

Environment



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), a reduction in the amount of resources used, a reduction in the amount of waste discharged 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.

Fumihiko Kobayashi
Member of the Board
Executive Vice President
Chief Administrative Officer
Established in April 2020
Revised in April 2022

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.

Therefore, we established the Global Environment Department (current Sustainability Management Division) in 1990 ahead of other trading companies.

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 our environmental 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.

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.

• The ITOCHU Group Environmental Policy (P34)

Structures and Systems

ITOCHU was the first trading company to acquire ISO14001 certification in 1997 and is working to continuously improve its sustainability promotion system. We recognize that our business activities can have an impact on the global environment and society and so are looking to take a precautionary approach to environmental and social risks. To that end, we have built a sustainability management system to assess in advance the impact in regards to new investments in particular together with the products we handle. Under this system we formulate targets every year for items related to environmental risks, environment conserving businesses, saving energy, saving resources, GHG emissions reduction and other climate change related risks. We then assess and analyze the progress, and we move through the PDCA cycle to reliably achieve our targets.

• ITOCHU’s Sustainability Promotion Structure (P12)

ISO 14001 Certification of the ITOCHU Group

Group companies subject to ISO 14001 certification of ITOCHU Corporation

- ITOCHU Corporation
- ITOCHU Automobile Corporation
- ITOCHU Metals Corporation
- ITOCHU Taiwan Corporation

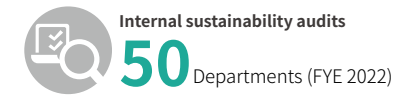


External Audits

We undergo an ISO14001 certification review by the BSI Group Japan K.K. (BSI). In FYE 2022, we underwent a re-certification review. This review led to the maintenance of our certification.

Internal Audits

We conduct internal sustainability audits every year based on ISO14001. In FYE 2022, we audited all 50 departments (including in the form of a self-check for 15 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.

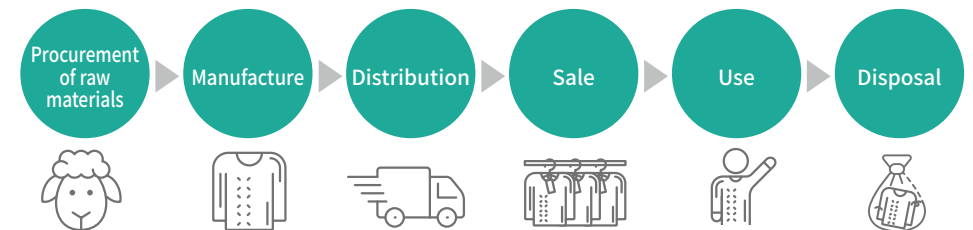


Initiatives

Assessment of Sustainability Risk in 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 sustainability 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 and specific education programs.

* 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.



Environmental Management

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 286 offices over the past 21 years up to the end of FYE 2022. 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.

Sustainability Risk Assessments on New Investment Projects

For business investment projects that ITOCHU undertakes, the impact of the project on society and the environment, as well as the state of governance of the investment target are evaluated in advance using the ESG Checklist for Investment — a checklist that must be submitted when entering into new business investment projects. For example in relation to the risk of climate change, it includes information on energy consumption and GHG emissions. During FYE 2022, there were 76 applications of ESG Checklist. For projects that require expert knowledge, we make request to external expert to conduct investigations in advance. The project is then only undertaken upon confirming that there are no problems in the results of those investigations.



ITOCHU Europe Green Finance Framework

ITOCHU Europe Plc (ITOCHU Europe) published its Green Finance Framework in March 2019 and raised its first green loan of EUR150Million from banks including Mizuho 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 companies. ITOCHU Europe Green Finance Framework was independently reviewed by Sustainalytics and is used for investments in energy efficient projects, renewable energy projects, etc.

• ITOCHU Europe's Sustainability - Environment
 (<https://www.itochu.com/uk/en/sustainability/environment/index.html>)

• 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.

Inquiries from Inside and Outside the Company and Our Response to Them (FYE 2022)



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 (MOODY'S ESG SOLUTIONS FRANCE SAS) for the conformity of our Framework with principles such as the Sustainability Bond Guidelines.

• ITOCHU's SDGs Bond (Sustainability Bond) (P189)

Climate Change (Information Disclosure Based on TCFD Recommendations)

In May 2019, ITOCHU Corporation announced our support for the TCFD* recommendations in recognition of the importance of climate-related financial disclosures. Since then, we continue working to provide information disclosure based on TCFD recommendations.

* TCFD: The Task Force on Climate-related Financial Disclosures established by the Financial Stability Board (FSB).

Policy and Basic Concept Concerning Climate Change

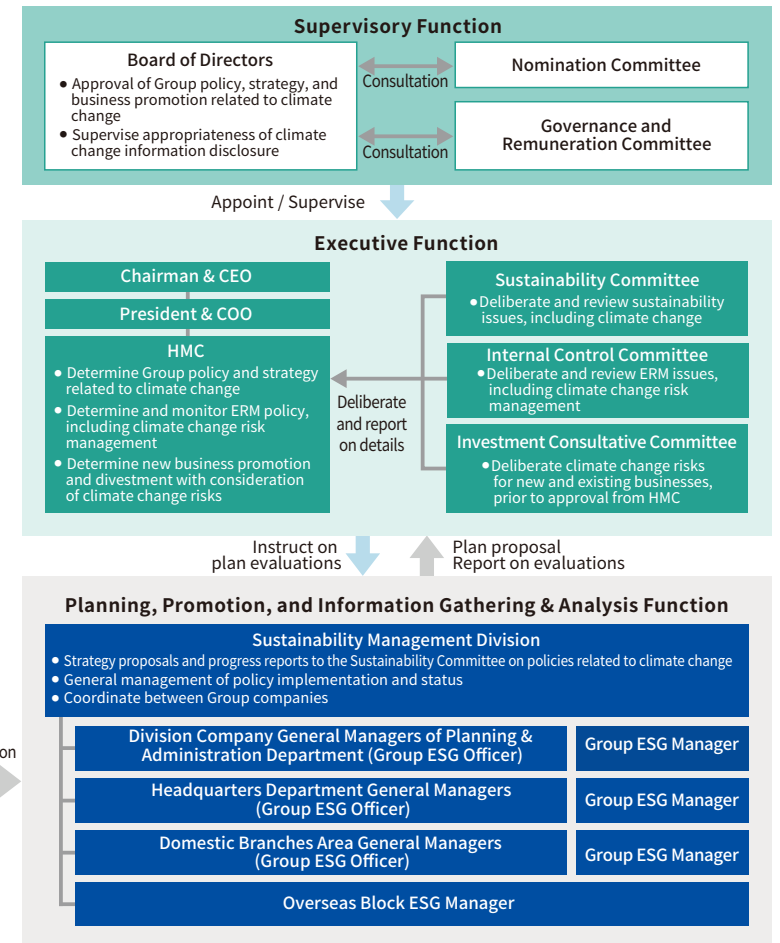
Recognizing climate change as one of the global environmental issues requiring the highest level of urgency, we have worked towards achieving the nationally determined contributions (NDCs) set by the Japanese government in response to the enactment of the Paris Agreement. As a Group engaged in business activities on a global scale, ITOCHU positions climate change and other global environmental issues as one of our highest priority management issues, recognizing that positioning these issues and opportunities and incorporating them into specific initiatives will lead to increases in our corporate value. We define our initiatives related to climate change in the ITOCHU Group Environmental Activities Policies "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." In March 2021, our Board of Directors approved the inclusion of greenhouse gas (GHG) emissions reduction targets for 2030, 2040, and by 2050 as core targets for our Medium-term Management Plan, Brand-new Deal 2023. These targets are in line with Japan NDCs, and will help us contribute to those goals. ITOCHU is committed to fulfilling our social responsibilities. Under our corporate philosophy of the "Sampo-yoshi" approach, we will increase our corporate value and promote collaborations with stakeholders on responses to climate change risks and opportunities.

Governance

ITOCHU views responding to climate change and other sustainability issues as an important management issue. Our Board of Directors gives due consideration to response policies for climate change-related risks and opportunities and GHG reduction targets and initiatives, and incorporates these policies into deliberations and decisions on annual budgets, business plans, and other core matters.

The ITOCHU Sustainability Committee is the body delegated with general management responsibilities concerning the proposal and implementation of the various policies that will enable us to respond to climate change and other sustainability matters. This Committee ascertains, manages, and evaluates climate change-related targets, the implementation status of transition plans, and current environmental and social risks and opportunities. ITOCHU's Chief Administrative Officer (CAO) is the director responsible for climate-related issues and is also a member of the Headquarters Management Committee (HMC). The CAO also serves as chair of the Sustainability Committee. The CAO provides a report to the Board of Directors approximately twice per year on matters deliberated and decided by the Sustainability Committee in addition to a report on the status of major sustainability promotion activities. This creates an organization that allows the Board of Directors to appropriately supervise business and

financial strategies (including reviewing strategy and making divestment decisions) for responding to environmental and social risks and opportunities while giving proper consideration to matters deliberated and decided by the Sustainability Committee. As the executive level, management from each company and administrative division also serving as ESG Officers participate in Sustainability Committee meetings as core members. The Sustainability Committee receives reports on climate-related matters from the Sustainability Management Division and ESG Managers from each company and administrative division. We use these reports towards progress management and monitoring for each policy and various initiatives.



Climate Change (Information Disclosure Based on TCFD Recommendations)

In 2021, our Board of Directors approved the inclusion of growth strategy and GHG emission reduction targets in our Medium-term Management Plan, Brand-new Deal 2023. This decision reflects our commitment to the climate-related issues impacting our Company and we believe this will enable us to lead the industry in realizing a decarbonized society in enhancing our contribution to and engagement with the SDGs through business activities. Based on this decision by the Board of Directors, the Sustainability Committee deliberates specific policies and targets related to decarbonized initiatives. Each business division works continuously to implement these policies and initiatives approved by the CAO, the director in charge, and progress is reviewed by the Sustainability Committee.

The chair of the Sustainability Committee and management from each company and administrative division (ESG Officers) meet with external experts (a Sustainability Advisory Board) once a year to engage in dialogue towards making continuous improvements to our climate change response. Through this dialogue, we promote climate change countermeasures based on an understanding of society's expectations and demands on ITOCHU.

Climate-related Meetings Held by the Board of Directors and Committees	Frequency of Meetings and Reports	Main Items Deliberated or Reported on (FYE 2019 to FYE 2022)
The Board of Directors	<ul style="list-style-type: none"> Periodic reports are made at least once a year Results <ul style="list-style-type: none"> Once in FYE 2019 2 times in FYE 2020 Once in FYE 2021 Once in FYE 2022 	<ul style="list-style-type: none"> FYE 2019 <ul style="list-style-type: none"> Announcement of support for the TCFD recommendations FYE 2020 <ul style="list-style-type: none"> Disclosure based on the TCFD recommendations, calculation of Scope 3 GHG emissions FYE 2021 <ul style="list-style-type: none"> GHG reduction target, Disclosure based on the TCFD recommendations FYE 2022 <ul style="list-style-type: none"> Creation of Medium-term Management Plan, Brand-new Deal 2023. (Growth strategy and GHG emission reduction targets towards leading the industry in realizing a decarbonized society in enhancing our contribution to and engagement with the SDGs through business activities.) Report on ITOCHU SDGs/ESG initiatives
Sustainability Committee	<ul style="list-style-type: none"> Usually held 1 ~ 2 times a year Results <ul style="list-style-type: none"> Once in FYE 2019 2 times in FYE 2020 Once in FYE 2021 2 times in FYE 2022 	<ul style="list-style-type: none"> FYE 2019 <ul style="list-style-type: none"> Announcement of support for the TCFD recommendations FYE 2020 <ul style="list-style-type: none"> Disclosure based on the TCFD recommendations, calculation of Scope 3 GHG emissions FYE 2021 <ul style="list-style-type: none"> GHG reduction target, Disclosure based on the TCFD recommendations FYE 2022 <ul style="list-style-type: none"> Confirmation of Scope 1/2/3 results, status of progress on reduction targets

Strategy

ITOCHU applies the Policy and Basic Concept Concerning Climate Change to analyze scenarios based on TCFD recommendations (analysis of transition and physical risks and opportunities associated with climate change). We use the results of these analyses to realign our business strategy and portfolio.

Climate Change-related Risks and Opportunities

ITOCHU is engaged in various businesses in locations around the world. Each business is impacted by various short-, medium-, and long-term climate change transition risks and physical risks. As such, ITOCHU globally identifies, evaluates, and manages risks and opportunities with the possibility to have a material financial impact on our business, supply chain, and strategy. We conduct such analysis and evaluation throughout each business proposal management process and in our environmental and social risk management processes, which includes climate change.

Material Climate Change-related Risks and Opportunities (risk criteria)

Climate-Related Risks and Opportunities		Impact of Climate-related Risks and Opportunities on the Organization's Business, Strategy, and Financial Planning	Impact Timeline*	Impacted Value Chains	Related Businesses
Transition Risks and Opportunities	Policy and Legal Systems	<ul style="list-style-type: none"> 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. Increased operating costs due to carbon pricing (carbon tax, etc.) or business regulations 	Medium-term, long-term	Upstream, ITOCHU Group	Power generation business, operations, fossil fuel business
	Technical Innovation	Business opportunities that contribute to combatting and adapting to climate change are expected to increase (e.g., renewable energy, energy storage systems, low-carbon fuels)	Short-term, medium-term, long-term	ITOCHU Group	Renewable energy, energy storage system businesses, low-carbon fuel business, new material business
	Changes in Market Conditions	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)	Short-term, medium-term, long-term	Upstream, ITOCHU Group	Fossil fuel business, renewable energy, energy storage systems businesses, new material business, CCUS/emissions credit-related businesses
Physical Risks and Opportunities	Acute Physical Risks and Opportunities	Operations may be impacted or damaged by increased occurrences of abnormal weather patterns (e.g. droughts, floods, typhoons, hurricanes, etc.)	Short-term, medium-term, long-term	Upstream, ITOCHU Group, downstream	Food business, forestry-related businesses, mining business
		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	Short-term, medium-term, long-term	Upstream, ITOCHU Group, downstream	Food business, forestry-related businesses
	Chronic Physical Risks and Opportunities	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.	Medium-term, long-term	Upstream, ITOCHU Group, downstream	Food business, forestry-related businesses

* Short-term: less than 1 year, medium-term, up to 3 years, long-term: 4 or more years

Climate Change (Information Disclosure Based on TCFD Recommendations)

Scenario Analysis

Scenario Selection

We consider which businesses to include in our scenario analysis by evaluating the business sectors that are highly susceptible to the impact of operating environment changes caused by climate change mitigation. From this evaluation, we identified the power generation business, energy business, and coal business as businesses that would be significantly impacted by political, regulatory, and other transition risks. We then selected the Dole business and the pulp business for inclusion in our scenario analysis as business highly susceptible to physical risks related to climate change.

