
- In the event of splashing, leaking, outflow, seepage or penetration underground, we will immediately 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.

# Prevention of Pollution and Resource Circulation

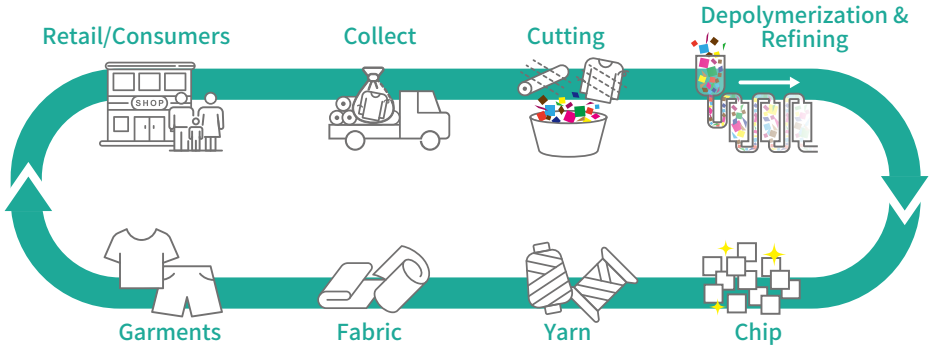
## Initiatives

### RENU ® Project Aims to Realize Circular Economy

In the spring of 2019, we launched a project called "the RENU ® project", which aims to address the issue of excessive waste in the fashion industry and realize circular economy. As its first product, we are developing recycled polyester made from textiles such as waste leftover fabric and used clothing. We will contribute to realize circular economy by developing this project through the entire supply chain of the fashion industry from raw materials to consumers.




• RENU® Project Website（https://renu-project.com/en/）




### Environmental Impact

The environmental impact of handling recycled polyester at RENU ® project in FYE 2021 is as follows.

| | |
|---|---|
| **Feedstock equivalent to T-shirt** | 3.5 million pieces of T-shirts |
| **Reduced $CO_2$** | 521 tons |
| **Reduced Water** | 875 kilolitre |

### ITOCHU Announces Development of Garbage Bag Made From Marine Debris

ITOCHU Corporation and Sanipak Company Of Japan, Ltd., our subsidiary and Japan's largest garbage bag maker developed the world's first*1 garbage bag including raw materials made from marine debris.*2 ITOCHU believes that marine debris is a significant social challenge and has been engaging in material recycling businesses recycling marine debris and turning it into products that are commercialized. In cooperation with Tsushima city, we have succeeded in the recycling. In addition, Sanipak Japan, leveraging the knowledge and technology it possesses as Japan's largest garbage bag maker, has developed the world's first*1 garbage bag made in part with raw materials made from marine debris.

ITOCHU and Sanipak Japan plan to provide some of these new garbage bags free of charge to Tsushima city and other areas that need garbage cleaning activities on their coastlines, and will establish a recycling economy-oriented business model to resolve the problem of marine debris that society faces.

*1 According to research by ITOCHU
*2 Debris that has already flowed into the marine environment


Garbage Bag Made From Marine Debris

### Introduction of Shopping Baskets Made Using Marine Plastic Waste as the Raw Material in FamilyMart Stores in Tsushima in Nagasaki Prefecture and Elsewhere

ITOCHU has developed shopping baskets made using marine plastic waste washed ashore in Tsushima in Nagasaki Prefecture as part of the raw materials together with FamilyMart Co., Ltd. and TerraCycle Japan GK. We have introduced these shopping baskets into a total of four FamilyMart stores in Tsushima and Iki in Nagasaki Prefecture in February 2021 to promote community-based SDGs activities.


# Prevention of Pollution and Resource Circulation

## Waste Reduction Initiatives

Under our environmental management system, ITOCHU adheres to all applicable laws and regulations (Waste Management and Public Cleansing Act, Act on the Promotion of Sorted Collection and Recycling of Containers and Packaging, Food Recycling Law, etc.) and strives to reduce waste generated through its business activities, as well as maintain a high recycling rate by committing to thorough waste sorting. In recent years, in order to further promote waste reduction initiatives within the company, a small number of employees have been given the opportunity to experience sorting.

Promotion of understanding of Waste Sorting at Underground Waste Storage Sites

Experience Sorting Waste in the Kitchenette

## 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 2018 | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|---|
| Quantity recycled | Waste volume generated (Unit: t) | 1,816.9 | 869.0 | 992.8 | 1,125.8 |
| | Amount of recycling (Unit: t) | 620.6 | 454.9 | 744.4 | 775.5 |
| | Waste volume (Unit: t) | 1,196.3 | 414.1 | 248.4 | 350.3 |
| Target (recycling rate target by individual food related operator) | Reference rate | 76.8% | 77.8% | 78.8% | 79.8% |
| Percentage recycled | Recycling rate | 34.2% | 52.3% | 75.1% | 68.9% |

* In FYE 2018, 1,001.0 tons were discarded due to a warehouse fire.
* FYE 2022 recycling rate target: 80.0%

## 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 $CO_2$ 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, value for blast furnace slag will be expected to rise affected by trend of decarbonization around the world. Therefore, we moreover focus to build continuous and stable distribution channels and consider investing and participating in the slag business.

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

Structure Made with Blast Furnace Slag

# Prevention of Pollution and Resource Circulation

## 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 2019 | Recycling | 750,030 | — | — | — | 9,045 | 1,197,091 | 1,956,166 |
| | Contribution | 0 | — | — | — | 27 | 0 | 27 |
| | Total amount | 750,030 | — | — | — | 9,072 | 1,197,091 | 1,956,193 |
| 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. The goals set by the Global Environment Committee are as follows.

#### Reduction Target for FYE 2026 in Domestic Business Activities (Trading Company Industry)

- [Disposal Amount] reduce 82% compared to FYE 2001
- [Generation Amount] reduce 62% compared to FYE 2001
- [Recycling Rate] 83% or more

### Promotion of Resource Recycling in Collaboration with Other Companies

ITOCHU is working to save resources and promote recycling by reducing fossil fuel consumption in collaboration with companies with advanced technologies in Japan and overseas regarding plastics and chemical fiber materials. ITOCHU is working to save resources and promote recycling by reducing fossil fuel consumption in collaboration with companies with advanced technologies in Japan and overseas regarding plastics and chemical fiber materials.

#### Collaboration to Enable Uptake of Renewable Polypropylene in the Japanese Market

Japan has formulated a basic plan to introduce approximately two million tons of renewable plastic products by 2030 as a countermeasure against climate change. Polypropylene is a principal raw material characterized by its high strength and high heat resistance. It is used extensively, including in food containers, daily commodities and automotive parts. Meanwhile, it has been considered difficult to commercialize polypropylene production from renewable materials due to the many technical difficulties in the production.

Under these circumstances, ITOCHU, Borealis AG and Borouge Pte Ltd. have agreed on the strategic intent to jointly evaluate how to enable uptake of renewable polypropylene (PP) in the Japanese market. Since its foundation in 1994, Borealis has been in business in at least 120 countries as a world-class plastic and resin manufacturer. In March 2020, it embarked on the commercial production of renewable PP and is now working to expand sales in Europe and around the world. ITOCHU targets to commercially launch Japan's first food containers and packaging materials made of Renewable PP as well as other sanitary goods, miscellaneous daily goods, cosmetic containers, office supplies, home electric appliances, automotive parts and other items in many different fields.

# Prevention of Pollution and Resource Circulation

## The Cooperative Development of Material Recycling Technology for Multi-layer Film Packaging

ITOCHU Corporation has entered into an agreement for cooperative development of material recycling technology for multi-layer film packaging with Toyo Ink SC Holdings Co., Ltd.

Recently, trends related to the problem of disposable plastic have attracted attention globally, and responses are being hurried. In particular, food packaging, refill pouches for detergent and other sanitary products, and film packaging, known as flexible packaging, feature a multi-layer structure that uses many materials to ensure the required performance, which differs based on use. This includes printed ink and adhesives between the polyolefin or polyester film. A major problem in recycling these materials is the difficulty in separating the layers.

In 2019, Toyo Ink Group developed a technology to separate the ink, adhesive, etc. that make up the multi-layer film or packaging in cooperation with the world's largest environmental solutions company. A demonstration pilot plant will be built in 2021, and, moving forward with LCA (Life Cycle Assessment) appraisals, cost simulations, and other verifications. Toyo Ink Group plans to start a post-industrial recycling business in 2022, and also plans to start a post-industrial and post-consumer recycling business in commercial plants by 2025.

In addition to acquiring exclusive marketing rights in Japan and first refusal rights in Asia and Europe related to major product materials related to this technology, ITOCHU will widely provide environmental solutions to food and consumer products company, retailers, brand owners, and more through requests to build structures for material recycling using this technology and to design recyclable, environmentally-friendly packaging.