When identifying business sectors that are highly susceptible to the impact of operating environment changes caused by climate change mitigation, we referenced the four non-financial sectors (energy, transportation, materials & buildings, and agriculture, food, & wood products) specified by the TCFD as being highly susceptible to the latent impact of climate change. The abovementioned five businesses are included in these sectors.

Definition of Scenario Groups

When considering our scenario analysis, we referenced materials published by the International Energy Agency (IEA) and the Intergovernmental Panel on Climate Change (IPCC). These materials are highly recognized internationally for the credibility, are referenced in TCFD recommendations, and cover a broad range of business domains. As a result, we set the following two scenarios.

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

* Important input parameters and prerequisites for the climate-related scenarios we used include the following types of parameters.

Parameters Related to the Power Generation Business in the US	2040	
	4°C Scenario	<2°C Scenario
Carbon price/emissions trading	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> \$140/ton
Fossil fuel price	<ul style="list-style-type: none"> Coal: \$108/ton Gas: \$7.5/MMBTU 	<ul style="list-style-type: none"> Coal: \$77/ton Gas: \$5.9/MMBTU
Renewable energy prices	<ul style="list-style-type: none"> Solar utility scale: 7.2 to 8.8 yen/kWh Land-based wind power: 6.2 to 7.7 yen/kWh 	<ul style="list-style-type: none"> Solar utility scale: 6.6 to 7.1 yen/kWh Land-based wind power: 6.2 to 7.7 yen/kWh
Energy production volume by source	<ul style="list-style-type: none"> Coal thermal: 1,016 TWh Gas thermal: 1,480 TWh Renewable energy: 1,488 TWh 	<ul style="list-style-type: none"> Coal thermal: 153 TWh Gas thermal: 959 TWh Renewable energy: 2,560 TWh
CCS dissemination rate	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Coal thermal w/CCS: 64% Gas thermal w/CCS: 18%

Climate Change (Information Disclosure Based on TCFD Recommendations)

Scenario Analysis and Results

For the scenario analysis, we did not limit the timeline range to the short-term. We also added medium- and long-term axes for 2030 and beyond when organizing and evaluating the factors of latent risks and opportunities that could have a significant qualitative or quantitative financial impact for each business. We extracted risk and opportunity factors from the perspective of procurement, business management, and demand, and then organized and evaluated factors of high importance. For particularly important factors, our scenario analysis was based on finance models that reflect defined parameters. We defined these parameters by identifying variables that significantly impact transition and physical risks and opportunities. For the analysis of financial impact level, we measured the latent impact level of climate change and analyzed the financial impact level, including the effect of risk and opportunity measures.

The quantitative information used in our scenario analysis reflects judgments made by ITOCHU based on scenarios prepared by sources such as the IEA. While we worked to increase analysis precision, the analysis does include numerous uncertainties.

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.

Business Profile	Power Generation Business	Energy Business
Timeframe	By 2040	By 2040
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, utilization and storage of carbon dioxide (CCUS). Opportunity : The competitive advantage of renewable energy may increase. This also includes technological progress and cost reduction. 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 (e.g., carbon taxes) toward the realization of a decarbonized society. This may lead global demand for fossil fuels to shrink. Opportunity : Demand for LNG may increase especially in Asia as a transition fuel to realize a decarbonized society and as a fuel to support industrial development. Opportunity : Demand for new energies (e.g., hydrogen, ammonia and renewable fuel) may increase as alternatives to fossil fuels. Opportunity : Business opportunities may increase for carbon dioxide capture, utilization and storage (CCUS) that contributes to a reduction in greenhouse gases.
	Physical Risk : Power generation facilities may be damaged by natural disasters (abnormal weather).	Risk : Possibility production facilities could be damaged in a natural disaster (abnormal weather).
Business environment under the scenario Business impact assessment	Transition risks will greatly squeeze income with carbon taxes and CCUS 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 CCUS costs by switching to measures emphasizing renewable energy. Analysis according to the EBITDA indicator (%)* 	In the 2°C scenario, a global decrease in demand for fossil fuels is projected but it is possible to maintain earnings by capturing new energy demand for fossil fuel alternatives and environmental business opportunities such as CCUS. Assumes a low possibility that natural disasters (abnormal weather) in relevant regions would further increase in scale. (Evaluated multiple scenarios for energy price fluctuations through 2040) Analysis according to post-tax profit (%)
	Measures and policies Business opportunities	<ul style="list-style-type: none"> • 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. • 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.
Financial information	<ul style="list-style-type: none"> • Profit in segment of applicable business (gross profit): 205.8 bn yen (Machinery Company / FYE 2022 results) • Total assets in segment of applicable business: 1,302.7 bn yen (Machinery Company / March 2022 results) 	<ul style="list-style-type: none"> • Profit in segment of applicable business (gross profit): 124.6 bn yen (Energy Division / FYE 2022 results) • Total assets in segment of applicable business: 818.0 bn yen (Energy Division / March 2022 results)

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

I Initiatives in Coal-related Business The business environment and response measures under the 2°C scenario for the coal-related business is as follows.

Business environment under the scenario	Under the 2°C scenario, business could be impacted by technological innovation, regulatory trends, and global energy demand but, overall, thermal coal usage volume will decrease over the medium- and long-term.
Measures and policies	<ul style="list-style-type: none"> • In February 2019, we adopted a policy outlining not developing new coal thermal power plants or acquiring thermal coal mine businesses. • Decided on the withdrawal from thermal coal mine interests to reflect commitment to leading the industry in realizing a decarbonized society. This is in line with the basic policies in the Medium-term Management Plan from FYE 2022: enhancing our contribution to and engagement with the SDGs through business activities. In April 2021, we sold our Drummond interests in Colombia, completing our withdrawal from interests in coal mines that only produce thermal coal. In March 2022, we also sold our interests in Ravensworth North in Australia, which produced both coking coal and thermal coal. • 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.
Financial information	<ul style="list-style-type: none"> • Profit in segment of applicable business (gross profit): 179.0 bn yen (Metals Company / FYE 2022 results) • Total assets in segment of applicable business: 1,285.3 bn yen (Metals Company / March 2022 results)

Climate Change (Information Disclosure Based on TCFD Recommendations)

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.

Business Profile		Dole Business	Pulp Business
Timeframe		By 2030	
Temperature Band Scenario		4°C Scenario	
Main risks and opportunities	Transition	<p>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.</p>	<p>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.</p>
	Physical	<p>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.</p>	<p>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). 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.</p>
Business environment under the scenario Business impact assessment		<p>The decrease in crop harvests attributable to climate change can be supplemented by increasing per-unit crop harvest volume. This can be accomplished by selecting breeds that are viable in high-temperature climates and through improvements to production methods, including cultivation and irrigation methods. We also started pineapple production in West Africa (Sierra Leone, etc.) as part of production site diversification to prepare for weather risks. The above initiatives will make it possible to increase earnings.</p> <div style="display: flex; align-items: flex-start;"> <div style="flex: 1;"> <p>Analysis according to the EBITDA indicator (%)*</p> </div> <div style="flex: 1; margin-left: 10px;"> <p>Risks and opportunities</p> <ul style="list-style-type: none"> Reduction in harvests due to rising temperatures Damage from typhoons <p>Measures and effects</p> <ul style="list-style-type: none"> Diversification of producing regions Improvement in cultivation technologies and efficiency </div> </div>	<p>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.</p> <div style="display: flex; align-items: flex-start;"> <div style="flex: 1;"> <p>Analysis according to the EBITDA indicator (%)*</p> </div> <div style="flex: 1; margin-left: 10px;"> <p>Risks and opportunities</p> <ul style="list-style-type: none"> Decline in production in Finland Softer soil in Finland Carbon tax in Finland <p>Measures and effects</p> <ul style="list-style-type: none"> Increase in production facilities in Finland Measures against soil softening </div> </div>
Adaptation/mitigation measures & policies Business opportunities		<ul style="list-style-type: none"> We will diversify producing areas in preparation for weather risks (e.g., Sierra Leone in West Africa). We will increase per-unit harvest by improving production methods, including selecting breeds that are viable in high-temperature climates, improving seedling cultivation, and installing irrigation equipment. We will use drones and ICT (agricultural chemical spraying location identification, yield prediction and timely and accurate fertilization) to increase the efficiency of production. We will capture the support of environmentally-conscious consumers and increase our brand value by expanding our adoption of recycling-based clean energy and renewable energy such as solar power to contribute to low carbon and water resource protection. 	<ul style="list-style-type: none"> 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. We will give training on the use of special heavy machinery for soft soil and examine even more efficient methods for harvesting in Finland.
Financial information		<ul style="list-style-type: none"> Dole International Holdings net profit: 8.4 bn yen (FYE 2022 results) Total assets in segment of applicable business: 1,979.5 bn yen (Food Company / March 2022 results) 	<ul style="list-style-type: none"> Profit in segment of applicable business (gross profit): 138.7 bn yen (Forest Products & General Merchandise/Logistics Division / FYE 2022 results) Total assets in segment of applicable business: 666.2 bn yen (Forest Products & General Merchandise/Logistics Division / March 2022 results)

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

Climate Change (Information Disclosure Based on TCFD Recommendations)

Impact on Existing Strategies and Business Transition Plans

During our scenario analysis, we ascertained high-impact negative financial risks associated with not implementing climate change measures such as shifting current business strategy or business regions. As a result, we have already begun incorporating specific business transition plans and financial plans (including divestment and investment portfolio reform) into our Medium-term Management Plan, Brand-new Deal 2023 based on the basic policy of leading the industry in realizing a decarbonized society in enhancing our contribution to and engagement with the SDGs through business activities.

Transition Plans for Main Businesses Subject to Transition Risks

- In the power generation business, increase project development towards the goal of increasing our rate of renewable energy (equity interest basis) to over 20% by FYE 2031.
- Selling our Drummond interests, in line with our policy of withdrawal from thermal coal interests. (We will also aim to sell off other thermal coal interests by the end of FYE 2024.)
- Build a next-generation fuel value chain based on hydrogen and ammonia.
- Create distributed power supply platform using AI storage batteries boasting the No. 1 sales in Japan. (Aim for scope exceeding cumulative power storage of 5 GWh by FYE 2031.)

Transition Plans for Main Businesses Subject to Physical Risks

- Increase per-unit harvest volume by selecting breeds that are viable in high-temperature climates and improvements to production methods.
- Expand business into other regions projected to see growth in production volume.

The Division Company Management Committee (DMC) conducts annual reviews of business risks and opportunities, including those related to climate change. Each DMC determines the order of priority for each policy and business, including business transition plans, and then drafts annual plans. The annual financial plans for each company are presented for approval to the HMC, the executive body, and the Board of Directors, the supervisory body, before final approval by the Board of Directors. This final approval is subject to a comprehensive analysis and deliberations from an ESG perspective, including matters related to climate change.

In March 2021, ITOCHU also issued SDGs Bond (Sustainability bond totaling US \$500 million) as part of our financial strategy to enhance our contribution to and engagement with the SDGs through business activities. A portion of these SDGs Bonds were allocated towards R&D-related investments in climate-related subjects like those indicated below. The issuance of SDGs Bonds will increase recognition of ITOCHU Group policies to a broader range of stakeholders and further promote initiatives related to the SDGs.

- GHG emissions reduction initiatives: Renewable energy (power generation, power storage)
- Initiatives to promote GHG emission reduction measures at FamilyMart.

We confirmed that implementing these types of transition plans will enable us to maintain resilient business operations, even in over the medium- and long-term, for Group businesses, products, and services. Beyond the scope of applicability to this scenario analysis, ITOCHU is engaged in diverse business activities in various regions. Those business activities are also impacted by climate change. However, at this point in time, we have determined that the impact on Group overall earnings caused by risks associated with each individual business activity would be limited.

To confirm the impact of climate change on overall Group business, we will continue to conduct analyses of both transition and physical risks. We will further identify and organize fields susceptible to significant impact and evaluate response policies based on an order of priority given to areas requiring a response.

Climate Change (Information Disclosure Based on TCFD Recommendations)

Risk Management

As a Group engaged in global business operations, ITOCHU constantly monitors climate change policies in each country, the status of abnormal weather around the world, and the business risks associated with changes in average temperatures. In the analysis of risks for our entire Group, we manage climate change risks identified based on an analysis of information concerning climate change measures, including regulatory information and abnormal weather information, as one of the 18 major risks (environmental and social risks) facing our company. Identified climate change risks are also examined and evaluated during our investment decision process. Each department in charge of risk management has established an organization for risk identification, evaluation, information management, and monitoring for the consolidated group.

Identification and Evaluation of Climate Change Risks

ITOCHU recognizes risk management as an important management issue. Referencing the COSO-ERM framework, we outline our basic policy on risk management for ITOCHU and prepare the organizations and methods necessary for risk management. Each company and the Sustainability Management Division cooperate regularly to gather information to assess risk importance. This information includes trends in climate change policy and regulations, which mainly consists of existing and new regulations related to climate change in the countries in which we operate, climate change-related technology, and clean-tech business. We also gather information on global abnormal weather and average temperature increases. Importance is identified and assessed using specific indicators and from the perspective of ascertaining the substantive financial or strategic impact that climate risk may have on the Company. For example, for non-consolidated businesses, we identify an important risk as a risk that would cause a 10% change compared to net sales from the previous year, a 20% change in average net income for the most recent past five years, or a 30% change in net assets from the end of the previous year. For consolidated businesses, we would use a change of 10% from previous fiscal year earnings or a 3% change in total capital from the end of the previous year. ITOCHU organizes the information we gather on climate change risks and opportunities into the material climate change-related risks and opportunities (risk criteria), with analysis for both transition and physical risks. We use risk criteria to identify and assess climate change risks in the risk management process for each phase of business, including the start of a new business, existing businesses, handled products, supply chains, Group company business management, and business strategy reviews. Climate change risks gathered during the risk assessment process are deliberated by the Sustainability Committee and other relevant committees to ensure we continuously review risk criteria and the risk identification process. During these deliberations, the relevant committees incorporate opinions received from the Sustainability Advisory Board, which promotes dialogue concerning sustainability between ITOCHU management and external stakeholders.

Integrating Climate Risk Management into the ITOCHU Group Risk Management System

Due to the nature of our broad-based operations, ITOCHU is subject to various risks, including market risks, credit risks, and investment risks. In addition to establishing various internal committees and designated responsible departments, we have created a risk management organizational structure and management methods necessary to address these risks. This organizational structure includes outlining management regulations, investment standards, risk limits, and transaction limits, as well as establishing structures for reporting and monitoring to enable integrated Group risk management.

Climate change risks are one (environmental and social risks) of the 18 major risks subject to Group risk management. We incorporate this risk management into the assessment methods for each business phase shown in the table below (business, product, Group companies, supply chain, strategy, and portfolio).

Evaluation Methods for Each Business Phase

Business Phase	Evaluation Method
Business start	Environmental risk assessments for new investment project (approx. 80 per year)
Business management	<ul style="list-style-type: none"> • Environmental risk assessments for handled products (overall supply chain evaluation) • Group company environmental status survey (2, 3 companies per year) • Supply chain sustainability surveys (ITOCHU and consolidated subsidiaries) • Internal environmental audits based on ISO14001 (ITOCHU Corporation, 3 applicable Group companies) (once per year)
Review business strategy	Consider business strategy, portfolio restructuring

If risks and opportunities are identified via the evaluation methods at each business phase, we use the tool shown below in Risk Assessment & Management Activities to assess the impact of risks and opportunities on business. Risk Assessment & Management Activities include quantitative evaluations such as scenario analyses and stress tests, and qualitative evaluations such as assessments of compliance with investment policy and GHG reduction targets. Quantitative information for risks and opportunities not related to climate change is added to climate change risk and opportunity information that has been quantitatively assessed. This information is then used to analyze the level of contributions to earnings.

Climate Change (Information Disclosure Based on TCFD Recommendations)

Risk Assessment & Management Activities

Managed Factor	Risk and Opportunity Factors (example)	Evaluation & Management Activities (example)
Market	<ul style="list-style-type: none"> Decreased demand due to adoption of a carbon tax on energy (crude oil, gas, LNG) development projects Increased LNG demand and increased demand for renewables and other new energy 	<ul style="list-style-type: none"> Scenario analysis Policy on climate change in relation to investment decisions Conformity to ITOCHU GHG reduction targets Compliance with policy on investment and growth in new energy solutions Earnings contributions
Regulations	<ul style="list-style-type: none"> Carbon tax on international transactions for energy and fuel Adopt volume reduction requirements and emissions trading scheme (cap and trade scheme) in country of operation Increased thermal power generation costs at power plants due to carbon tax and CCUS requirements 	<ul style="list-style-type: none"> Scenario analysis Portfolio stress test Regulatory monitoring Carbon prices Conformity to ITOCHU GHG reduction targets
Technology	<ul style="list-style-type: none"> Mobility electrification Renewable energy and storage battery/lithium battery technology CCUS, hydrogen/ammonia and other low carbon technologies Digitized big data 	<ul style="list-style-type: none"> Monitoring technological trends related to risk factors Increased investment in new energy solutions, CCUS, and new low-carbon technologies Digitization roadmap
Physical risks	<ul style="list-style-type: none"> Chronic effects (e.g., sea level rise, water scarcity increase) Acute effects (e.g., more frequent extreme weather events) 	<ul style="list-style-type: none"> Regular updates to meteorological and oceanographic data for new business development / existing business risk assessments Updates to physical impact data on food products
Reputation	<ul style="list-style-type: none"> Maintaining company appeal in terms of personnel hiring Investor awareness of climate change countermeasures Climate-related lawsuits Impact on acquiring licenses needed for business 	<ul style="list-style-type: none"> Governance for climate change issues Ensuring transparency of performance disclosure Communication with stakeholders (investors, initiatives, NGOs, business affiliates)

• Our risk management, including climate change, related to Company operations (P179)

Climate Change Risk Management Organization

Business Start Phase

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 Investment Consultative Committee and the HMC (Headquarters Management 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. Using a tool called ESG Checklist for investments, we conduct shadow pricing for the purposes of risk analysis of GHG-intensive projects, promotion of low-carbon investments, identification and expansion of low-carbon business opportunities, stress testing, etc. This will be one of the analytical tools for future internal carbon pricing. As a member of the HMC and the Investment Consultative Committee, the CAO, who chairs the Sustainability Committee, participates in the screening of projects that exceed the authority of the division 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.

• Our business investment management (P181)

Business Management Phase

ITOCHU evaluates and manages risks such as climate change, natural disasters, and ESG investment identified in the business start stage and the business management stage through collaboration between responsible committees such as the Sustainability Committee and Internal Control Committee and the departments in charge. Environmental and social risks, including climate change, are summarized as one of the 18 major risks subject to centralized management. Each year, the Sustainability Management Division serves as the executive unit in charge of organizing this information and issuing reports to the Internal Control Committee along with information on the other 17 major risks to integrate the risk information into company-wide risk management system. The Sustainability Committee also deliberates on policies and measures related to climate change risk and how to promote the risk management system, etc. The director serving as chair of the Sustainability Committee reports on the content of deliberations to the Board of Directors approximately twice per year.

Review Business Strategy

Reviews of business strategy related to climate change are conducted by the Division Company Management Committee (DMC), and then by the HMC via the Investment Consultative Committee on which the CAO, who serves as the chair of the Sustainability Committee, also participates as a key member. Final decisions are made following deliberation by the Board of Directors. Scenario analysis based on TCFD recommendations is also used as a tool when considering business strategies and portfolio restructuring. In our analysis, we analyze short-term, medium-term, and long-term climate-related risks and opportunities once a year for their impact on organization business, strategy, and financial planning.

Climate Change (Information Disclosure Based on TCFD Recommendations)

Metrics and Targets and Action Plan

ITOCHU has set the following targets for GHG, electricity usage, and clean-tech business as part of our response to climate change risks and opportunities. When setting these metrics and targets, we reference Japan NDC and IEA materials, which are highly recognized internationally and can cover a wide range of business areas.

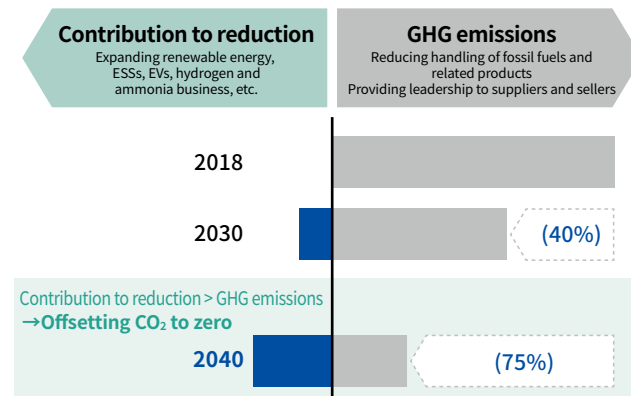
GHG Emissions Reduction Targets

- Metrics (aggregation range): Scope 1/2/3 (consolidated subsidiaries), fossil fuel business and interests (consolidated subsidiaries, equity, general investments)
- Targets:
 - Achieve net zero GHG emissions by 2050.
 - Achieve 75% reduction from 2018 levels by 2040, aim for “offset zero”** through aggressive promotion of businesses that contribute to GHG emission reductions.

*Offset zero: When reduction contributions exceed company GHG emissions

- Achieve 40% reduction from 2018 levels by 2030.

• Trends in our GHG emissions (P85)



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

Electricity Consumption Reduction Targets

	FYE 2022 Results	Single Year Target	Target for the Year Ended March 2023
Electricity Consumption of Japanese Bases of ITOCHU Corporation	Reduction of 0.8% compared with FYE 2021 levels	Reduction of at least 1% annually	Reduction of 30% compared with FYE 2011 levels
	Reduction of 48% compared with FYE 2011 levels		






Climate Change (Information Disclosure Based on TCFD Recommendations)

Clean-tech Business Metrics and Targets (Action Plans)

We set the following metrics and targets (Action Plans) in ITOCHU Clean-tech Business as one of the main metrics (benchmarks) for climate-related risks and opportunities.



* Our clean-tech business (P71)

Action Plan

Materiality	SDGs Targets	Impact Classification	Issues to Address	Business Area	Commitment	Specific Approach	Performance Indicators	Degree of Progress
Machinery Company								
Address Climate Change (Contribute to a Decarbonized Society)		Climate Change Opportunities	Taking counter-measures against climate change	Overall power generation business	We will develop power plants with a good balance between renewable energy power generation and conventional power generation, thereby contributing to the development of countries and regions in a sustainable manner that is optimized for each.	Pursue opportunities to invest aggressively in renewable energy power generation through analyses of countries and regions.	FYE 2031: Target to achieve a renewable energy ratio more than 20% (equity interest basis) and reflect this to the future strategy.	<ul style="list-style-type: none"> We continue to operate wind power projects in the U.S. (Butendiek and Cotton Plains). We invested in wind farms consisting of Kimball Power Plant (Minnesota, U.S.) and South Fork Power Plant (Nebraska, U.S.) in March 2020. 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. We established Tyr Energy Development Renewables, LLC ("TED") to accelerate the development of renewable energy in the U.S. 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 14.2% (as of December 2021).
Address Climate Change (Contribute to a Decarbonized Society)		Climate Change Opportunities	Taking counter-measures against climate change	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.	<ul style="list-style-type: none"> Build a value chain centered on ammonia fuel through the owning and operation of ammonia fueled vessels and establishing fuel supply chain. Reduce carbon emissions from the maritime industry by promoting the spread of ammonia-fueled vessels from 2025 onward. 	<ul style="list-style-type: none"> For the contribution of decarbonization in the field of the international shipping, and creation of the new business, we implement "comprehensive projects", including the development of ammonia fueled vessels, the operations, fuel supply areas. We have created the platforms for the studying and the discussion of the common tasks for introducing ammonia fueled vessels. For the further discussion, we consider to collaborate with Japanese government(Ministry of Land, Infrastructure, Transport and Tourism), Rotterdam port and Singapore port authority. In October, 2020, it has been adopted to the "Green Innovation Fund Project / Development Project for Next-Generation Ships / Development of Ammonia Fueled Ship", a project publicly offered by New Energy and Industrial Technology Development Organization (NEDO).
Address Climate Change (Contribute to a Decarbonized Society)		Climate Change Opportunities	Taking counter-measures against climate change	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.	<ul style="list-style-type: none"> We have invested in a ride sharing service company called Via (2019). We have been providing efficient transport system to mainly rural areas. Also we are currently promoting collaboration with a major logistics company (providing a system for new logistics services). This is improving the efficiency of transportation and logistics to contribute as an aid in reducing our environmental burden. We have been participating in a small electric truck demonstration experiment since January 2019 in Japan and from the knowledge we are trying to establish new business around EVs. Since September 2021, we are participating into a pilot project about battery swapping EV truck which is backed up by Japanese government(Ministry of Environment). We have invested in 2018 in China called Dishangtie Car Rental, an electric commercial vehicle rental and maintenance service. We have engaged a MOU to study about expanding such EV maintenance rental and leasing to abroad countries.
<ul style="list-style-type: none"> Address Climate Change (Contribute to a Decarbonized Society) Ensure Stable Procurement and Supply 	 	<ul style="list-style-type: none"> Water Resources Pollution Prevention and Resource Recycling 	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.	<p>Water Field</p> <ul style="list-style-type: none"> We 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 across a range of industries. <p>Environmental Field</p> <ul style="list-style-type: none"> We operate four municipal solid waste incineration and power generation plants(waste to energy plant) in the U.K, which treat 1.3 million tons of waste annually, accounting for 15% of the UK's waste incineration market, and generate enough electricity to power 160,000 British households. 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. In November 2020, we acquired a 20% stake in Environment Development Company Ltd. (EDCO) , which provides integrated hazardous waste management services in Jubail Industrial City in Saudi Arabia. In August 2021, we started to provide the government of Serbia with partial service of energy-from-waste project. Appropriate treatment of municipal solid waste in City of Belgrade and reduction of environmental pollution and greenhouse gas emissions has begun. Recycling of construction waste has also begun. <p>We are aiming to enhance the functions of our initiatives 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.</p>

Climate Change (Information Disclosure Based on TCFD Recommendations)

Action Plan

Materiality	SDGs Targets	Impact Classification	Issues to Address	Business Area	Commitment	Specific Approach	Performance Indicators	Degree of Progress
Metals & Minerals Company								
Address Climate Change (Contribute to a Decarbonized Society)	 	<ul style="list-style-type: none"> Climate Change Opportunities Capital Introduction 	Taking countermeasures against climate change	<ul style="list-style-type: none"> Resource recycling business Mining business Environmental business Materials-related business 	<ul style="list-style-type: none"> We will realize stable resource supply as our social mission and responsibility while fully considering its environmental impact. We will contribute to climate change issues through businesses that help to reduce greenhouse gases (e.g., lighter-weight vehicles (EVs)) and the stable supply of essential materials. 	<ul style="list-style-type: none"> Take the lead in developing recycling-orientated business. Promote initiatives for the social implementation of hydrogen and ammonia as next-generation resources and raw materials in client industries (e.g. steel and power). 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. 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). Promote initiatives 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. Implementation and expansion of businesses that contribute to developing lighter-weight vehicles and shifting to EVs (e.g., aluminum and copper). 	<ul style="list-style-type: none"> Promote recycling-orientated business. Promote initiatives for the social implementation of hydrogen and ammonia as next-generation resources and raw materials in client industries (e.g., steel and power). 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). Strive to withdraw from thermal coal mine interests. Realize initiatives in businesses that contribute to developing lighter-weight vehicles and shifting to EVs (e.g., aluminum and copper). 	<ul style="list-style-type: none"> 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 initiatives 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 (current TRE HOLDINGS CORPORATION) general recycling company we invested into last year. We agreed with Nel ASA (Norway), who is the world's largest manufacturer of electrolysers that are essential for green hydrogen production, to create a strategic partnership in the hydrogen industry. We and Nel are jointly exploring hydrogen business opportunities. We are promoting 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. We continue 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, which is based on our agreement in February 2021. We made an investment into Australia-based MCI, who possesses mineral carbonation technologies. We are promoting this technology for the Japanese market by introducing and selecting candidates sites for MCI demonstration plants in Japan. We are promoting the examination of other carbon dioxide capture, utilization and storage (CCUS) technologies and various initiatives that will lead to a reduction in CO₂ emissions. As per the Outline of Medium-Term Management Plan that we announced in January 2021, we decided to withdraw from thermal coal mine interests with a perspective of strengthening contribution and initiatives to SDGs. And we divested our Drummond thermal coal mine interests in Colombia that had accounted for the majority of the ITOCHU's thermal coal interests and agreed to divest Ravensworth North coal mine interests in Australia producing both of thermal coal and coaking coal. 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.