Through this initiative, both companies will make currently un-recyclable multi-layer film packaging into a recyclable product, aiming for a more than 40% material recycling rate in Japan and abroad.

## The Recovery of Nylon Waste to ECONYL® Nylon Products

ITOCHU Corporation and Aquafil S.p.A. have agreed on their strategic partnership to promote and expand the businesses of circular nylon production.

Nylon is used for textiles and plastic materials made through petrochemistry in a range of fields such as fashion, carpeting, fishing, food packaging, and automobiles. However, many products use nylon blended with other materials in a compound form, making it a difficult material to be recycled.

In 2011 Aquafil created its ECONYL® Regeneration System that turns recovered nylon waste such as fishing nets, carpets and post-industrial waste back to caprolactam (CPL), a crude raw material. Through its proprietary chemical recycling technology, Aquafil eliminates impurities completely, to achieve regenerated nylon product having the same features of the virgin quality materials. ECONYL® nylon is made completely from waste, which enables up to 90% $CO_2$ reduction compared to conventional nylon made from petroleum.

ITOCHU will leverage on its Group's diverse network and expand sales for applications in fashion, carpeting, automobiles, and packaging materials. Moreover, ITOCHU plans to enforce Aquafil's nylon waste recovery scheme using its existing sales chain and will also implement the Partnership from the perspective of the stable supply of raw materials to Aquafil. Through its collaboration from the recovery of waste to the sale of Aquafil's products, ITOCHU aims to expand the businesses of nylon circularity.

## The License Business of Polyester Chemical Recycling Technology

ITOCHU Corporation, Teijin Limited, and JGC Holdings Corporation have signed a joint agreement on the license business of polyester chemical recycling technology from discarded polyester textile products.

This agreement will bring together Teijin's proprietary chemical recycling technology deployed in the manufacture of polyester, the expertise of JGC derived from its global engineering business, and ITOCHU's extensive network of textile industry players. The three companies intend to establish a system for collecting discarded polyester fiber products and cost-effective chemical recycling technology for using such products as raw materials.

Going forward, ITOCHU, Teijin and JGC aim to expand the range of effective solutions for the mass disposal of used textile products.

# Prevention of Pollution and Resource Circulation

## Performance Data

Performance Data on the ITOCHU Group's pollution prevention and resource circulation is compiled according to the Management Control Standards (the control approach).

### Pollution Prevention

#### Emissions of NOx, SOx, and VOC (Air Pollutants)

(Unit: t)

| | | FYE 2018 | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|---|
| Grand total of ITOCHU Group | NOx (Nitrogen Oxides) | 1,821 | 1,958 | 13,091 | 11,273 |
| | SOx (Sulfur Oxides) | 425 | 739 | 1,154 | 1,248 |
| | VOC (Volatile Organic Compounds) | 500 | 524 | 520 | 529 |

### Resource Circulation

#### Waste Volume and Waste Recycling Rate

The table below gives the waste volume generated in the Tokyo Headquarters, Osaka headquarters, branches and business facilities in Japan group companies in Japan, overseas offices and overseas group companies from FYE 2017 to FYE 2021. ITOCHU promotes the separation of garbage. Our Tokyo Headquarters has set a single year target of reducing its waste volume by 6% compared with FYE 2019 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 2017 | FYE 2018 | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|---|---|
| Tokyo headquarters★ | Waste volume (Unit: t) | 674 | 698 | 680 | 767 | 465 |
| | Waste non-recycled | 38 | 43 | 48 | 44 | 31 |
| | Waste recycled | 636 | 655 | 632 | 723 | 434 |
| | Recycling rate (Unit: %) | 94.3 | 93.8 | 92.9 | 94.3 | 93.4 |
| Osaka headquarters, branches and business facilities in Japan | Waste volume (Unit: t) | — | — | — | 290 | 258 |
| Group companies in Japan | Waste volume (Unit: t) | 21,947 | 177,526 | 89,210 | 149,620 | 248,465 |
| Overseas offices | Waste volume (Unit: t) | 33 | 5 | 17 | 9 | 41 |
| Overseas group companies | Waste volume (Unit: t) | 10,016 | 141,392 | 364,476 | 461,018 | 504,085 |
| Grand total of ITOCHU Group | Waste volume (Unit: t) | 32,670 | 319,621 | 454,383 | 611,751 | 753,315 |
| | Waste non-recycled | — | — | — | 449,030 | 583,599 |
| | Waste recycled | — | — | — | 162,721 | 169,716 |
| | Recycling rate (Unit: %) | — | — | — | 26 | 23 |

* 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.

# Prevention of Pollution and Resource Circulation

## Hazardous Waste

(Unit: t)

| | FYE 2018 | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|
| Grand total of ITOCHU | 1.5 | 1.4 | 1.26 | 1.5 |
| Grand total of ITOCHU Group | — | — | 749 | 45,754 |

## Waste Disposal Cost

(Unit: 1,000 yen)

| | | FYE 2018 | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|---|
| Tokyo headquarters | Payment to waste disposal company | 16,330 | 10,448 | 11,998 | 9,067 |

## Paper Consumption

The table below gives our paper consumption for FYE 2017 to FYE 2021 (This is for the total of all ITOCHU bases in Japan). ITOCHU has set a target of reducing its paper consumption by 3% compared with FYE 2019 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 2017 | FYE 2018 | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|---|---|
| ITOCHU Corporation | Copy paper consumption | 34,940 | 32,949 | 30,711 | 26,913 | 19,167 |

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

### Legal Compliance Status

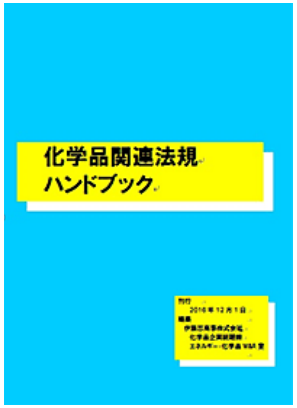
- There were no major violations (e.g., license suspensions)

### 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: 117 / period: October 19 to November 13, 2020)
- 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.



# Prevention of Pollution and Resource Circulation

## Scope of Aggregation

○:in scope of aggregation

| | | Waste Volume and Recycling Rate | Hazardous Waste | Waste Disposal Cost | Emissions of NOx, SOx, and VOC | Paper Consumption |
|---|---|---|---|---|---|---|
| Tokyo headquarters | | ○ | ○ | ○ | ○ | ○ |
| Osaka headquarters | | ○ | — | — | ○ | — |
| Branches and business facilities in Japan*1 | The number of offices including domestic branches: FYE 2017: 13, FYE 2018: 11, FYE 2019: 13, FYE 2020: 12, FYE 2021: 11 | ○ | ○ | — | ○ | — |
| Group companies in Japan*2 | The number of target companies: FYE 2017: 65, FYE 2018: 208, FYE 2019: 220, FYE 2020: 238, FYE 2021: 232 | ○ | ○ | — | ○ | — |
| Overseas offices | The number of overseas offices: FYE 2017: 16, FYE 2018: 15, FYE 2019: 30, FYE 2020: 29, FYE 2021: 49 | ○ | ○ | — | ○ | — |
| Overseas group companies*2 | The number of target companies: FYE 2017: 46, FYE 2018: 299, FYE 2019: 282, FYE 2020: 286, FYE 2021: 274 | ○ | ○ | — | ○ | — |
| 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, 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 2017. All consolidated subsidiaries are covered since FYE 2018 (coverage 100%).

## Independent Assurance

**Independent Assurance Report** (P183)**:**

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 $CO_2$ 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.

# Water Resources Conservation

## Action Plan

| Materiality | SDGs Targets | Issues to Address | Business Area | Commitment | Specific Approach | Performance Indicators | Degree of Progress |
|---|---|---|---|---|---|---|---|
| Machinery Company | | | | | | | |
| Ensure Stable Procurement and Supply |  | Improving water and sanitation infrastructures | Water and environmental projects | We will contribute to improve the sanitary conditions, the development of economic activities, and the protection of the global environment through the appropriate treatment and effective use of water and waste. | Expand water and environment projects to promote the appropriate use and treatment of water and the effective utilization of resources, and reduce the burden on the environment. | Expand and diversify the investment portfolio in the water and environment field. | **Water Field**<br>We are developing have developed a water supply service business in the U.K. and seawater desalination business in Australia and Oman. We aim to continue contributing to stable water supply in regions through seawater desalination, and water supply/ and sewerage businesses. At the same time, we are looking to be involved in solutions-based business for water issues in each industrial sector accross a range of industries. |

## Policy and Basic Concept

We understand that water stress and shortages of potable water supply are an increasing global concern. Areas suffering from water shortages are expected to expand due to global economic development and population growth, as well as changes in precipitation patterns due to climate change. However, initiatives to identify new sources of freshwater have yet to see a breakthrough. For example, people have been looking for ways to turn seawater, earths largest source of water covering approximately 97.5% of all water sources, into freshwater, but at our current technology only 0.01% of seawater can be converted for human use.

Under such circumstances, ITOCHU is aware that the sustainability of water resources is indispensable for business continuity in the various businesses we are developing around the world, including those in water stressed regions. Item (5) "Conservation and Effective Use of Water Resources" 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." To ensure the sustainable use of water, we are committed to raising awareness of water sustainability in our corporate culture and integrating the concern into our business decision making process. In existing businesses, we will conduct a comprehensive assessment of water consumption to improve our water efficiency and reduce 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 the creation of reclaimed water. This allows us to improve our water consumption efficiency in the office. The targets and indicators we track to manage our performance are noted in the table below.

### Qualitative Targets

| Item | Boundary | Target | FYE 2021 Results and Evaluation |
|---|---|---|---|
| **Risk Assessment for Investment and Financing Projects** | ITOCHU Corporation | Conduct a preliminary risk assessment using the ESG Checklist for Investments, which incorporates a dedicated section to water risks. | Properly implemented |
| **On-Site investigation for Group Companies** | ITOCHU Group | Select Group companies involved in businesses where water use is a material risk and conduct on-site investigation on the status of water management. | We selected Group companies in areas where water resources are particularly important, but the visit was postponed due to COVID-19 and a web conference was held. |
| **Compliance with Laws and Regulations** | ITOCHU Group | Continued awareness and response to domestic and foreign laws and regulations related to water resources (water withdrawal / discharge) | There were no legal violations related to water withdrawal and discharge. |
| **Enhancement of Data Collection** | ITOCHU Group | Gain a better understanding of our water impacts by expanding the scope and level of detail by which we collect and monitor water-related performance data for domestic and overseas Group companies as well as overseas subsidiaries. | Properly implemented |

# Water Resources Conservation

## Targets in Water Stressed Regions

| Item | | Boundary | FYE 2021 Target | FYE 2021 Results and Evaluation |
|---|---|---|---|---|
| **Initiatives in Water Stressed Regions** | **Risk Assessment for Investment and Financing Projects** | ITOCHU Corporation | Conduct a preliminary risk assessment using the ESG Checklist for Investments, which incorporates a dedicated section to water risks.<br>Conduct preliminary risk assessments on water resources for projects and investments in water stressed regions where water resources are critical to operations, such as beverages, agriculture and mining. | Properly implemented |
| | **On Site Investigation for Group Companies** | ITOCHU Group | Select group companies operating in water stressed regions and conduct on-site investigation on the status of water management. | We selected Group companies in areas where water resources are particularly important and hold web conference. |

## Quantitative Targets

| Category | | Boundary | Annual Target | FYE 2021 Results | Review | Target | |
|---|---|---|---|---|---|---|---|
| | | | | | | Period | Contents |
| **ITOCHU Corporation** | Water Withdrawal (Clean Water) | Tokyo Headquarters | Total Volume Reduction Target 1%/ Year | 38.4% Reduction Compared to FYE 2019 | Achieved | March 2025 | 6% Reduction Compared to FYE 2019 |
| **Water Stressed Regions*** | Water Withdrawal (Clean Water) | Water Stressed Regions | Reduction Target 1.5%/ Year | 12.6% Reduction Compared to FYE 2020 | Achieved | March 2025 | 9% Reduction Compared to FYE 2020 |

* Quantitative targets for water stressed regions cover operations located in areas where the WRI Aqueduct Baseline Water Stress map identifies as "Extremely High Risk".

## Structures and Systems

We assess in advance the impact on the market, society and the environment by business investment projects in Japan and overseas engaged in by ITOCHU and our Japanese subsidiaries. We do this with the ESG Checklist for Investment. (The assessment items 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 conduct an environmental impact assessment, which includes water-related supply chain criteria, for all of the commodities we handle. We have also been conducting annual on-site investigations for Group companies since 2001 to strengthen our environmental risk management. These on-site assessments are conducted for 10 Group companies that we identify as having relatively high environmental impacts. Throughout the assessment, we engage with the senior management team to assess the company's water efficiency performance (water withdrawal and discharge) at facilities such as factories and warehouses as well as the company's compliance with environmental laws and regulations.

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

ITOCHU Group promotes its business activities in compliance with laws and regulations in its business areas related to water usage and discharge. There were no legal violations related to water usage and discharge in FYE 2020.

# Water Resources Conservation

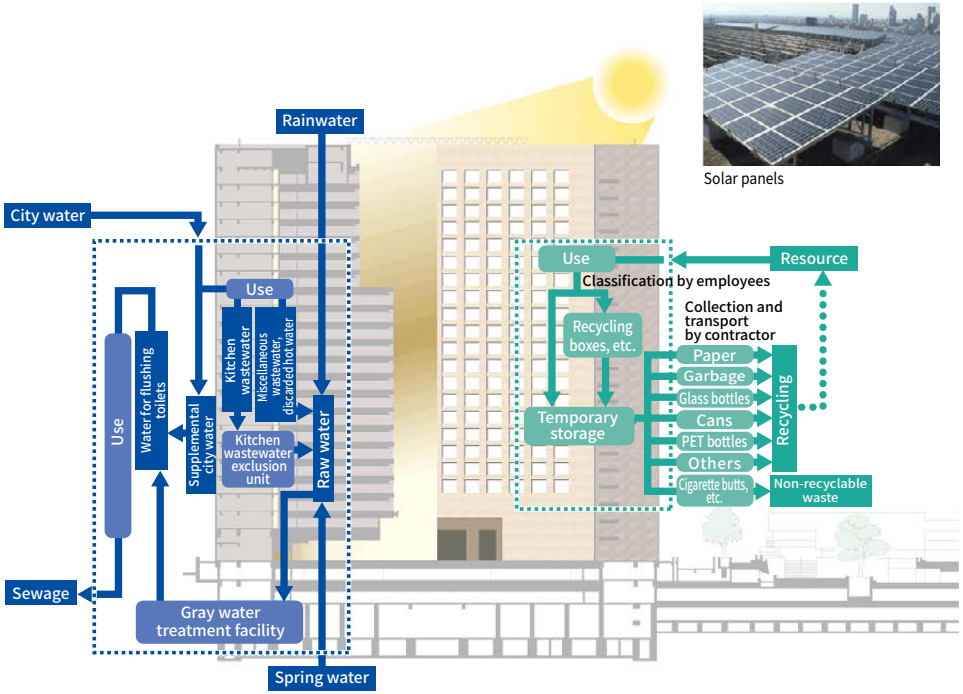
## Initiatives for Effective Use of Water Resources

### Business Activity

#### Enhancing Water Efficiency at the Tokyo Headquarter Building

ITOCHU's Tokyo headquarter building has a greywater production mechanism built in since its completion in 1980. This allows for us to recycle kitchen wastewater, rainwater, spring water, and non-fecal wastewater from washbasins and office kitchenettes to utilize it as toilet water.

The amount of greywater production relies, however, on the amount of rainwater we are able to collect. Therefore, in years when rainfall is relatively scarce, we must rely more on tap water than other years. In order to minimize our reliance on tap water, we have installed water saving mechanisms such as in the toilet facility, washbasins, and the toilets themselves.





Solar panels

## Business activities in Water Stressed Regions

#### Understanding Water Risks at Manufacturing Bases

ITOCHU uses the WRI 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.

Please refer to P68 for water withdrawal at sites identified as high risk in the Baseline Water Stress parameters.

| Overall Water Risk | Number of Sites |
|---|---|
| Low risk (<10%) | 45 |
| Low to medium risk (10-20%) | 110 |
| Medium to high risk (20-40%) | 61 |
| High risk (40-80%) | 7 |
| Extremely high risk (>80%) | 3 |
| Total | 226 |

# Water Resources Conservation

## Water Related Business

ITOCHU considers our water related business to be a priority field. We are deploying seawater desalination business and water utility 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 utility business** | 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. |
| **Seawater desalination business** | 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. |
| | We have invested and are participating as the largest shareholder in a seawater desalination project with a daily volume of 281,000 m³. The Oman Power and Water Procurement Company (OPWP), which is under the umbrella of the Oman government, is promoting this project in Barka in the northern part of the country. This is the largest seawater desalination project in Oman. It involves the construction of reverse osmosis membrane (RO membrane) seawater desalination facilities and surrounding facilities. These will be operated for 20 years. The project has started commercial operation in June 2018. |
| **Seawater desalination plant, and osmosis membrane manufacturing and sales** | We started delivering multiple seawater desalination plants to Saudi Arabia in the 1970s. 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. |

### 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 m³ in Barka in the northern part of Oman toward the stable supply of water in that country in March 2016. This is a public-private partnership project promoted by the Oman government. We have constructed reverse osmosis membrane (RO membrane) seawater desalination facilities and surrounding facilities. These will be operated for 20 years. The facilities started commercial operation in June 2018. This is the largest seawater desalination project in Oman with total operating expenses of approximately 300 million dollars.