Climate Change (Information Disclosure Based on TCFD Recommendations)

Action Plan

Materiality	SDGs Targets	Impact Classification	Issues to Address	Business Area	Commitment	Specific Approach	Performance Indicators	Degree of Progress
Energy & Chemicals Company								
<ul style="list-style-type: none"> Address Climate Change (Contribute to a Decarbonized Society) Ensure Stable Procurement and Supply 		<ul style="list-style-type: none"> Transition Risk Stable Supply of Resources 	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 gas projects with a relatively low environmental burden in fossil fuels and as raw material source of the low-carbon fuel while keeping in mind the stable supply of energy in the transition phase toward the realization of a sustainable society.	Aiming stable supply of energy towers the realization of a sustainable society, we are continuing to hold discussions with superior partners to realize participation in new gas projects as transition fuel and raw material source of the low-carbon fuel.
Address Climate Change (Contribute to a Decarbonized Society)		Climate Change Opportunities	Energy use that takes into consideration local communities and the environment	District heating and cooling	We will promote initiatives toward environmentally friendly regional energy use.	Communicate appropriately with neighboring stakeholders in the Jingu Gaien district.	Maintain the stable operations of district heating and cooling in the Jingu Gaien district and promote the spread of it to neighboring areas.	<ul style="list-style-type: none"> We submitted Project Planning sheet to Tokyo Metropolitan Government in July, 2021. In March, 2022 Tokyo Metropolitan Government notified Jingu Gaien district city planning. We are continuing discussions with the relevant stakeholders to spread and promote district heating and cooling to neighboring areas.
Address Climate Change (Contribute to a Decarbonized Society)		Climate Change Opportunities	Efforts to optimally and continuously supply renewable energy	<ul style="list-style-type: none"> Energy Storage System Power & Environmental Solution 	<ul style="list-style-type: none"> We will continue to stably supply the Energy Storage System that are the key to the efficient and optimal utilization of renewable energy. 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.	<ul style="list-style-type: none"> Number of storage batteries sold. Use of recycled and reused batteries. 	<ul style="list-style-type: none"> We have sold a cumulative total of approximately 50,000 units (485 MWh) of energy storage systems as of the end of March, 2022. 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. In Jun, 2021 Energy Storage Systems brand, "Bluestorage", using reuse-EV-battery, has started its operation. We are continuing to promote it with a view to commercialization and mass production. We continue the recycle demonstration of household storage battery reuse for the establishment of recycle chain and tractability. We are considering the combination of recycler, manufacturer of positive electrode material/ precursor and the company who has the block chain skills.
<ul style="list-style-type: none"> Address Climate Change (Contribute to a Decarbonized Society) Ensure Stable Procurement and Supply 		<ul style="list-style-type: none"> Stable Supply of Resources Capital Introduction 	Working on new fuel initiatives 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.	<ul style="list-style-type: none"> In Oct 2020, we have participated in a collaboration initiative, a first for Japan, in relation to the supply of sustainable aviation fuel (SAF) in partnership with ALL NIPPON AIRWAYS CO., LTD. and Neste Corporation, world's leading producer of renewable diesel and SAF, developing chemical recycling to combat the plastic waste challenge. In Feb 2021, we have agreed to a strategic collaboration on the development of a hydrogen value chain that covers all aspects from upstream to downstream (low-carbon hydrogen production to its utilization), with Air Liquide Japan G.K., the Japanese subsidiary of Air Liquide, the world's largest industrial gas company driving the worldwide hydrogen business, and ITOCHU ENEX Co., Ltd.. The three companies have signed a memorandum of understanding to this effect. In Jun 2021, we, ITOCHU Corporation, ITOCHU ENEX Co., Ltd. and FamilyMart Co., Ltd. have facilitated the use of renewable diesel for delivery vehicles for convenience stores for the first time in Japan. In Aug 2021, we made investment in Raven SR Inc (headquartered in USA) along with Chevron U.S.A. Inc., Hyzon Motors Inc., and Ascent Hydrogen Fund. Raven is a startup company seeking to produce renewable hydrogen and renewable fuels from municipal solid waste. In Aug 2021, we have participated in a project, which produce sustainable aviation fuel (SAF) from biomass materials, as a member of consortium including JERA Co., Inc, Mitsubishi Heavy Industries, Ltd., and Toyo Engineering Corporation with support of New Energy and Industrial Technology Development Organization (NEDO). We will aim at implementing a commercial scale domestic SAF production for sustainable SAF supply in Japan. In Feb 2022, we, ITOCHU Corporation, and Neste have expanded their partnership to grow the availability of SAF in Japan. In the partnership, ITOCHU acts as the sole branded distributor of "Neste MY Sustainable Aviation Fuel" in Japan, making "Neste MY Sustainable Aviation Fuel" available first at the two largest Japanese international airport; Tokyo Haneda and Narita. Through their expanded partnership, ITOCHU and Neste are able to support other domestic and international airlines as well as other fuel suppliers at Haneda and Narita International Airports, going forward.

Climate Change
(Information Disclosure Based on TCFD Recommendations)

Climate Change (Information Disclosure Based on TCFD Recommendations)

Action Plan

Materiality	SDGs Targets	Impact Classification	Issues to Address	Business Area	Commitment	Specific Approach	Performance Indicators	Degree of Progress
Energy & Chemicals Company								
Address Climate Change (Contribute to a Decarbonized Society)		Capital Introduction	Working on initiatives 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.	In Jun 2021, we, ITOCHU Corporation, together with ITOCHU Oil Exploration Co., Ltd., are joining the Geological Carbon Dioxide Storage Technology Research Association to participate in a project to research and develop technologies for underground sequestration of carbon dioxide. We aim to build a business model for the CO ₂ capture chain through this initiative.
Address Climate Change (Contribute to a Decarbonized Society)		Climate Change Opportunities	Working on initiatives to optimally and continually supply renewable energy	Renewable energy independent power producers (IPPs) / renewable energy-related materials procurement / dispersed power source initiatives	<ul style="list-style-type: none"> 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). We will stimulate renewable energy power generation inside and outside of Japan through renewable energy-related materials procurement. 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 grid 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).	<ul style="list-style-type: none"> Scale of our renewable energy assets Scale of our dispersed power sources 	<ul style="list-style-type: none"> We have expanded the third party-owned distributed power supply using renewable energy, by operating approximately 300 on-site photovoltaic power plants(combined output is appx 65,000kW) across Japan through VPP Japan, Inc. We signed capital and business alliances with Clean Energy Connect Co.,Ltd who supply renewable power sources to customer companies through off-site Corporate Power Purchase Agreements(PPAs). We started a demonstration of next generation energy management by AI for optimal control among individual facilities, solar power generation facilities, energy storage systems, in collaboration with iGrid Solutions Inc. We made a decision to construct a biomass power plant in Tahara City, Aichi Prefecture and in Hyuga City, Miyazaki Prefecture.
Food Company								
Address Climate Change (Contribute to a Decarbonized Society)	 	GHG Emissions	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.	<ul style="list-style-type: none"> New boiler and power plant operating situation. Situation of the utilization of raw materials in boilers and power plants. <ol style="list-style-type: none"> Situation of the utilization of all food residue generated in pineapple processing factories. 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 a Decarbonized Society)		Capital Introduction	Taking countermeasures against climate change	Cement substitute material such as slag	We plan to expand the use of sustainable byproducts (slag) as a substitute material for the cement which is vital for construction and civil engineering.	Establish continuous, stable business between Steelworks as the supplier of slag and Users.	Consider investment, participation, etc. in the slag business and focus initiatives 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.

Reflecting Climate Change Issues in Corporate Officer Remuneration System

To enhance the link between management strategy and executive compensation structure, ITOCHU decided to newly incorporate climate change and ESG/SDGs response into the evaluation of each executive from FYE 2021. Director remuneration is determined according to factors that include degree of contribution to ITOCHU Corporation, including addressing climate change, ESG and SDGs, based on a standard amount for each position.

Climate Change (Information Disclosure Based on TCFD Recommendations)

Initiatives

Initiatives in Business Tackling Climate Change

Toward Sustainable Plantation Operation in Response to Climate Change

ITOCHU group company Dole has a banana field on Mindanao Island in the Philippines, where typhoons, droughts, pests and diseases have occurred. Banana production volume decreased by 40% to 440,000 tons in FYE 2017. In light of this situation, we conducted the following analysis.

- Climate change risk assessment (short- and medium-term risks) in the Group company environmental status survey (conducted on 2 to 3 companies per year) as a part of global risk management process.
- As information necessary for risk assessment, we ascertained domestic and international trends related to climate change and problem cases caused by climate change. We used ERM to analyze those trends.

As a result, we recognized that the concentration of production areas was a serious risk. To recover and expand production while dealing with this risk, we introduced irrigation equipment for bananas, consolidated and expanded agricultural land, and implemented measures against pests and diseases. Since similar risks exist in pineapple cultivation, we also decided to improve productivity by investing in equipment for pineapple farms and reviewing cultivation methods. We also promoted diversification of production areas in preparation for abnormal weather risks. Through the above analysis and countermeasures, we were able to maintain banana and pineapple production by making full use of diversified production areas and cultivation techniques, even when several typhoons occurred near Mindanao Island in 2020.



Banana Field

Withdrawal from Interests in Thermal Coal

ITOCHU has invested in several coal interests, but in the future these businesses will likely be subject to carbon tax. Also, countries will introduce energy diversification policies, which will lead to the promotion

of renewable energy and energy saving technology. The changing and more competitive prices of renewable energy risks decreased profits from coal-related businesses, causing these assets to become impaired or fixed.

Based on this risk analysis, in 2019 ITOCHU announced that we will not develop a new coal-fired power plants or acquire thermal coal mine businesses. In February 2019, we sold all interests in the Rolleston thermal mine owned by ITOCHU Minerals & Energy of Australia Pty Ltd (IMEA). In 2021, we declared through our Medium-term Management Plan that we will lead the industry in realizing a decarbonized society. As part of this initiative, we sold off interests in Drummond and Ravensworth North.

We will continue to review existing thermal coal mine businesses as we seek to contribute to the development of a sustainable society while also continuing to meet societal demands for stable energy supply to domestic and overseas consumers.

Full Switchover to Real CO₂-free Electricity at Tokyo Head Office

ITOCHU is sourcing its real CO₂-free electricity, together with a Non-Fossil Fuel Energy Certificate showing the environmental value of not emitting CO₂, 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.

* Press release regarding full switchover to real CO₂-free electricity at Tokyo Head Office(<https://www.itochu.co.jp/en/csr/news/2019/191217.html>)

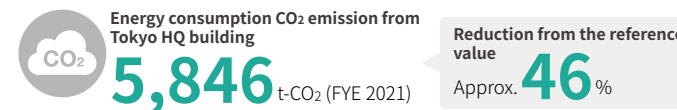
Initiatives for the Tokyo Metropolitan Government Program to Prevent Global Warming

ITOCHU submitted a plan to the Tokyo Metropolitan Government to reduce the CO₂ emissions in our Tokyo Headquarters by 25% from the reference value (average value from FYE 2003 to FYE 2005) over five years from FYE 2021 to FYE 2025 based on the Ordinance on Environmental Preservation. Our energy consumption CO₂ emission in FYE 2021 was 5,846t-CO₂. This is an approximately 46% 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 2021 to FYE 2025 (Submitted in November 2021) (Japanese Only) (<https://www.itochu.co.jp/en/csr/pdf/ondanka-202111.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 (Information Disclosure Based on TCFD Recommendations)

Collaboration with Outside Initiatives

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.

TCFD Consortium

ITOCHU announced its support for TCFD in May 2019, which encourages companies to disclose financial information related to climate change. By participating in the TCFD Consortium*, we will continuously engage in the appropriate disclosure of ITOCHU business risks and opportunities associated with climate change.

*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.

CDP (Climate Change & Water Security)

ITOCHU is actively providing information on ESG initiatives to various stakeholders around the world. As part of these initiatives, 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 and water security questionnaires.

Climate Change Campaign “COOL CHOICE” led by Ministry of the Environment

ITOCHU participates in the Ministry of the Environment-led COOL CHOICE climate change campaign to realize 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 that all employees can do in their daily lives such as sorting waste and promoting recycling in the offices.

◦ COOL CHOICE Website (Japanese Only) (<https://ondankataisaku.env.go.jp/coolchoice/about/>)

GX League Basic Concept formulated by the Ministry of Economy, Trade and Industry

ITOCHU expressed its support for the GX League Basic Concept formulated by the Ministry of Economy, Trade and Industry with the aim of achieving full-scale operation of the Green Transformation League (GX League) in or after April 2023. The GX League will take on the challenge of GX with a view to achieving carbon neutrality and social change in 2050, and will serve as a forum for collaboration between industry, government and academia for the realization of sustainable growth. We will be actively involved in the discussions leading up to the establishment of the GX League, and contribute to the national effort to tackle climate change.

◦ GX League Basic Concept (Japanese Only) (https://www.meti.go.jp/policy/energy_environment/global_warming/GX-league/gx-league.html)

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

Ensuring stable procurement and supply is one of our important ESG issues identified as a material sustainability topic. 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), a reduction in the amount of resources used, a reduction in the amount of waste discharged 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.

Targets and Action Plan

ITOCHU sets qualitative management targets and quantitative performance targets to promote better practices in pollution prevention and resource efficiency. The environmental targets and achievements in FYE 2022 are as follows.

Qualitative Targets

Item		Boundary	Target	FYE 2022 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 in accordance with our EMS.	Properly implemented
	Paper Consumption Reduction Target	ITOCHU Corporation	Reduce paper consumption by raising awareness of our targets internally.	Properly implemented

Quantitative Targets

Item		Boundary	Target Period	Target	Progress in FYE 2022 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	31% Reduction Compared to FYE 2019	Achieved
	Recycling Rate		March 2025	90%	94%	Achieved
Resource Conservation	Paper Consumption	ITOCHU Corporation	March 2025	3% Reduction Compared to FYE 2019	51% Reduction Compared to FYE 2019	Achieved

* ITOCHU Corporation, Overseas offices, Group companies subject to compliance

Climate Change
(Information Disclosure Based on TCFD Recommendations)

Prevention of Pollution and Resource Circulation

Action Plan

Risks						Opportunities		
<ul style="list-style-type: none"> Negative impacts on the natural environment including those related to resource circulation. Deterioration of relations with local communities and subsequent loss of social license to operate. 						<ul style="list-style-type: none"> Increased resource demand due to population growth and enhanced living standards in emerging economies. Creation of customer trust and new business opportunities through stable and sustainable supply chain practices. 		
Materiality	SDGs Targets	Impact Classification	Issues to Address	Business Area	Commitment	Specific Approach	Performance Indicators	Degree of Progress
Textile Company								
Ensure stable procurement and supply	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Supply Chain	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.	<ul style="list-style-type: none"> 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. Work for the goal of "Zero Fashion Loss" and "Carbon Neutrality" committed by Japan Sustainable Fashion Alliance to achieve by 2050. 	<ul style="list-style-type: none"> Following the recycled polyester of "RENU", we have encouraged apparel customers to adopt our expanded ESG product lineup such as lyocell fiber of "KUURA", artificial leather of "MIRUM" derived from biomass, etc. We cofounded Japan Sustainable Fashion Alliance to promote ESG activities in the textile industry.
Machinery Company								
<ul style="list-style-type: none"> Address Climate Change (Contribute to a Decarbonized Society) Ensure stable procurement and supply 	6 CLEAN WATER AND SANITATION 12 RESPONSIBLE CONSUMPTION AND PRODUCTION	<ul style="list-style-type: none"> Water Resources Pollution Prevention and Resource Recycling 	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 <ul style="list-style-type: none"> We operate four municipal solid waste incineration and power generation plants(waste to energy plant) in the U.K, which treat 1.3 million tons of waste annually, accounting for 15% of the UK's waste incineration market, and generate enough electricity to power 160,000 British households. 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. In November 2020, we acquired a 20% stake in Environment Development Company Ltd. (EDCO) , which provides integrated hazardous waste management services in Jubail Industrial City in Saudi Arabia. In August 2021, we started to provide the government of Serbia with partial service of energy-from-waste project. Appropriate treatment of municipal solid waste in City of Belgrade and reduction of environmental pollution and greenhouse gas emissions has begun. Recycling of construction waste has also begun. We are aiming to enhance the functions of our initiatives 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	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Plastic	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.	<ul style="list-style-type: none"> We cowedorked with Familymart and announced that Familymart begun using food containers made from biomass-polypropylene which is linked to renewable resources. We will promote applications for environmentally friendly materials.(June 2021) We announced Capital and Business Alliance with LOOP JAPAN who works to expand a circular platform. We will strengthen the collaborative relationship to expand the sustainable, circular shopping platform business using reusable containers, which is operated by LOOP JAPAN.(July 2021) We have developed a food collection box that is partially made from ocean plastic waste with TerraCycle Japan LLC and FamilyMart. We will gradually roll out this collection box to over 500 FamilyMart stores.(September 2021) YKK ITALIA S.P.A, Aquafil and ITOCHU are jointly developing environmentally friendly recycled zippers and recycled buttons made of ECONYL® nylon manufactured by Aquafil. Through the expansion of a mono-material product businesses, we will continue contributing to increase the recycling rate.
Food Company								
Ensure stable procurement and supply	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Pollution Prevention and Resource Recycling	Supply and use of environmentally friendly resources and materials	Fresh food field	Through the reduction of food loss, we will contribute to the promote the effective use of the resources and reduce the environmental impacts.	The company will brand and commercialize the out-of-spec Dole bananas discarded in Japan as Mottainai bananas and distribute them in the market again.	<ul style="list-style-type: none"> Consider diversifying this movement into processed foods and developing new products by using raw materials other than bananas. Aim to increase the volume of the reused bananas. 	* Because of new commitment, review will be conducted from the next fiscal year.
ICT & Financial Business Company								
Ensure stable procurement and supply	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Pollution Prevention and Resource Recycling	Provide products/ services that support the realization of a sustainable lifestyle.	Reuse / Recycling Business	Contribute to the development of a sustainable society by making most of limited resources through the distribution of used mobile phones and tablets in the Japanese market.	<ul style="list-style-type: none"> Expand supply channels in order to realize a sustainable and stable procurement of resources. Reinforce promotional activities in order to raise the awareness of secondhand mobile phones/ tablets. 	<ul style="list-style-type: none"> Expand product variation and supply channels. Expand distribution outlets. 	* Because of new commitment, review will be conducted from the next fiscal year.

Prevention of Pollution and Resource Circulation

Structures and Systems

Evaluation of Pollution Prevention and Resource Recycling in New Business Investment Projects

For business investment projects that ITOCHU undertakes, the impact of the project on society and environment is evaluated in advance using the ESG Checklist for Investments — a checklist that must be submitted when entering into new business investment projects. For example, it includes monitoring the status of pollution prevention and resource recycling. 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.

Management of Chemical Substances

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.

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.

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.

In order to maintain and improve the abilities of each person in charge at a high level, we distribute its own handbook on chemical-related regulations to all persons in charge. 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.

By taking these initiatives, in FYE 2022, there were no major violations caused (e.g. license suspensions).



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

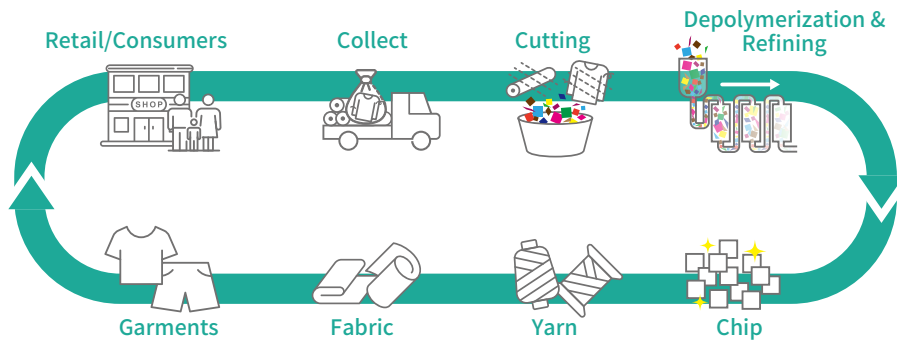
RENU® Project Aims to Realize Circular Economy

In the spring of 2019, we launched a project called the RENU® project (“RENU”), 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/>)

RENU Aims for a Closed Loop Economy



Environmental Impact

The environmental impact of handling recycled polyester at RENU project is as follows.

	FYE 2021	FYE 2022
Feedstock equivalent to T-shirt	3.5 million pieces of T-shirts	6.0 million pieces of T-shirts
Reduced CO ₂	521 tons	893 tons
Reduced Water	875 kiloliters	1,500 kiloliters

Expansion of the Textile Collection Service for a Circular Economy

ITOCHU Corporation and Ecommit Corporation, which develops resource recycling businesses through reusing and recycling, have signed an agreement to expand the textile collection service “Wear to Fashion” in the Japanese market. Starting spring 2022, the service will gradually be offered to all companies and local governments in Japan.

With this new initiative as a part of the RENU Project aimed at solving a problem in the textile and fashion industries, textile products coming out of various sites will be collected and sorted through combining ITOCHU’s network in the textile and fashion industries and Ecommit’s system from collection to resource recycling. Reusable products will be reused utilizing Ecommit’s knowledge, and recyclable polyester products will be made into RENU. In doing so, the amount of discarded textile products will be reduced as much as possible and aims to realize a circular economy.



Prevention of Pollution and Resource Circulation

Leading UK for Collecting and Recycling Casing Tyres

Murffits Group Limited, a company under ITOCHU subsidiary European Tyre Enterprise Limited, collects and processes casing tyres in the UK each year. Using the recovered material it manufactures a range of recycled products such as rubber crumb products for sports surfaces, pathways, children's playgrounds, carpet underlay, modified asphalt and many other industrial applications. Its products are exported to markets across the globe.



Pro gran Crumb Rubber made by casing tyres

Murffits also has been developing and commercializing a proprietary pyrolysis technology, which decompose the tyre feedstock at high temperatures in a vacuum in order to recover various high-value materials such as carbon black and recycled fuel oil. This technology will help promote sustainability initiatives in the tyre industry by replacing one of major raw materials of tyres, carbon black, with a recycled product.

ITOCHU Announces Development of Garbage Bag Made from Ocean Plastic Waste

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

ITOCHU and Sanipak Japan have provided 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.



Garbage Bag Made from Ocean Plastic Waste

* According to research by ITOCHU

Introduction of Shopping Baskets and Collection Box Using Ocean Plastic Waste as the Raw Material in FamilyMart Stores around the Nation

ITOCHU has developed shopping baskets made using ocean 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 28 FamilyMart stores in Tsushima and Iki in Nagasaki Prefecture and elsewhere since February 2021. Also, we have developed a food collection box that is partially made from ocean plastic waste that drifted ashore for the FamilyMart Food Drive program. ITOCHU will gradually roll out this collection box to over 600 FamilyMart stores around the nation to promote community-based SDGs activities.



Initiatives to Reduce the Use of Raw Materials at Convenience Stores

FamilyMart, a subsidiary of ITOCHU, has set the goals of increasing the ratio of environmentally-friendly containers and packaging* to 60% by 2030 and 100% by 2050, as part of its efforts to curb plastic use in FamilyMart Environmental Vision 2050. By reducing the thickness of the packaging film for the rice balls and changing the composition to bio-based materials, the use of petroleum-based plastics, which are used as raw materials, will be reduced by approximately 15% per piece compared to conventional products, and the use of petroleum-based plastics is expected to be reduced by approximately 70 tons annually. We have also begun efforts to replace pasta containers with bioplastics derived from renewable resources. FamilyMart will continue to reduce the use of petroleum-based plastics as raw materials and promote the use of environmentally-friendly materials.

* Packaging using biomass plastics made from plants and materials containing recycled PET

Prevention of Pollution and Resource Circulation

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. We target to commercially launch food containers and packaging materials made of renewable. We have introduced Japan's first pasta meal containers made from renewable PP in the Kanto area in June 2021, and will gradually expand to other areas. We also plan to commercially launch more containers and packaging materials made from 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.

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 operated in 2022, 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 2023, and also plans to start the business under commercial conditions 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, we 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 concluded capital and business alliance 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% CO₂ 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. In February 2022, YKK, which is a global leader in the manufacturing and sale of zippers, Aquafil and ITOCHU are jointly developing environmentally friendly recycled zippers and recycled buttons.

Moreover, ITOCHU plans to enforce Aquafil's nylon 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.



Prevention of Pollution and Resource Circulation

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.

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

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

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

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

We have been selling blast furnace slag produced in Japan and overseas in around 10 countries since about 20 years ago. We handle of volume of blast furnace slag that makes us the number one trader in the world for it. In the future, 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

Collaboration with Outside Initiatives

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	FYE 2016			FYE 2017			FYE 2018			FYE 2019			FYE 2020		
		Recycling	Contribution	Total Amount	Recycling	Contribution	Total Amount	Recycling	Contribution	Total Amount	Recycling	Contribution	Total Amount	Recycling	Contribution	Total Amount
Glass Bottles	Colorless	770,179	0	770,179	814,414	0	814,414	704,782	9,344	714,126	750,030	0	750,030	813,659	0	813,659
	Brown	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Other Colors	158,548	0	158,548	—	—	—	—	—	—	—	—	—	—	—	—
PET Bottles	—	—	—	708	68	776	—	—	—	—	—	—	—	—	—	
Paper Containers and Packaging	30,825	315	31,140	18,306	168	18,474	29,327	102	29,429	9,045	27	9,072	15,288	4	15,292	
Plastic Containers and Packaging	292,375	13,395	305,770	631,798	47,052	678,850	1,057,941	0	1,057,941	1,197,091	0	1,197,091	1,463,900	4,537	1,468,437	
Total		1,251,927	13,710	1,265,637	1,465,226	47,288	1,512,514	1,792,050	9,446	1,801,496	1,956,166	27	1,956,193	2,292,847	4,541	2,297,388

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	FYE 2022
Quantity recycled	Amount of food waste generated (Unit: t)	1,816.9	869.0	992.8	1,125.8	955.9
	Amount of recycling (Unit: t)	620.6	454.9	744.4	775.5	762.0
	Amount of disposal (Unit: t)	1,196.3	414.1	248.4	350.3	193.9
Target (recycling rate target by individual food related operator)	Reference rate	76.8%	77.8%	78.8%	79.8%	80.8%
Percentage recycled	Recycle rate*1	34.2%	52.3%	75.1%	68.9%	81.9%

*1 Recycle rate is calculated as in below formula defined by the Ministry of Agriculture, Forestry and Fisheries.

$$\frac{(\text{Amount of suppressed waste (vs FYE2008)} + \text{Amount of recycling} + \text{Amount of heat recovery} \times 0.95 + \text{Amount of weight reduction})}{(\text{Amount of suppressed waste (vs FYE2008)} + \text{Amount of waste food generated})}$$

* In FYE 2018, 1,001.0 tons were discarded due to a warehouse fire.
 * FYE 2023 recycling rate target:80.8%

Initiative Participation (Activities Through Business and Industry Groups)

ITOCHU is 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

Water Resources Conservation

Structures and Systems

Evaluation of Water Resource Conservation in New Business Investment Projects

For business investment projects that ITOCHU undertakes, the impact of the project on society and environment is evaluated in advance using the ESG Checklist for Investments — a checklist that must be submitted when entering into new business investment projects. For example, it includes assessing the amount of water used and discharged, and checking the level of water stress at business sites. For projects that require expert knowledge, we make request to external expert to conduct investigations in advance. The project is then only undertaken upon confirming that there are no problems in the results of those investigations.