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

## 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.

# Water Resources Conservation

## Performance Data

### Volume of Water Withdrawal 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 water withdrawal and wastewater discharge in Osaka headquarters, branches and business facilities and group companies in Japan, overseas offices and overseas group companies from FYE 2017 to FYE 2021. Our Tokyo headquarters has set a target of reducing its water consumption by 6% compared with FYE 2019 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:thousand m³)

| | | FYE 2017 | FYE 2018 | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|---|---|
| **Tokyo headquarters** | City water usage★ | 52 | 43 | 47 | 42 | 29 |
| | Gray water usage★ | 31 | 34 | 31 | 34 | 25 |
| | Wastewater discharge★ | 63 | 58 | 59 | 60 | 41 |
| **Osaka headquarters, branches and business facilities in Japan*** | Water withdrawal | — | — | — | 73 | 61 |
| | Wastewater discharge | — | — | — | 170 | 133 |
| **Group companies in Japan*** | Water withdrawal | — | — | 32,335 | 21,947 | 24,540 |
| | Wastewater discharge | 847 | 14,629 | 51,913 | 9,594 | 14,269 |
| **Overseas offices*** | Water withdrawal | — | — | 5 | 5 | 16 |
| | Wastewater discharge | 6 | 6 | 5 | 5 | 15 |
| **Overseas group companies*** | Water withdrawal | — | — | 106,182 | 72,059 | 48,494 |
| | Wastewater discharge | 207 | 11,832 | 34,380 | 16,394 | 21,723 |

* 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.

# Water Resources Conservation

## Water Withdrawal Amount by Withdrawal Source

(Unit:thousand m³)

| | | FYE 2018 | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|---|
| Grand total of ITOCHU Group | Supplied water usage, industrial water | 12,952 | 9,560 | 10,649 | 12,119 |
| | Groundwater withdrawal | 17,118 | 92,899 | 46,764 | 20,516 |
| | Water taken from rivers, lakes, rainwater | 43,919 | 31,740 | 26,323 | 31,402 |
| | Water taken from seawater | 0 | 4,339 | 10,269 | 9,068 |
| | Others (produced water, etc.) | 0 | 0 | 11 | 34 |
| | Total | 73,989 | 138,538 | 94,017 | 73,140 |

## Discharge Amount by Discharge Destination

(Unit:thousand m³)

| | | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|
| Grand total of ITOCHU Group | Water discharged to treatment facility (e.g. sewage) | 57,669 | 3,664 | 7,181 |
| | Water discharged to groundwater | 9,243 | 5,731 | 11,639 |
| | Water discharged to rivers, lakes | 12,992 | 10,464 | 10,251 |
| | Water discharged to sea | 6,453 | 6,130 | 6,679 |
| | Others | — | — | 431 |
| | Total | 86,358 | 25,989 | 36,181 |

# Water Resources Conservation

## Water Withdrawal in Water Stressed Regions

The amount of water withdrawal at sites with high risk and extremely high risk (>40%) identified using the WRI Aqueduct tool developed by WRI (World Resources Institute) (P65) is as follows.

| | | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|
| High risk (40-80%) | Number of sites | 5 | 6 | 7 |
| | Water Withdrawal (thousand m³) | 188 | 2,201 | 2,786 |
| Extremely high risk (>80%) | Number of sites | 2 | 2 | 3 |
| | Water Withdrawal (thousand m³) | 583 | 623 | 1,096 |

## Water Consumption in Manufacturing Processes that are Highly Dependent on Water Resources (Intensity)

| Category | Boundary | Unit | FYE 2018 | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|---|---|
| Beverage Manufacturing | Clear Water Tsunan Co., Ltd. (Soft drink manufacturing and sales business) | (Water Consumption m³/Production Volume kL) | Not consolidated | 2.01 | 1.95 | 1.85 |

## Chemical Oxygen Demand (COD)

| Category | Boundary | Unit | FYE 2019 | FYE 2020 | FYE 2021 |
|---|---|---|---|---|---|
| Chemical | C.I. TAKIRON Corporation (factory) | mg/l | 3.90 | 2.78 | 2.20 |

## Environmental Costs Related to Water

Among the environmental conservation costs (FYE 2021) disclosed in the environmental accounting, associated with water are as follows (P34)：

- 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

# Water Resources Conservation

## Scope of Aggregation

○:in scope of aggregation

| | | Water Consumption and Wastewater Discharge |
|---|---|---|
| Tokyo headquarters | | ○ |
| Osaka headquarters | | ○ |
| Branches and business facilities in Japan*1 | The number of offices including domestic branches: FYE 2017: 13, FYE 2018: 11, FYE 2019: 13, FYE 2020: 12, FYE 2021: 11 | ○ |
| Group companies in Japan*2 | The number of target companies: FYE 2017: 65, FYE 2018: 208, FYE 2019: 220, FYE 2020: 238, FYE 2021: 232 | ○ |
| Overseas offices | The number of overseas offices: FYE 2017: 16, FYE 2018: 15, FYE 2019: 30, FYE 2020: 29, FYE 2021: 49 | ○ |
| Overseas group companies*2 | The number of target companies: FYE 2017: 46, FYE 2018: 299, FYE 2019: 282, FYE 2020: 286, FYE 2021: 274 | ○ |
| 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, 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 for FYE 2017. All consolidated subsidiaries are covered since FYE 2018 (coverage 100%).

## Independent Assurance

Independent Assurance Report (P183):

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 $CO_2$ 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.

# Approaches to Conservation of Biodiversity

## Policy and Basic Concept

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.

ITOCHU's business activities depends upon the values and resources that biodiversity provides, which is a blessing provided by the intricate relationships between earth's myriad of organisms. In order to minimize our impacts on biodiversity, ITOCHU is implementing two initiatives, which focus on our business activity impacts and our broader corporate citizenship impacts. For the former, our initiatives target our business sites and surrounding areas to ensure the conservation of local biodiversity and the sustainable use of forests, fisheries, and other commodities. For the latter, our initiatives target local communities in which we directly handle forest commodities aiming to make broader contributions for the local biodiversity as a part of our corporate citizenship commitments.

Given the global nature of our operations, it is a top management priority for us to address global environmental problems, including biodiversity issues across the globe. 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 in order to ensure the conservation of ecosystems and endangered species as well as the human rights of indigenous communities when conducting our business activities.
- We will strive to maintain harmony between the workings of nature and our business activities by committing to the sustainable use of natural resources with regards to the commodities that we handle.
- 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

ITOCHU conducts product certification and traceability for biodiversity protection in products handled in businesses including the supply chain, and social contribution activities for biodiversity protection in business-related areas. We handle commodities related to forest protection (wood, wood products, paper raw materials and paper products, natural rubber, palm oil) and dairy products, meat, marine products, and textile raw materials, which are important for biodiversity. We regard them as products, and strive to disclose information and set goals for them.

### Targets in Business Activities

| Theme | Target | FYE 2021 Results | SDGs |
|---|---|---|---|
| **Biodiversity Conservation**<br>Reduce the impact of ITOCHU's products and projects on biodiversity conservation across our supply chain | By 2025, conduct a follow-up ESG risk assessment for all investment projects subject to high biodiversity risk (e.g. hydropower, mines, ships), where biodiversity should be a material risk item assessed, and implement a plan for improvement if necessary. | Identification of biodiversity risks | |
| **Sustainable Use of Natural Resources**<br>Implement initiatives to improve the sustainable use of natural resources in order to stably produce and supply commodities related to forestry, fishing, and agriculture in the future | By 2025, we will further strengthen our supply chain management approach that focuses on establishing certification and traceability, in order to prevent deforestation and overconsumption of natural resources. For more details(P139).<br>Timber, Timber Products, Raw Materials for Papermaking, and Paper Products: Aim to achieve 100% coverage of our products that are either certified or confirmed to be under progressive management standards. Achieved the target in FYE 2021 ahead of schedule.<br>Palm oil: Achieve 100% traceability to the mill by 2021 and to switch all palm oil procured by the Company to sustainable palm oil*1 by 2030. In particular, we aim to align our procurement to the NDPE principle (No Deforestation, No Peat, No Exploitation)*2.<br>Marine Products: At present, the MSC*3 certification rate for highly migratory fish (e.g. skipjack and yellowfin) are limited due to lack of capability and technology.<br>Given these circumstances, only 4,500 tons of canned yellowfin we trade per year is MSC-certified. However, we are committed to strengthening our supplier engagement to reach 10,000 tons of MSC-certified canned yellowfin traded per year within 5 years.<br>The rate of pole and line fished*4 canned tuna products we handled in FYE 2014 was 7%. By FYE 2019, we succeeded in doubling this to exceeded 14%. We aim to continue on this trajectory and reach 20%.<br>The usage rate and quantity of pole and line fished raw material in ATI more than doubled from 20% at 8,000 tons in 2013 to 40% at 20,000 tons in 2018. It has become one of the few canned tuna factories in the world that uses pole and line fished raw material. We will continue to secure, maintain and expand pole and line fished raw material.<br>Textile Raw Materials: Make 50% of the textile raw materials that we handle traceable and environmentally friendly by 2025. | | |

*1 Sustainable palm oil: palm oil supplied from supply chains compliant to RSPO and RSPO-equivalent standards
*2 No Deforestation, No Peat, No Exploitation (NDPE): zero deforestation, zero peatland development, zero exploitations
*3 The Marine Stewardship Council (MSC) is an international NPO established in 1997 to work on spreading sustainable fishing. It is headquartered in London, England.
*4 Pole and line fishing is a method of fishing where one fish is caught at a time. It is a sustainable fishing method that does not involve the catching of large quantities of fish at one time. It is said that it is an environmentally friendly fishing method because it is also possible to avoid the bycatch of non-targeted fish.

Please refer to P139 for goals in other business activities.

# Approaches to Conservation of Biodiversity

## Targets in Business-related Areas

| Targets | FYE 2021 Action Plans | FYE 2021 Results | FYE 2022 Action Plans | SDGs |
|---|---|---|---|---|
| **Implementation and follow-up on social contribution programs aimed at environmental conservation [Basic Activity Guidelines 2 Environmental Conservation]** | 1. Promote the Project for Protecting Green Turtles, An Endangered Species.<br>2. 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. | 1. 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 on Chichijima in the Ogasawara Archipelago in FYE 2019 and 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. In addition, we have supported the construction of a new accommodation facility with improved living environment and convenience. We did this because the mobile home accommodation facility for people visiting Chichijima as volunteers had deteriorated with aging.<br>2. 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, 31 manatees (cumulative total) were released into a semi-captive lake. Furthermore, 27 manatees were released into the Amazon River. This project provided more than about 1,000 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. | 1. Promote the Project for Protecting Green Turtles, An Endangered Species.<br>2. Promote other environmental conservation projects. |  |

## Structures and Systems

### Assessment of the Impact of Biodiversity on New Businesses

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.

### Assessment of the Impact of Biodiversity on Existing Businesses

ITOCHU has introduced an environmental management system (EMS) based on ISO14001. We are building a system to evaluate the impact of its business activities on the business it is implementing, as well as the products it handles, in order to recognize the potential impact of its business activities on the global environment and prevent environmental risks. Through this system, we aim to comply with environment-related laws and regulations, prevent environmental risks including biodiversity, and promote environment-friendly businesses. In addition, in order to understand the actual situation of suppliers, seven core subjects of ISO26000 including biodiversity are set as essential survey items, and each company and each company and the handling amount are based on certain guidelines such as high-risk countries, products handled, and amount handled. The relevant group companies select important suppliers, and sales representatives of each company, overseas subsidiaries, and representatives of group companies visit the suppliers and conduct hearings.

## Initiatives

### Biodiversity Conservation in Business Activities

#### Consideration for Biodiversity in the Pulp Manufacturing Business

ITOCHU considers the prevention of deforestation by commodities related to forest protection (wood, wood products, raw materials for papermaking and paper products, natural rubber, palm oil) as a priority item. We are working to acquire product certifications such as FSC forest certification and to develop a traceability system to protect biodiversity.

For more information, please refer to Wood, Wood Products, Papermaking Raw Material, and Paper Products (P140).

#### Consideration for Biodiversity in Mine Closure

In our mineral resource development business, we have prepared EHS guidelines based on international standards*,which also stipulate the consideration of biodiversity in the closure of mines. Closure plans are designed not only for physical restoration but also for minimizing the impact and maximizing the benefits on the community by considering the local socio-economy and environment in cooperation with stakeholders. So, it is necessary to prepare funds, ensure the safety of the waterways constructed during the operation, prevent residual chemicals, and conserve ecosystems. 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 of the International Finance Corporation (IFC)

# Approaches to Conservation of Biodiversity

## Biodiversity Conservation in Business-related Areas

ITOCHU is working with stakeholders to protect endangered wildlife.

### 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 31 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

The Amazonian manatee is a vulnerable species

# Approaches to Conservation of Biodiversity

## Project for Protecting Green Turtles, an Endangered Species

ITOCHU Corporation support activities for protecting green turtles, designated as an endangered species. The support is provided via Everlasting Nature (ELNA), a certified NPO. The total amount of support so far is 9.5 million yen.

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 2018, ITOCHU conducted a Green Turtle Protection Tour on Chichijima in the Ogasawara archipelago, the largest green turtle breeding ground in Japan. In July 2019, ten ITOCHU employees and family members took part in the tour.

In addition, as the accommodation for volunteers staying in Chichijima for conservation activities was aging, we supported the construction of a new accommodation facility with improved living environment and convenience, and completed a unit house in May 2020.

Green Turtles, an Endangered Species
(Photographed on the Ogasawara Islands)

Employees participate in conservation activities

Donated a unit house for volunteer stay

## 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

# Approaches to Conservation of Biodiversity

### 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)

## 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 2030. 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.

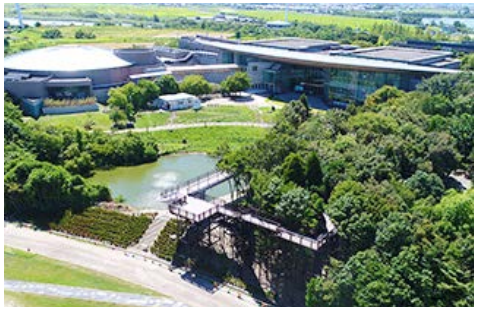
# Approaches to Conservation of Biodiversity

### Sponsorship of Shiga Prefectural Lake Biwa Museum Renewal Project

ITOCHU donated 5 million yen for the 2020 renewal project of the Shiga Prefectural Lake Biwa Museum for the purpose of environmental conservation and regional promotion of the founding site.

Shiga Prefecture, where our company was founded, is one of the "SDGs Future City" and has Lake Biwa, the largest lake in Japan. Lake Biwa is one of only about 20 ancient lakes in the world. More than 1,700 species of animals and plants live there, and more than 60 species of native species also exist.It is also an important wetland for waterfowl and a registered wetland under the Ramsar Convention. Since its opening in 1996, the museum has attracted more than 11 million visitors, with the mission of deepening our understanding of the nature, history and life of Lake Biwa and building a better relationship between people and the lake.

In May 2019, we received a letter of appreciation from the governor of Shiga Prefecture, Taizo Mikazuki, for our support. The exhibition room which was renewed in October 2020 explains the transition of the forest and the climate around Lake Biwa.



Lake Biwa Museum and Canopy Trail

From Governor Mikazuki (right)
Receipt of a letter of appreciation

Exhibition room explaining the transition of the forest and the climate around Lake Biwa

## Performance Data

### Performance Data in Business Activities


- Performance Data (P141) Regarding Forest Certification and Legal Compliance, Sustainable Procurement
  Performance Data of Raw Materials for Papermaking (P141)
- Performance Data Regarding Sustainable Palm Oil Procurement (P143)
- Performance Data of Traceability of Meat (P146)
- Performance Data Related to Certification of Marine Products (P147)
- Performance Data of Organic Cotton Procurement (P148)