We consider 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 to assess water stress in the region for manufacturing bases affiliated with our group.

Initiatives for Effective Use of Water Resources

Business Activity

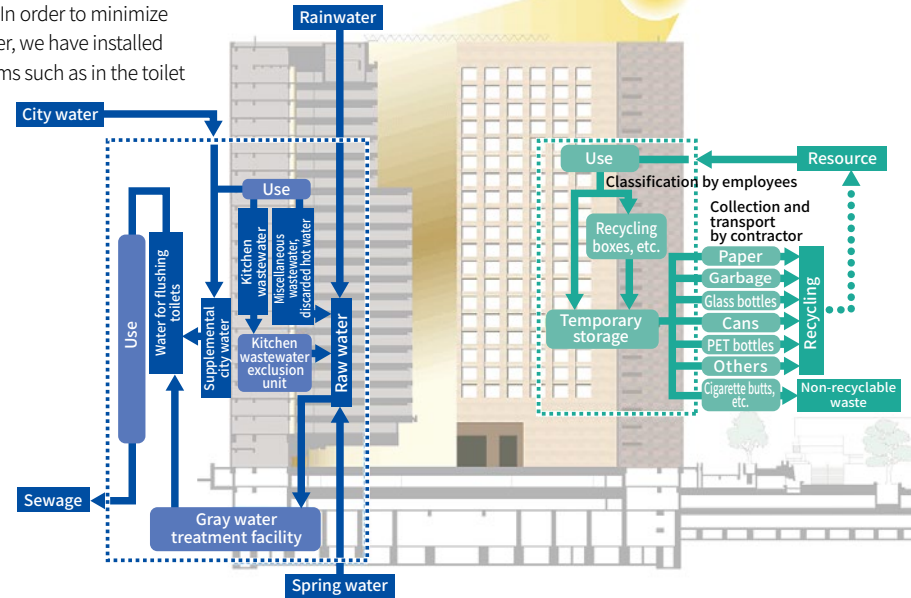
Enhancing Water Efficiency at the Tokyo Headquarter Building

ITOCHU's Tokyo headquarter building has a greywater production mechanism built in since its completion in 1980. This allows 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



Effective Use of Water Resources by ITOCHU Group

ITOCHU recognizes that conservation of water resources is a global issue along with climate change and other issues. As one of the important issues of the Group's environmental policy, we make efforts to reduce water consumption through efficient water use and recycling, as well as take necessary measure to appropriately treat effluents in our domestic and overseas businesses. For example, ITOCHU's group company PRIMA MEAT PACKERS, LTD. and its group companies has listed "Reduction of factory water consumption (well water and supplied water)" as one of the priority issues for its ISO14001 certified sites and is carrying out reduction activities and progress management in order to reduce food production water intensity (water consumption (m³) / ton of food produced). In FYE 2021, the food production water intensity was 15.3 m³/ton, 107% achievement rate against the target 16.4 m³/ton.

* PRIMA MEAT PACKERS, LTD.'s ESG Data Books & Fact Books (<https://www.primaham.co.jp/en/ir/library/factbook/>)

Water Resources Conservation

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.

* Water withdrawal at sites identified as high risk in the Baseline Water Stress parameters (P92)

Overall Water Risk	Number of Sites
Low risk (<10%)	55
Low to medium risk (10-20%)	108
Medium to high risk (20-40%)	61
High risk (40-80%)	4
Extremely high risk (>80%)	3
Total	231

* As of March 2022

Water Related Business

List of Water-related Businesses

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.

Business	Content of Initiatives
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 m ³ . 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.
Seawater desalination plant, and osmosis membrane manufacturing and sales	We started delivering multiple seawater desalination plants to Saudi Arabia in the 1970s. 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 project is a public-private partnership with the Oman government to provide domestic water to the Barka region, which is a severely water-stressed region. 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

Environmental Costs Related to Water

Among the environmental conservation costs (FYE 2022) disclosed in the environmental accounting (P93), associated with water are as follows:

Cost for water pollution prevention, wastewater treatment cost, grey water production cost, monitoring measurement cost and management cost	10,194 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

Collaboration with Outside Initiatives

Japan Business Federation (KEIDANREN) Working Group on Global Environment Strategy under the Committee on Environment and Safety

We are participating in the Working Group on Global Environment Strategy under 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).

The Global Environment Committee of the Japan Foreign Trade Council

We are participating in the Global Environment Committee of the Japan Foreign Trade Council. We are striving to build a decarbonization society, construct a recycling-orientated society, and to support environmental related laws and regulations with other trading companies.

Participation in the CDP (Water Security)

* Participation in Initiatives (P51)

Conservation of Biodiversity

Policy and Basic Concept

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, we are 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 Policy. As such, we will contribute to building a sustainable society.

Biodiversity Policy

1. Biodiversity-friendly Environmental Management

We recognize that our business activities depend on the blessings of biodiversity and that they may affect the ecosystem. Accordingly, we shall promote environmental management that incorporates a wide range of environmental activities (such as interrelated climate change measures, resource circulation measures and biodiversity conservation) into our business activities to build a society in which we coexist with nature.

2. Understanding and Reducing the Impact of the Relationship between Business and Biodiversity

We are aiming for a net positive impact on biodiversity by understanding the relationship between our business activities not only in our group companies but across our entire group and biodiversity from a global perspective. We shall strive to avoid and minimize the impact our business activities have on biodiversity. At the same time, we shall promote the restoration of the ecosystem.

We have established a procurement policy to protect natural forests and forest resources concerning forest commodities (such as timber, natural rubber and palm oil). We shall promote information gathering to confirm there is zero deforestation due to production from protected areas designated by law.

3. Compliance with International Treaties and the National Laws of Each Country

We shall promote the conservation of biodiversity by complying with international treaties on biodiversity (e.g., the Convention on Biological Diversity) and the relevant national laws of each country.

We shall promote social contribution activities to protect endangered species in the areas in which we conduct business activities. This is in addition to not participating in transactions relating to endangered species designated by the Washington Convention (CITES)* with our business activities.

4. Enhancement of Partnerships and Conservation of Local Ecosystems

We shall look to share awareness of biodiversity by cooperating with industry groups, supply chains, NGOs and international organizations. We shall then make our biodiversity conservation efforts more effective.

We shall take into account conservation of biodiversity in the areas in which we conduct business activities. At the same time, we shall promote conservation of biodiversity from the perspective of creating communities that utilize natural resources to contribute to the realization of affluent and safe lives in local communities. We shall do this together with stakeholders such as local residents and NGOs in addition to governmental bodies.

5. Enhancement of Information Sharing and Dissemination

We shall promote understanding of biodiversity to local residents of the areas in which we conduct business activities in addition to our employees through awareness activities.

We shall contribute to raising awareness of biodiversity over the whole of society by continuously disclosing the details, targets and achievement status of our efforts.

* CITES: Convention on International Trade in Endangered Species of Wild Fauna and Flora

Fumihiko Kobayashi
Member of the Board
Executive Vice President
Chief Administrative Officer
Established in April 2022

Conservation of Biodiversity

Targets

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

Targets in Business Activities

Theme	Target	FYE 2022 Results	SDGs
Biodiversity Conservation 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.	Development of schemes to identify biodiversity risks and progress of countermeasures.	
Sustainable Use of Natural Resources 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	<ul style="list-style-type: none"> 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. 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*2. Marine Products: Increase the MSC*3 certified products to 15,000 tons per year within 5 years. 	<ul style="list-style-type: none"> The handling ratio of certified or highly controlled materials is 100% for pulp & wood, and 92% for chips. Palm oil achieved 100% traceability to the mill level in FYE 2022. The volume of MSC/COC in raw materials for marine products increased from 2,600 tons in FYE2021 to 6,500 tons in FYE 2022. 	

*1 Sustainable palm oil: palm oil supplied from supply chains compliant to RSPO and RSPO-equivalent standards
 *2 NDPE (No Deforestation, No Peat, No Exploitation): zero deforestation, zero peatland development, zero exploitations
 *3 MSC (The Marine Stewardship Council): an international NPO established in 1997 to work on spreading sustainable fishing. It is headquartered in London, England.

◦ For goals in other business activities (P144)

Targets in Business-related Areas

Targets	FYE 2022 Action Plans	FYE 2022 Results	FYE 2023 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.	1. We launched the Project for Protecting Green Turtles, an Endangered Species in FYE 2019. 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.	1. Continue promotion of the mangrove planting project in collaboration with Uken Village of Amami Oshima Island	
	2. Promote other environmental conservation projects.	2. We launched a mangrove planting project in cooperation with Uken Village of Amami Oshima Island in FYE 2022. It aims to conserve biodiversity and create future blue carbon credits.	2. Continue promotion of the project for protecting green turtles, an Endangered Species. 3. Promote other environmental conservation projects.	

Conservation of Biodiversity

Structures and Systems

Assessment of the Impact of Biodiversity on New Businesses Investments Projects

For business investment projects that ITOCHU undertakes, the impact of the project on environment and society is evaluated in advance using the ESG Checklist for Investment — a checklist that must be submitted when entering into new business investment projects. For example, it includes assessing the impact on the natural environment and biodiversity such as the impact on ecosystems and the depletion of resources. If an impact is recognized, we conduct a risk analysis, and if necessary, we ask an external expert to conduct additional due diligence. The project is then only undertaken upon confirming that there are no problems in the results of those investigations.

Assessment of the Impact of Biodiversity on Existing Businesses

ITOCHU has introduced an environmental management system (EMS) based on ISO 14001. In order to recognize the impact of its business activities on the environment and society, and to prevent environmental and social risks, we have established a system to evaluate the impact on biodiversity of new investments in advance, as well as products it currently handles. 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 Forestry Products 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 biodiversity conservation.

* Wood, Wood Products, Papermaking Raw Material, and Paper Products (P145)

Consideration for Biodiversity in Mine Closure

In our mineral resource development business, we have prepared Environment, Health, Safety (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. It will require 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 project partners, assessed the environmental impact and formulate mine closure plans as stipulated by the regulations of countries where projects are located, and also put the system in place to check the implementation process of the plan by utilizing EHS check list.

* EHS Guidelines of the International Finance Corporation (IFC)

Biodiversity Conservation in Business-related Areas

ITOCHU is working with stakeholders to protect endangered wildlife.

Mangrove Planting Project in Collaboration with Uken Village of Amami Oshima Island, a World Heritage Site

Located on the west coast of Amami Oshima, Uken Village is striving to nurture and protect its abundant and irreplaceable natural environment, home to many different creatures, so that the next generation will always and proudly cherish it. ITOCHU has been supporting this initiative since 2021, and has started supporting reforestation activities in mangrove forests using *Kandelia obovata** seedlings raised by children in Uken. We shall contribute to biodiversity conservation through mangrove planting, and also aim to create CO₂ credits in the future.

* *Kandelia obovata* is a species of plant that comprises the mangrove forests found in Kagoshima and Okinawa prefectures.

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 & Treetop Walk



Received a letter of appreciation from the Shiga Prefecture Governor Daizo Mikazuki (on the right)



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

Support for a Biodiversity Conservation Program in the Amazon

ITOCHU established its office in Brazil in 1957 and has expanded business in various sectors including forestry and mineral products. Those products benefit from the abundant water and biological resources of Brazil, including the Amazon. Since FYE 2017, with the aim of conserving the environment and biodiversity, we have been engaged in activities to save Amazon manatees, a species in danger of extinction, through support for the “Field Museum Initiative” a biodiversity conservation program in tropical forests in the Amazon promoted by the Wildlife Research Center of Kyoto University in collaboration with the National Institute of Amazonian Research in Brazil, and the construction of a research facility “Field Station”. This project is part of the SATREPS Project, a joint project between the Japan Science and Technology Agency (JST) and the Japan International Cooperation Agency (JICA). With the support of ITOCHU, over the 3 years from FYE 2017, the project aimed to release more than 9 manatees to the wild and more than 20 manatees to the semi-wild. In fact, 27 manatees have been released to the wild and 31 manatees to the semi-wild, and more than 100 local residents have been provided with learning opportunities.

• Support of Amazon Ecosystem Conservation Program (P155)



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

Conservation of Biodiversity

Project for Protecting Green Turtles, an Endangered Species

With the aim of conserving biodiversity, ITOCHU supports conservation activities for the green turtle, which is listed as an endangered species in the Ministry of the Environment Red Data Book, through the certified NPO Everlasting Nature (ELNA). ELNA was established in 1999 with the aim of conserving the marine life in Asia and the surrounding marine environment, and is an organization that has received certification as an NPO from Kanagawa Prefecture.

Thanks to ELNA's 24-hour conservation activities, the number of nesting sites of green turtles on the Ogasawara Islands is gradually increasing with repeated increases and decreases.

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.

• ELNA activity report (Japanese Only) (<https://www.elna.or.jp/rep-support-itochu2021/>)



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.

• Activities to Restore the Tropical Rainforests and Conserve Borneo's Ecosystem (P155)



Afforestation with Tour Participants



Endangered Species of the Orangutan

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)

Collaboration with Outside Initiatives

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, 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.