# Approaches to Conservation of Biodiversity

## Performance Data on Business-related Areas

### Conservation Project for Endangered Green Turtles

■ **Project Data Monitoring the Spawning and Post-hatching Mortality of Green Turtles in the Ogasawara Islands**

| | | Unit | | 2017 | 2018 | 2019 | 2020 | 2020 Compared to the Pevious Year | 2020 Compared to 2000 | Notes | Review |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Survey Scale** | Number of Surveyed Coasts | Coast | Chichijima Islands | 30 | 30 | 30 | 30 | — | | | |
| | | | Hahajima Islands | 10 | 10 | 10 | 10 | — | | | |
| | | | Mukojima Islands | 10 | 10 | 10 | 10 | — | | | |
| | Total Number of Surveys Conducted | Times | | 364 | 280 | 168 | 172 | 102% | | | The Increasing Trend of Green Turtles in Ogasawara (Conjecture) |
| | Total Survey Personnel | Person | | 1,178 | 1,078 | 732 | 692 | 95% | | | |
| **Results** | Number of Surveyed Green Turtle Nests | Nest | Chichijima Islands | 2,000 | 1,800 | 1,500 | 1,700 | 113% | 378% | In the Chichijima Islands, we succeeded in temporarily stopping the 3-year decrease since 2016. | Increase |
| | | | Hahajima Islands | 500 | 500 | 600 | 400 | 67% | | The decreases in 2020 are partially due to insufficient surveys conducted on the Hahajima and Mukojima Islands. | |
| | | | Mukojima Islands | 50 | 30 | 40 | 28 | 70% | | | |
| | Number of Surveyed Post-hatching Nests (Conducted only on Chichijima) | Nest | | 1,900 | 1,200 | 1,000 | 1,200 | 120% | | | Increasing trend with repeated increases and decreases |
| | Baby Turtles Returning to the Sea (Conjecture) | Head | | 63,700 | 55,000 | 43,700 | 55,000 | 126% | | | Trend in Escape Rate |
| | Escape Rate (Number of Escaped Turtles / Number of Eggs) | % | | 36 | 25 | 32 | 36 | 113% | | | Good |

* Figures are approximate due to unpublished data. Table based on ELNA activity report (https://www.elna.or.jp/support/%e4%bc%8a%e8%97%a4%e5%bf%a0%e5%95%86%e4%ba%8b/) (Japanese Only).

# Approaches to Conservation of Biodiversity

## Support for a Biodiversity Conservation Program in the Amazon

### ■ 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). | • Release of 20 or more manatees into semi-captive lake.<br>• Establishment of a lake and preserve for return to a semi-captive environment. | • Launch of establishment of lake for return of manatees to a semi-captive environment in Manacapuru.<br>• Health check of 13 manatees living in the semi-captive lake.<br>• Release of 6 manatees in semi-captive lake. | • Began meeting for setting up a lake in Manacapuru.<br>• Conducted health checks of 12 manatees.<br>• Released nine manatees into the lake to keep them in a semi-wild state. | • Conduct health checks of 17 manatees.<br>• Release eight manatees into the lake to keep them in a semi-wild state. | • Conducted health checks of 24 manatees.<br>• Released 12 manatees into the lake where they remain in a semi-captive state. | • Release five manatees into the lake to keep them in a semi-wild state. | • Released 14 manatees into the lake where they remain in a semi-captive state. |
| **Return to the wild** | • Release of manatees into the Amazon River. | • Release of 10 or more manatees into the Amazon River. | • Release of 3 or more manatees into the Amazon River. | • 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.<br>• Released five manatees into the Amazon River. | • Release five manatees into the Amazon River. | • Released 10 manatees into the Amazon River.<br>• 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. | • Release five manatees into the Amazon River. | • Released 12 manatees into the Amazon River. |
| **Providing environmental training for local residents and raising their environmental awareness** | Raising awareness of biodiversity conservation among local residents through a project for returning manatees to the wild. | • Provide at least 100 local residents with learning opportunities every year.<br>• Have local fishermen understand the importance of protecting manatees, aiming to have two of them participate in this project. | — | • 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.<br>• Encouraged local fishermen to understand the importance of protecting manatees and had two of them participate in this project. | • Provide 100 local residents with learning opportunities.<br>• Have local fishermen understand the importance of protection of manatees, aiming to have two of them participate in this project. | • 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.<br>• Two local fishermen took part in this project, continuing their practice from the previous year. | • Provide 100 local residents with learning opportunities.<br>• Have local fishermen understand the importance of protection of manatees, aiming to have two of them participate in this project. | • 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.<br>• Two local fishermen took part in this project, continuing their practice from the previous year. |

# 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.



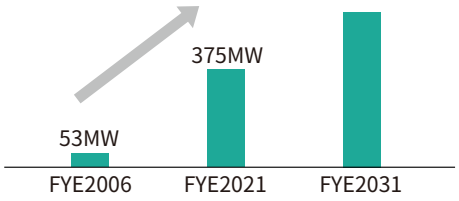
## 1. Renewable Energy

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.

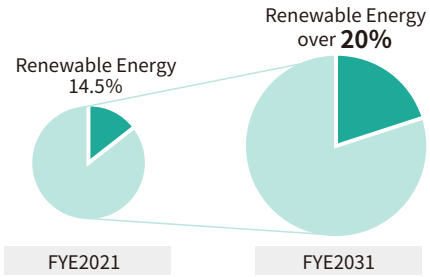
Within the business activities introduced above, we are proactively promoting power generation methods that leverage renewable energy sources such as geothermal, wind, solar, and biomass. We are aiming for a renewable energy ratio of over 20% (equity interest basis) by FYE2031 from 14.5% in FYE2021 within 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 FYE2020 and Breakdown Target for FYE2031**

| | FYE2020 | FYE2021 | FYE2021 | FYE2031 (Target) |
|---|---|---|---|---|
| | Generation Capacity on Equity Interest Basis (MW) | Generation Capacity on Equity Interest Basis (MW) | Ratio (%) | Ratio (%) |
| Wind | 185 | 179 | 14.5% | 20%< |
| Solar/PV Power | 83 | 80 | | |
| Geothermal | 83 | 83 | | |
| Biomass | 20 | 33 | | |
| Renewable Energy (Total) | 369 | 375 | | |
| Natural Gas | 1,621 | 1,258 | 85.5% | 80%> |
| Coal-fired Power | 315 | 315 | | |
| Oil-fired Power | 640 | 640 | | |
| Thermal Power (Total) | 2,576 | 2,213 | | |
| Grand Total | 2,945 | 2,588 | 100% | 100% |

For a list of our renewable energy-related businesses please refer to P88.
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

# ITOCHU's Clean-tech Business

## 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

### Aomori Mutsu Ogawara Onshore Wind Farm

ITOCHU is planning to build an onshore wind farm (57 MW) in a suitable site with favorable wind conditions in Rokkasho, Kamikita in Aomori Prefecture as a joint project with Hitachi Zosen Corporation and ENEOS Corporation. We are aiming to start operating it during FYE 2025. We expect this wind farm to generate approximately 138 million kWh of power a year. That is equivalent to the annual power consumption of approximately 24,000 ordinary households.

### Solar Power/PV Power

ITOCHU is involved in six large-scale solar power plants in Japan, the United States, and in Spain.

**[ Utility Scale Solar Projects ]**

Following on from the start of the commercial operation of a mega-solar power plant in Ehime in 2015, ITOCHU started operating mega-solar power plants in Oita in 2016, Okayama in 2017 and Saga in 2018. This means we now operate four mega-solar power plants in Japan (total power generation output: approximately 130,000 kW). The knowledge and experience we have gained through operating these power plants is contributing to the expansion of our renewable energy business. We will continue to aim to stably operate these power plants.

Oita-Hiyoshibaru Solar Power Plant

**[ Distributed Solar Power Supply Business ]**

ITOCHU operates one of the largest distributed power plants in Japan focusing on the roofs of supermarkets and logistics facilities through the operating company VPP Japan, Inc. VPP Japan, Inc. deploys the Off-grid Power Supply Service (third-party ownership model for solar power). It installs self-consumption solar power generation systems with zero initial investment by customers and then supplies power at low cost over a long period of time directly to facilities.

Furthermore, it is aiming to develop to regional virtual power plants (VPP) focused on customer facilities by integrating and controlling distributed power supplies (e.g., storage batteries and electric vehicles).

VPP Japan Distributed Power Supply

# ITOCHU's Clean-tech Business

## 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 $1.17 billion 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 Power

The Ichihara Biomass Power Plant (power generation output: 49,000 kW) in which ITOCHU is participating started commercial operation in December 2020. We expect this power plant to generate approximately 350 million kWh of power a year. That is equivalent to the annual power consumption of approximately 120,000 ordinary households. In addition, we established Hyuga Biomass Power Co., Ltd. through joint investment in April 2021. We have decided to build a biomass power plant (power generation output: 50,000 kW) in Hyuga in Miyazaki Prefecture.

Ichihara Biomass Power Plant

## Biomass Fuel Related Business

ITOCHU is supplying biomass fuel to power generation operators in Japan in addition to our own company by leveraging our biomass fuel suppliers portfolio. We are working to improve the ratio of renewable energy in power generation projects in Japan through the supply of biomass fuel.

Biomass Fuel (Wood Pellets)

## Operation and Maintenance for Renewable Power

ITOCHU offers operation, maintenance as well as asset management services for solar power plants in US principally through our subsidiary Bay4 Energy Services, LLC. It serves approximately as many as 1,400 sites (as of Dec 2020) throughout US by utilizing its remote monitoring system.

# ITOCHU's Clean-tech Business

## 2. Ammonia Fuel

With international momentum towards the transition to a decarbonized society 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 $CO_2$ 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, in order to achieve the development of ships that use ammonia as their main fuel, the stable supply of marine ammonia fuel and the development of supply sites are essential elements.

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

ITOCHU Corporation has agreed with Nihon Shipyard 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").

### Developing an Infrastructure to Support the Use of Ammonia as an Alternative Marine Fuel for Ships

ITOCHU Corporation, ITOCHU ENEX Co. Ltd. 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 alternative marine fuel for ships in Singapore.

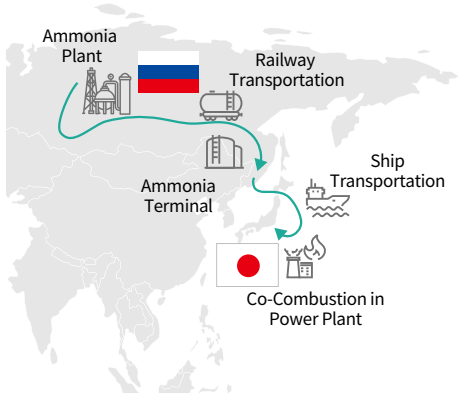
In addition, ITOCHU Corporation and ITOCHU ENEX Co., Ltd. announced in March 2021 that they have reached an agreement with Ube Industries, Ltd. and Uyeno Transtech Ltd. to supply marine ammonia fuel and jointly develop supply sites in Japan.

These latest joint development efforts are not only focused on the development of ships equipped with an Ammonia-fueled Engine and developing supply sites for marine ammonia fuel at Singapore and Japan, but also positioned as part of an integrated project that includes the ownership and operation of these ships, the introduction of marine ammonia fuel and the establishment of worldwide supply chain of that fuel, which ITOCHU and ITOCHU ENEX has been pursuing in parallel. Working in cooperation with companies in Japan and overseas as well as related government agencies, the companies will pursue initiatives aimed at reducing greenhouse gases.

### Joint Feasibility Study of an Ammonia Value Chain Between Eastern Siberia and Japan

ITOCHU and TOYO Engineering Corporation have received a commission from Japan Oil, Gas and Metals National Corporation (JOGMEC) to conduct a joint feasibility study of a value chain to produce blue ammonia in Eastern Siberia in Russia and to then transport it to Japan.

ITOCHU will provide our knowledge on logistics optimization cultivated through our rich track record of business in the energy field. We will realize the production and efficient transportation of ammonia, expected to be a new market as a low carbon fuel in the future, to achieve the stable supply of blue ammonia to the Japanese market.




Flow Diagram (Schematic) of the Ammonia Value Chain Between Eastern Siberia and Japan

# ITOCHU's Clean-tech Business

## 3. Hydrogen Related Business

In December 2020, Japan announced the "Green Growth Strategy Towards 2050 Carbon Neutrality," and as part of that strategy, hydrogen is expected to contribute to the decarbonization of various fields as a key technology for carbon neutrality with promising applications across a wide range of fields, such as power generation, industrial usage, transportation, etc.

In light of this major trend, ITOCHU's wide-ranging networks focused on consumer-related sectors will be used to demonstrate the comprehensive capabilities of the ITOCHU Group and promote the development of the hydrogen market.

### Strategic Collaboration to Build a Hydrogen Value Chain

ITOCHU, Air Liquide Japan G.K. and ITOCHU ENEX Co., Ltd. will jointly examine hydrogen production/supply and hydrogen station business focused on major metropolitan areas in Japan. The aim of this is to cultivate the hydrogen market for mobility and industry.

We will demonstrate our comprehensive strengths as a group by making full use of our extensive network focused on the consumer goods industry field to contribute to the growth of the hydrogen market.


Hydrogen Station (Kawasaki Hydrogen Station of Air Liquide Japan G.K.)

### Business Model Development of a Local Hydrogen Production for Local Consumption

ITOCHU Corporation has been progressing the joint operationalization research on a hydrogen business based on "the local production for local consumption model" in northern Kyushu with our important customers of Nippon Coke & Engineering Company, Limited (hereinafter "Nippon Coke") and Compagnie Maritime Belge B.V. (hereinafter, "CMB"). ITOCHU has been supplying raw materials to Nippon Coke, and also has a lot of newly built ship business with CMB which is the largest maritime group in Belgium, both for many years.

Featuring both the hydrogen byproduct of Nippon Coke and the hydrogen engine of CMB, this project aims to create and expand both supply of and demand for hydrogen, with the goal of swiftly realizing actually operating hydrogen supply chains based on "the local production for local consumption model".

Furthermore, by actively deploying this business model in other regions as well, ITOCHU will realize the social implementation of hydrogen on a global scale at the possible earliest time, for enhancing our contribution to and engagement with the SDGs.


# ITOCHU's Clean-tech Business

## 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 of 50 billion JPY and a cumulative energy storage exceeding 5GWh by FYE 2031.

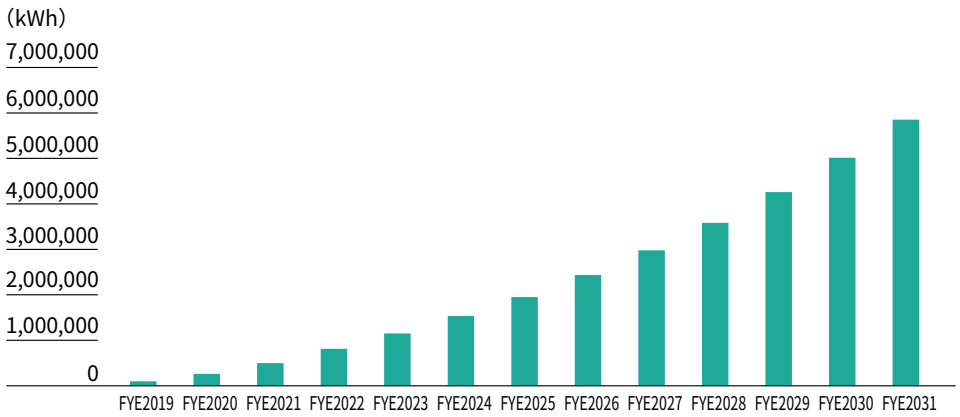
Moving forward, ITOCHU will strengthen our global battery procurement and dealer network to further deploy household storage batteries. At the same time, we will look to develop AI-equipped energy storage systems and to then launch them onto the market (especially, we assume, the U.S. and Australian markets which are expected to grow in the future) with capital and business alliance partners overseas. We will then aim for the development and social implementation of large energy storage systems that use reused batteries for commercial and industrial applications. Moreover, we will accelerate efforts to recycle waste batteries generated by electric vehicles (EVs) or energy storage systems and efforts relating to the traceability of those. This will allow us to develop our recycling-orientated business and to contribute to a further improvement in corporate value.

### Sales and Cumulative Energy Capacity of Our ESS Products

In cooperation with NF Blossom Technologies, Inc.*, ITOCHU developed Smart Star, a unique ESS approximately 43,000 units as of March 2021. 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.

* NF Blossom Technologies, Inc. is a joint venture by NF Corporation and ITOCHU launched in February 2020.

**Cumulative Capacity of ESS Units Sold**




### Other Initiatives

**[ The Launch of Next-generation ESS Products Using AI Technology ]**

**Smart Star L**

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(https://www.smartstar.jp/)(Japanese only).

External view of the Smart Star L

**Smart Star 3 (Released in May 2021)**

ITOCHU started selling a new product called Smart Star 3 in May 2021. This product is the first in the world to convert environmental value into a point system through a household energy storage system and it also has an electric vehicle charging function.

External View of the Smart Star 3

# ITOCHU's Clean-tech Business

**[ Equity Participation in TRENDE Inc. and Future Collaboration ]**

TRENDE Inc. provides an energy retail service with a concept of being easy to understand and economical (Ashita Denki) and an energy retail service to realize solar power generation and reasonable electricity rates with zero initial investment (Hot Denki). It does this under its mission to realize a society which actively utilizes renewable energy. The company is also conducting a demonstration experiment toward the realization of P2P energy trading to contribute to the efficient use and popularization of renewable energy.

ITOCHU and TRENDE Inc. deepened our relationship through the joint development of a power plan only for energy storage systems in 2018. We released Marumaru Denki power plan in April, 2021 as a collaborative model. This is a solar power generation TPO*1 model with no initial cost, energy storage system and flat-rate electricity bill plan. In the future, we will aim to increase environmental value trading utilizing the non-fossil value*2 possessed by renewable energies and to realize P2P energy trading*3 between the customers to whom we provide our services.