* Sustainable Procurement of Forest Resources - Palm Oil (P147)

Conservation of Biodiversity

Performance Data

Performance Data in Business Activities

- Performance Data Regarding Forest Certification and Legal Compliance (P146)、Sustainable Procurement Performance Data of Raw Materials for Papermaking (P146)
- Performance Data Regarding Sustainable Palm Oil Procurement (P148)
- Performance Data of Traceability of Meat (P150)
- Performance Data Related to Certification of Marine Products (P152)
- Performance Data of Organic Cotton Procurement (P153)

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	2021	2021 Compared to the Previous Year	2021 Compared to 2000	Notes
Survey Scale	Number of Surveyed Coasts	Coast								
		Chichijima Islands	30	30	30	30	30	—		
		Hahajima Islands	10	10	10	10	10	—		
	Mukojima Islands	10	10	10	10	10	—			
	Total Number of Surveys Conducted	Times	364	280	168	172	202	117%		
	Total Survey Personnel	Person	1,178	1,078	732	692	934	135%		
Results	Number of Surveyed Green Turtle Nests	Nest								
		Chichijima Islands	2,000	1,800	1,500	1,700	1,200	71%	267%	Increasing trend until 2020, fell again in 2021.
		Hahajima Islands	500	500	600	400	330	83%		
	Mukojima Islands	50	30	40	28	33	118%			
		Number of Surveyed Post-hatching Nests (Conducted only on Chichijima)	Nest	1,900	1,200	1,000	1,200	930	78%	
		Baby Turtles Returning to the Sea (Conjecture)	Head	63,700	55,000	43,700	55,000	44,000	80%	
	Escape Rate (Number of Escaped Turtles / Number of Eggs)	%	36	25	32	36	29	81%		
Reviews	The Increasing Trend of Green Turtles in Ogasawara (Conjecture)	—	Increasing trend with repeated increases and decreases							
	Trend in Escape Rate	—	Good with repeated increases and decreases							

* Figures are approximate due to unpublished data. Table based on ELNA activity report (Japanese Only).(<https://www.elna.or.jp/rep-support-itochu2021/>)

Conservation of Biodiversity

Support for a Biodiversity Conservation Program in the Amazon

■ Amazonian Manatee Reintroduction Performance Indicators

Theme	Activities	FYE 2017	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
Return to semi-captive environment	Release of manatees into a semi-captive lake (Manacapuru) or a preserve established in a river (Rio Cuieiras).	<ul style="list-style-type: none"> Began meeting for setting up a lake in Manacapuru. Conducted health checks of 12 manatees. Released 9 manatees into the lake to keep them in a semi-wild state. 	<ul style="list-style-type: none"> Conducted health checks of 24 manatees. Released 12 manatees into the lake to keep them in a semi-wild state 	<ul style="list-style-type: none"> Released 14 manatees into the lake to keep them in a semi-wild state. 	<ul style="list-style-type: none"> No result 	<ul style="list-style-type: none"> No result 	<ul style="list-style-type: none"> No result
Return to the wild	<ul style="list-style-type: none"> Release of manatees into the Amazon River. 	<ul style="list-style-type: none"> Conducted a health check on a manatee that was recaptured after being released into the Amazon River and confirmed that both the length of its body and its weight had increased and that the manatee had adapted to the natural environment after being released into the river. Released 5 manatees into the Amazon River. 	<ul style="list-style-type: none"> Released 10 manatees into the Amazon River. Recaptured one manatee that had been released into the Amazon River and conducted health checks on it. Confirmed through the health checks that the recaptured manatee had grown in both body length and weight and that it had adapted to the natural environment smoothly after its release into the River. 	<ul style="list-style-type: none"> Released 12 manatees into the Amazon River. 	<ul style="list-style-type: none"> Releasing 18 manatees into the Amazon River, installing VHF transmitters and monitoring activities. All the tracked individuals were confirmed to have successfully adapted to the wild. The body weight and body length of the recaptured individuals were also increased. 	<ul style="list-style-type: none"> Due to the COVID-19, new releases were not possible, and monitoring of manatee releases had to be suspended for months. 	<ul style="list-style-type: none"> 13 manatees were released into the Amazon River, and 5 of them were equipped with VHF transmitters for behavior monitoring. Interaction between released and wild individuals and pregnancy of released individuals kept for 16 years were confirmed. The success of the wild adaptation was shown.
Providing environmental training for local residents and raising their environmental awareness	Raising awareness of biodiversity conservation among local residents through a project for returning manatees to the wild.	<ul style="list-style-type: none"> Asked more than 200 local residents to join us when we released the manatees. Through the protection of manatees, we raised their awareness of the importance of preserving biodiversity. Encouraged local fishermen to understand the importance of protecting manatees and had two of them participate in this project. 	<ul style="list-style-type: none"> Raised awareness for biodiversity preservation through an environmental education program and a ceremony for releasing manatees at which 301 and 370 local residents participated, respectively. Two local fishermen took part in this project, continuing their practice from the previous year. 	<ul style="list-style-type: none"> Raised awareness for biodiversity preservation through an environmental education program and a ceremony for releasing manatees at which 350 and 500 local residents participated, respectively. Two local fishermen took part in this project, continuing their practice from the previous year. 	<ul style="list-style-type: none"> Created a mobile exhibition to convey the importance of manatee restoration to the wild. Employment promotion for hunters who used to be manatee poachers. 	<ul style="list-style-type: none"> Employment promotion for hunters who used to be manatee poachers. 	<ul style="list-style-type: none"> Raising awareness of biodiversity conservation among local residents. Implement environmental education programs for local residents with thorough infection control measures. Distributing 500 T-shirts bearing the ITOCHU logo to participants and participants.

Clean-tech Business

Basic Policy and Strategy

ITOCHU has established enhancing contribution and engagement with the SDGs including climate change as one of our basic policies in our Brand-new Deal 2023 medium-term management plan. We will aim for offset zero that also takes into account the amount of greenhouse gas emissions we contribute to reducing through clean-tech business by 2040. This target is 10 years ahead of the Japanese government's target. We will achieve this by being the first in the industry to realize a decarbonized society.

Climate change and other environmental risks are also clean-tech business opportunities at the same time. We will adopt cutting-edge technologies from a medium- to long-term perspective. We will also take the lead in promoting concrete measures which are expected to lead to sustainable growth in the future and which will contribute to a transformation in social structure toward a decarbonized and recycling-oriented society.

Targets

Aim for offset zero* of our greenhouse gas emissions by 2040. Achieve this by proactively promoting business that contributes to a reduction in the amount of greenhouse gas emissions (such as clean-tech business).

* Offset zero : When the amount of greenhouse gas emissions we contribute to reducing exceeds our greenhouse gas emissions

Individual Targets for Each Business Segment

Business Segment	Individual Targets
Renewable Energy	<ul style="list-style-type: none"> • Raise the renewable energy ratio accounted for in the power generating capacity of our equity interests to over 20% by FYE2031. • We are participating in renewable energy business with a total of approximately 1,000 MW such as in Cotton Plains, Texas in the U.S. (wind and solar power) and in Sarulla in Indonesia (geothermal power). • We are currently newly developing renewable energy business of approximately 2,000 MW to achieve a renewable energy ratio of over 20%.
Fuel Ammonia	<ul style="list-style-type: none"> • Build value chains focused on fuel ammonia. Achieve this by owning and operating ammonia-fueled ships and developing fuel supply bases. • Reduce carbon emission from the maritime industry. Achieve this by promoting the spread of ammonia-fueled ships from 2025 onward.
Energy Storage Systems (ESS)	<ul style="list-style-type: none"> • Aim for a cumulative energy storage of over 5 GWh by FYE2031.
Water Infrastructure	<ul style="list-style-type: none"> • Expand our achievements in Europe and Australia to other regions. Continue to build up excellent assets.
Waste Management Project	<ul style="list-style-type: none"> • Expand our achievements in Europe to the Middle East and other regions in Asia. Continue to build up excellent assets.



Initiatives

Top Management Involvement: Hydrogen and Ammonia Task Force

We have stated a strong commitment to being the first in the industry to realize a decarbonized society by enhancing contribution and engagement with the SDGs in our Brand-new Deal 2023 medium-term management plan. Based on this commitment, we began the full-scale operation of a hydrogen and ammonia task force across companies under the control of President & Chief Operating Officer in April 2021. This task force reports on the details of progress made on initiatives in each company every other week. Its field is not limited to hydrogen and ammonia projects; it also discusses other decarbonization projects (such as emissions trading and Carbon dioxide Capture, Utilization and Storage (CCUS)) which will contribute to a reduction in greenhouse gas emissions and whose market is expected to grow.

Introduction to Individual Businesses

1. Renewable Energy (P72~P74)
2. Fuel Ammonia (P75)
3. Hydrogen Related Business (P76~P77)
4. Energy Storage Systems (ESS) (P77~P78)
5. Water Infrastructure (P79)
6. Waste Management Project (P79)
7. CCUS · Carbon Fixation (P80)
8. Green Buildings (P80)
9. Collaboration with Outside Initiatives (P80~P81)
10. Clean-tech Businesses (Web Links) (P81)

Clean-tech Business

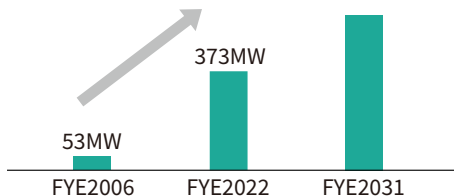
1. Renewable Energy

ITOCHU is involved in various aspects of power generation projects worldwide, aiming to optimize and maximize power generation efficiency. These include construction and refurbishment projects for all types of power plants, Independent Power Producer (IPP) businesses, as well as the operation and maintenance of power plants.

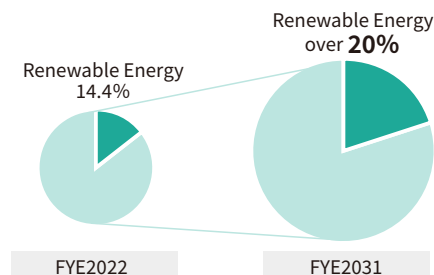
Within the business activities introduced above, we are proactively promoting power generation methods that leverage renewable energy sources such as geothermal, wind, solar, and biomass. We are aiming for a renewable energy ratio of over 20% (equity interest basis) by FYE2031 from the current 14.4% within our overall power generation business.

ITOCHU will continue to proactively promote power generation businesses that utilizes renewable energy inside 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 Energy Ratio of Total Generation



■ Breakdown of ITOCHU's Total Generation and Breakdown Target for FYE2031

	FYE2020	FYE2021	FYE2022	FYE2022	FYE2031 (Target)
	Generation Capacity on Equity Interest Basis (MW)	Generation Capacity on Equity Interest Basis (MW)	Generation Capacity on Equity Interest Basis (MW)	Ratio (%)	Ratio (%)
Wind	185	179	122	14.4%	20%<
Solar/PV Power	83	80	112		
Geothermal	83	83	83		
Biomass	20	33	57		
Renewable Energy (Total)	369	375	373		
Natural Gas	1,621	1,258	1,258	85.6%	80%>
Oil-fired Power	315	315	315		
Coal-fired Power	640	640	640		
Thermal Power (Total)	2,576	2,213	2,213		
Grand Total	2,945	2,588	2,586	100%	100%

For a list of our renewable energy-related businesses please refer to P82. We have announced a policy not to 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>)

Clean-tech Business

Renewable Energy Highlights

Wind Power

ITOCHU has continued involvement in wind power (onshore and offshore) 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 decarbonized 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 2026. 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 Japan 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 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 MW). 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 operate these power plants stably.



Oita-Hiyoshibaru Solar Power Plant

Distributed Solar Power Supply Business

We operate one of the largest on-site distributed power plants in Japan mainly involving the roofs of supermarkets and logistics facilities through our capital and business alliance partner of i GRID SOLUTIONS, Inc. (i GRID). i GRID is involved in the on-site solar power generation business. The company installs self-consumption solar power generation systems at zero initial investment by customers. It then directly supplies power at low cost to facilities over a long period of time. Furthermore, in addition to solar power generation, it integrates and controls distributed power supplies such as storage batteries and electric vehicles with a supply and demand adjustment platform using AI. This allows it to offer solutions for the realization of green transformation in regions centered on customer facilities.

Furthermore, we have entered into a capital and business alliance with Clean Energy Connect Co., Ltd. (CEC) for initiatives to contribute to clean energy by effectively utilizing land in Japan. We have been jointly promoting this business since 2021. CEC is involved in the off-site solar power business. The company develops and owns multiple small and medium-sized solar power plants by utilizing idle land in Japan. It then bundles together green power to supply electricity and environmental value over the long-term to customers such as office buildings in the center of cities. Through CEC, ITOCHU will introduce photovoltaic power plants with additionality in approx. 5,000 locations in Japan with a cumulative total output of 500 MW by FYE2026, aiming to be one of the largest corporate PPA operators in Japan.



i GRID SOLUTIONS On-site Distributed Power Supply



Clean Energy Connect Off-site Distributed Power Supply

Clean-tech Business

Geothermal Power

ITOCHU participates in Sarulla Geothermal Power Project in Indonesia, which is one of the largest of its kind in the world. The project entered construction phase after signing a 30-year power purchase agreement with Indonesia’s state-owned electricity company in 2013. The first and second units were completed and commenced commercial operation in 2017, followed by the third unit in 2018. Indonesia is actively promoting renewable energy, and geothermal is positioned as an important part of it as it holds the world’s largest amount of geothermal resources. Among renewable energy, geothermal energy is able to provide stable power supply to the electricity grid through a whole day, not dependent on the natural conditions such as wind or sunlight. ITOCHU is proceeding with decarbonization through stable power supply in line with energy mixes and policies of each countries or areas.

Biomass Power

The Ichihara Biomass Power Plant (power generation output: 49.9 MW) 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 Japan households. In addition, we decided to build biomass power plants (power generation output of each: 50 MW) in Hyuga in Miyazaki Prefecture in April 2021 and in Tahara in Aichi Prefecture in November 2021.



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.



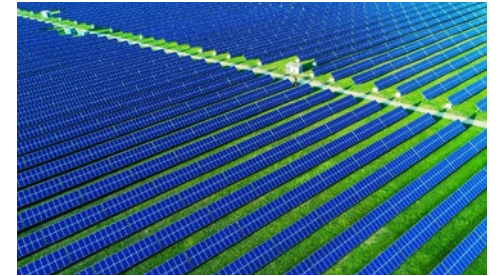
Biomass Fuel (Wood Pellets)

Operation and Maintenance for Renewable Power in North America

ITOCHU provides operation and 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 1,100 sites throughout US by utilizing its remote monitoring system.

Solar Power Development in the United States

Tyr Energy Development Renewables, LLC, a company that specializes in the development of renewable energy in the United States, was established in 2022. Through this company, it will respond to market demand in North America where a large-scale energy conversion is necessary, and seek to contribute to the creation of a recycling-oriented society.



Solar Power Project under construction in U.S.A.

Clean-tech Business

2. Fuel Ammonia

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 CO₂ 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 fuel ammonia 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”).