*1 TPO is the abbreviation for third party ownership.

*2 Non-fossil value is the environmental value given to power sources which do not use fossil fuels when generating power. A trading market was established in May 2018 to promote the introduction of renewable energies in Japan.

*3 P2P is the abbreviation for peer to peer. P2P power trading refers to direct trading between energy consumers and power generation facility owners.

**[ Capital and Business Alliance in the Automotive Battery Reuse and Recycling Business with PAND in China ]**

ITOCHU undertook a capital increase through a third-party allotment from Shenzhen Pandpower Co., Ltd. – a company engaged in the automotive battery reuse and recycling business in China. We are now involved in the reuse business to convert automotive batteries to stationary storage batteries as part of our lithium-ion rechargeable battery business efforts.

There is a major trend for the electrification of automobiles worldwide. Against this background, it is expected that batteries equipped to the electric vehicles sold will appear on the market in large quantities in the future. Accordingly, the effective utilization of used batteries has become a major issue.

We will utilize the knowledge in the stationary storage battery business we have accumulated thus far to provide competitive energy services to new market areas. These areas will include ancillary services that used to be difficult to install into storage batteries due to cost issues and microgrids for power in underpopulated areas. The core of this will be stationary storage batteries utilizing reused batteries.

**[ 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 and water utility, aiming to contribute solutions to the increasing water problems around the world.

### Water Utility 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.

### 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 desalinization project in the country, subject to a daily volume of 281,000 $m^3$. 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 Desalinization Plants and Reverse Osmosis Membranes Stable Supply of Life-sustaining Water ] – Seawater Desalinization 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 desalinization project in the country, subject to a daily volume of 281,000 $m^3$. 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 Desalinization Plant

# ITOCHU's Clean-tech Business

## 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 23 real estate assets with DBJ Green Building certifications, which accounts to 30.1% in surface area, and 8.5% in number of units among its entire portfolio. At ITOCHU Advance Logistics Investment Corporation, a listed REIT focused on logistics assets, we own 6 assets with DBJ Green Building certifications, which accounts to 78.2% in surface area, and 60.0% 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*, 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. Clean-tech Businesses (Links)

### Renewable Energy

- Investment in Wind Power Generation Plants in Nebraska and Minnesota (https://www.itochu.co.jp/en/news/press/2020/200317_2.html)
- ITOCHU Announces Joint Development of Mutsu Ogawara Onshore Wind Farm Project (https://www.itochu.co.jp/en/news/press/2021/210317_2.html)
- ITOCHU Announces Investment in US-Based Bay4 Energy Services, LLC (https://www.itochu.co.jp/en/news/press/2020/201208.html)
- Announcement of Commercial Operation of Biomass Power Generation in Ichihara City, Chiba Prefecture (https://www.itochu.co.jp/ja/news/press/2020/201217.html)(Japanese only)
- ITOCHU Announces Biomass Power Generation Business in Hyuga City, Miyazaki Prefecture (https://www.itochu.co.jp/en/news/press/2021/210415.html)

### CCS・Carbon Fixation

- ITOCHU Announces Collaboration with Australia-Based MCi on the Utilization of Mineral Carbonation Technologies (https://www.itochu.co.jp/en/news/press/2021/210506.html)

### Alternative Fuels

- ITOCHU Announces Launch of Microalgae Euglena Cultivation Demonstration Project in Overseas Country (https://www.itochu.co.jp/en/news/press/2020/201005.html)
- ITOCHU Announces the Realization of the First Commercial Supply of Sustainable Aviation (https://www.itochu.co.jp/en/news/press/2020/201026_2.html)

# ITOCHU's Clean-tech Business

## Zero-Carbon Emission Fuels (Ammonia, Hydrogen)

- Joint Agreement Reached for GHG Zero-Emission Ship
  (https://www.itochu.co.jp/en/news/press/2020/200430.html)
- ITOCHU group and Vopak Singapore to sign Memorandum of Understanding to study ammonia marine fuel supply chain in Singapore
  (https://www.itochu.co.jp/en/news/press/2020/200612.html)
- ITOCHU Announces Supply of Marine Ammonia Fuel in Japan and Joint Development of Supply Sites
  (https://www.itochu.co.jp/en/news/press/2021/210312.html)
- Agreement Reached on Joint Feasibility Study of the Ammonia Value Chain between Eastern Siberia and Japan to Achieve a Decarbonized Society
  (https://www.itochu.co.jp/en/news/press/2020/201224_2.html)
- ITOCHU Announces Strategic Joint Venture with Air Liquide on Hydrogen Value Chain Development
  (https://www.itochu.co.jp/en/news/press/2021/210226.html)
- ITOCHU Announces the Building of a Local Hydrogen Production for Local Consumption Model Business in Northern Kyushu
  (https://www.itochu.co.jp/en/news/press/2021/210224.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)
- ITOCHU Announces Establishment of a Joint Venture Company on Energy Storage Systems
  (https://www.itochu.co.jp/en/news/press/2019/191125.html)
- Capital and Business Alliance with Automotive Battery Reuse and Recycling Company
  (https://www.itochu.co.jp/en/news/press/2019/191028.html)
- ITOCHU Announces Acquisition of an Equity Stake in TRENDE Inc. for Realizing a Next-Generation, Renewable Energy-Oriented Society
  (https://www.itochu.co.jp/en/news/press/2020/200618.html)
- ITOCHU Announces Launch of New Product in the Smart Star Series of Next-Generation Residential Energy Storage Systems
  (https://www.itochu.co.jp/en/news/press/2021/210303.html)
- ITOCHU Announces Closer Capital and Business Alliance with VPP Japan and Promotion of Sustainable Energy Business
  (https://www.itochu.co.jp/en/news/press/2020/200304.html)

## Fuel & Resources Economy

- Itochu Announces Investment in SkyDrive
  (https://www.itochu.co.jp/en/news/press/2020/200828.html)
- ITOCHU Announces Rollout of Demand Forecasting Service for Apparel Through Business Alliance with Japan Weather Association
  (https://www.itochu.co.jp/en/news/press/2020/201125.html)
- 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 begins demonstration tests using electric trucks
  (https://www.family.co.jp/company/news_releases/2018/20181217_01.html)(Japanese only)
- Family Mart begins demonstration tests using small fuel-cell trucks
  (https://www.family.co.jp/company/news_releases/2020/20201208_03.html) (Japanese only)

## 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)
- Start of Commercial Operation of Oman's Largest Seawater Desalination Plant in Barka
  (https://www.itochu.co.jp/en/news/press/2018/181031.html)

# ITOCHU's Clean-tech Business

## Resources Circulation

- ITOCHU, Borealis and Borouge announce collaboration to enable uptake of renewable polypropylene in the Japanese market (https://www.itochu.co.jp/en/news/press/2020/200925.html)
- ITOCHU Announces Development of Garbage Bag Made From Marine Debris (https://www.itochu.co.jp/en/news/press/2020/201126.html)
- ITOCHU Announces the Cooperative Development of Material Recycling Technology for Multi-layer Film Packaging (https://www.itochu.co.jp/en/news/press/2020/201216.html)
- Introduction of Shopping Baskets Using Marine Plastic Debris as Raw Materials to FamilyMart stores in Tsushima City, Nagasaki Prefecture, etc. (https://www.itochu.co.jp/ja/news/press/2021/210209.html) (Japanese only)
- ITOCHU and Aquafil announce a Strategic Partnership to support and to expand the nylon circular business (https://www.itochu.co.jp/en/news/press/2021/210212.html)
- ITOCHU Announces Use of New Material PAPTIC in Packaging of ROSE GALLERY's Mother's Day Rose Bouquets (https://www.itochu.co.jp/en/news/press/2021/210414.html)
- ITOCHU, Teijin, and JGC Conclude Joint Agreement on the License Business of Polyester Chemical Recycling Technology (https://www.itochu.co.jp/en/news/press/2021/210421.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** | Aspenall Wind Power Generation Project | USA | 43MW | Approx. 120,000 tons / year |
| | Cotton Plains Wind and Solar Power Generation Business | USA | 217MW | Approx. 560,000 tons / year |
| | Mutsu Ogawara Wind Power Generation Project (Under Development) | Japan | 57MW | Estimated 72,000 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 |
| | Dubai Waste Management Project / Dubai Waste Management Company P.S.C. (Under Construction) | UAE | Incineration treatment of 1,900,000 tons / year<br>Generating Capacity: 200MW (planned) | Estimated 2,170,000 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 | N/A* |
| | Hyuga Biomass Power Plant (Under Development) | Japan | 50.0MW | N/A* |

* The lifecycle GHG calculation methodology has not been established