Moreover, we applied for the Green Innovation Fund Project / Development Project for Next-Generation Ships / Development of an Ammonia Fueled Ship project publicly offered by the New Energy and Industrial Technology Development Organization (NEDO) in October 2021. We made this application with four other companies: Kawasaki Kisen Kaisha, Ltd., NS United Kaiun Kaisha, Ltd., Nihon Shipyard Co., Ltd. and Mitsui E&S Machinery Co., Ltd. Our application was successful. We are aiming to ensure the maritime industry in Japan can maintain a competitive advantage over the long-term in the zero-emission ships field in this project. We will achieve this aim by implementing ammonia fueled ships in society under the leadership of Japan as soon as possible by 2028. We will develop propulsion systems and hulls and own and operate ammonia fueled ships ahead of other countries to achieve that aim.

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

ITOCHU Corporation and ITOCHU ENEX Co., Ltd. reached an agreement to jointly research the construction of a fuel ammonia supply base for ships in Singapore with six companies including Mitsui O.S.K. Lines, Ltd., Pavilion Energy Pte. Ltd. and TotalEnergies Marine Fuels Pte. Ltd. in addition to VOPAK Terminals Singapore Pte Ltd.

ITOCHU Corporation and ITOCHU ENEX Co., Ltd. also reached an agreement to conduct joint development on the supply of fuel ammonia for ships and supply bases in Japan with Ube Industries, Ltd. and Uyeno Transtech Ltd.

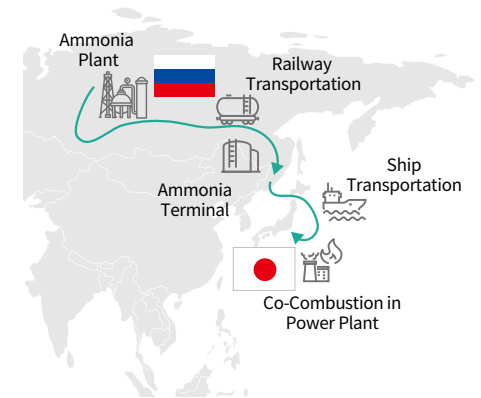
We launched a council with 22 companies and organizations in June 2021 aiming to use ammonia as fuel for ships. (The number of companies and organizations on this council has now expanded to 34.) The council will verify and organize common issues relating to the use of ammonia as fuel for ships.

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 fuel ammonia 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 fuel ammonia 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 non-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

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.



Clean-tech Business

Hydrogen Business Partnership with Nel

ITOCHU Corporation has concluded a Memorandum of Understanding with Nel ASA (headquartered in Oslo, Norway), to create a strategic partnership in the hydrogen industry and the both companies are jointly developing hydrogen business. Nel is the world's largest manufacturer of electrolysers, which are essential for green hydrogen production, in terms of production capacity, size of systems, number of systems delivered and revenues.

Under the MOU, Nel and ITOCHU will jointly explore hydrogen business opportunities, develop tangible projects and, as a future goal, aim to expand the hydrogen business worldwide by establishing a production, transportation and distribution hydrogen value chain together with potential partners in each area of the value chain. Nel and ITOCHU will promote this initiative for the commercial success utilizing Nel's nearly 100 years of experience in the hydrogen industry and ITOCHU's international network, based on their shared belief that hydrogen is crucial for decarbonizing industry. In addition, the parties agreed to evaluate and explore each project and business opportunity together with Osaka Gas Co., Ltd., a leading Japanese utility with experience in gas handling and hydrogen technology.

ITOCHU contributes to a decarbonized society through this collaboration creating synergies with ITOCHU's existing decarbonization business, such as hydrogen and ammonia.



4. Energy Storage Systems (ESS)

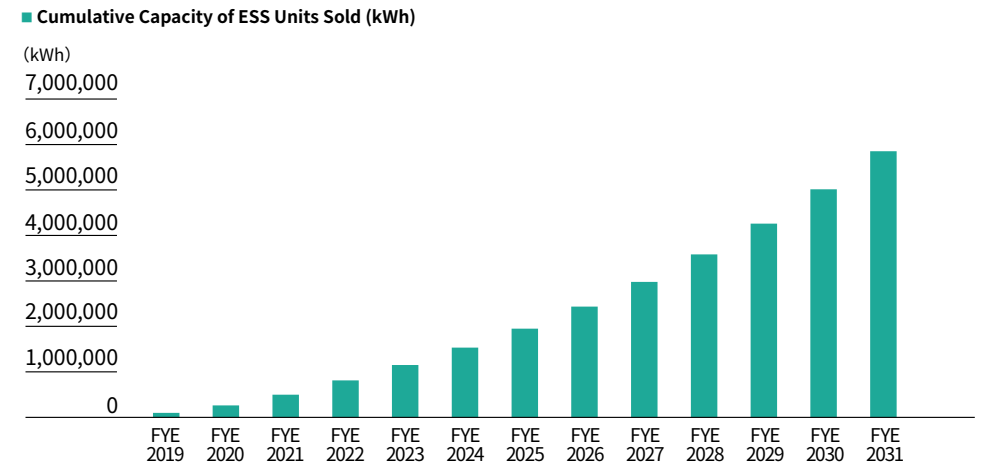
ITOCHU aims to promote decarbonization and reduce environmental footprint by selling energy storage systems (ESS) that enhance and optimize the sustainable supply of renewable energy. As a demonstration of our commitment, we have set a clear sales target for ESS of 50 billion JPY and a cumulative energy 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 50,000 units as of March 2022. 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 Holdings Corporation and ITOCHU launched in February 2020.



Clean-tech Business

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 (Japanese only), (<https://www.smartstar.jp/>)



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

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*1 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*2 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*3 possessed by renewable energies and to realize P2P energy trading between the customers to whom we provide our services.

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

*2 TPO is the abbreviation for third party ownership.

*3 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.

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.

Establishment of IBeeT Corporation – a Joint Venture to Offer a Subscription Service for Distributed Power Sources

We have established a joint venture called IBeeT Corporation together with Tokyo Century Corporation to offer a subscription service for distributed power sources and related equipment that will contribute to the realization of a decarbonized society.

IBeeT will offer Smart Star with a subscription service to promote market introduction in response to increasing demand for home energy storage systems and medium-sized to large energy storage systems.

The company is also considering offering a subscription service for “Bluestorage” medium-sized to large energy storage systems that utilize reused electric vehicle batteries, commercial energy storage batteries, solar panels, electric vehicles and related equipment in the future. IBeeT will aim to build an efficient distributed power source platform at an early stage. For example, it will mutually accommodate surplus power produced from the distributed power sources it owns through this service by using “GridShare” AI.

Clean-tech Business

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.

Seawater Desalination

We have invested and are participating in a seawater desalination project in Victoria, Australia. This facility is capable of satisfying the water demands of approximately 30% of the population of Melbourne, Victoria, supporting the stable supply of water in the area since 2012.

We have invested and are participating as the largest shareholder in a seawater desalination project with the Oman Power and Water Procurement Company (OPWP), which is under the umbrella of the Oman government. The project, situated in Barka, a northern region of the country, is the largest seawater desalination project in the country.

Other Initiatives

■ The Development and Sales of Seawater Desalination Plants and Reverse Osmosis Membranes

Stable Supply of Life-sustaining Water

Seawater Desalination Business Largest in Oman (P62)

6. Waste Management Project

Around the world, 2.01 billion tons of municipal solid waste (about 5,400 cups of Tokyo Dome) are discharged per year. At least one-third of this waste is not treated with a proper way. As a result, decomposing gases emitted from waste cause fires, and the toxic substances that flow from waste mix with lakes, rivers, and groundwater, having a negative impact on the health of people and ecosystems in the surrounding areas. Due to rapid urbanization and population growth, especially in emerging countries, the world's waste volume is expected to reach 3.4 billion tons per year over the next 30 years.

ITOCHU is involved as a developer, investor, and operator in 4 energy-from-waste projects for municipal governments in the United Kingdom, which treat 1.3 million tons of waste annually, accounting for 15% of the UK's waste incineration market, and generate enough electricity to power 160,000 British households. In the Republic of Serbia, we are working with the government of Serbia and City of Belgrade to develop an energy-from-waste project. The project will address one of the biggest environmental and social problems in Serbia - closing and remediating the existing landfill at the Vinca dumpsite, and treat municipal solid waste in City of Belgrade, and generate electricity. Financed by International Finance Corporation (IFC), the European Bank for Reconstruction and Development (EBRD) and Oesterreichische Entwicklungsbank (Austria's Development Bank "OeEB"), the construction of an energy-from-waste facility is under construction. This project will treat 340,000 tons of waste annually and generate enough electricity to power 30,000 households. In addition to these projects, ITOCHU have started an energy-from-waste project in the Emirate of Dubai, the United Arab Emirates in 2020. This project will be one of the largest energy-from-waste projects in the world, which will treat 1.9 million tons of waste annually, accounting for about 45% of the municipal solid waste in UAE, and generate electricity. This project will contribute to reaching the goals set by Dubai Municipality in minimizing the volume of municipal waste in landfills and developing alternative energy sources as well as contribute to sustainable and ecologically friendly waste management.



Clean-tech Business

7. CCUS • Carbon Fixation

ITOCHU invested in the Australia-based company, Mineral Carbonation International (MCI) in August 2021, and has been collaborating with MCI in promoting its technology which produces calcium carbonate by combining by-products of the steelmaking process (slag), coal ash and/or waste concrete with CO₂, to permanently lock away CO₂ in a solid form and utilize as building materials. MCI was, in June 2021, awarded 14.6 million Australian dollars grants from the Australian government's Carbon Capture Use and Storage (CCUS) Fund, and then in November 2021 MCI won the first prize in the COP26 Clean Energy Start-up Pitch Battle in Glasgow, among 2,700 competing companies around the world. MCI is a company that aims to remove a billion tons of CO₂ annually in the future, as its company mission.

Furthermore, ITOCHU acts as a member of a consortium which was awarded a project, worth total 16 billion yen, launched by New Energy and Industrial Technology Development Organization (NEDO), for the research and development, demonstration and surveys to establish the mass transportation technology for liquefied CO₂, by connecting emission sources to utilization/storage points. In addition, ITOCHU has been engaged with the research and demonstration for the mass cultivation of the euglena microalgae, making use of CO₂ from neighboring coal-fired power plant, which again is a project run by NEDO, with a partner, euglena Co., Ltd.



8. Green Buildings

ITOCHU's construction and real estate group are committed to providing real estate and distribution services, especially in housing and commercial facilities as well as distribution facilities and housing complexes, which 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.

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 18 real estate assets with DBJ Green Building certifications and 5 real estate assets with CASBEE real estate valuation certifications which accounts to 29.9% in surface area, and 8.4% 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 50.0% in number of units among its entire portfolio.

9. Collaboration with Outside Initiatives

We are promoting and expanding initiatives for clean-tech business by participating in initiatives. We decide to participate in each initiative upon confirming it conforms to our basic policy and initiatives for the clean-tech business.

Carbon Recycling Fund Institute

The Carbon Recycling Fund Institute was established in August 2019. The fund believes it is necessary to make further initiatives to achieve the target of carbon neutrality by 2050 by using CO₂ as a carbon source. It is a general incorporated association aiming to solve the problem of global warming and to improve energy access around the world at the same time. It will do this by supporting the creation of carbon recycling innovation through research assistance and publicity activities relating to carbon recycling. ITOCHU is also participating as a member.

Tokyo Zero-emission Innovation Bay

Tokyo Zero-emission Innovation Bay was established in June 2020 as a council by research laboratories, factories, business offices, research institutes, and universities located around the Tokyo Bay area, based on the concept proposed by the Japanese Government to develop the Tokyo Bay Area into the world's first Zero Emission Version of Silicon Valley where members can best collaborate, plan and carry out research & development/demonstrations/businesses, and disseminate information around the world. ITOCHU Corporation is listed as its member.

Japan CCS Co., Ltd.

In response to the national policy to develop and promote CCS technology, Japan CCS Co., Ltd. (hereinafter JCCS) was established in May 2008 by a group of major companies with expertise in CCS-related fields, including electric power, petroleum, oil development, and plant engineering. JCCS is a company founded and dedicated explicitly for developing the integrated CCS technology, and conducting feasibility studies and demonstration projects in Tomakomai area, Hokkaido, pertaining to carbon dioxide capture, utilization, transportation and storage technologies. As one of the shareholders, ITOCHU Corporation has been supporting this project. Also, separate from this project in Hokkaido, ITOCHU is jointly conducting research and demonstration project of NEDO to establish liquefied CO₂ ship transportation technology with JCCS as the consortium partners.

Clean-tech Business

The Association for Reciprocal Revitalizations of Renewable Energy and Region (FOURE)

The Association for Reciprocal Revitalizations of Renewable Energy and Region (FOURE) was established in June 2021. It is an organization aiming to expand the introduction of renewable energy that benefits regions and to realize a decarbonized society. The organization is achieving this aim by spreading the introduction of renewable energy as the main power source in regions in Japan and by regions and renewable energy coexisting and mutually developing. ITOCHU has been participating as a member since March 2022.

Japan Sustainable Fashion Alliance

The Japan Sustainable Fashion Alliance was established in August 2021 with ITOCHU serving as a representative alongside GOLDWIN INC. and JEPLAN, INC. The purpose of this alliance is to promote a transition to a sustainable fashion industry with targets of zero fashion loss through appropriate production, appropriate purchasing and recycling, and carbon neutrality in 2050. The alliance will realize its purpose by understanding the impact the fashion industry has on the natural environment and society to come up with solutions jointly for shared issues in the fashion and textile industries.

10. Clean-tech Businesses (Web Links)

https://www.itochu.co.jp/en/business/cleantech/index.html#other_clean_tech_businesses

Clean-tech Business

■ 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. 570,000 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 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	45MW	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	26MW	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	50MW	N/A*
	Tahara Biomass Power Plant (Under Development)	Japan	50MW	N/A*

* The lifecycle GHG calculation methodology has not been established

ESG Data (Environment)

Independent Assurance

The data below marked with ★ and ◆ is independently assured by KPMG AZSA Sustainability Co., Ltd. This assurance is conducted in accordance with the International Standard on Assurance Engagements (ISAE) 3000 and 3410 of the International Auditing and Assurance Standards Board (IAASB).

★ : Total electricity consumption and Scope1・Scope2 and its total attributable to the domestic bases of ITOCHU Corporation, and the waste, waste non-recycled, waste recycled, recycling rate, water consumption, treated water production volume and wastewater volume for the Tokyo Headquarters, and the volume of water withdrawal & wastewater discharge and Scope3 (domestic transportation) attributable to distribution of ITOCHU Corporation.

Independent Assurance Report (P193)

◆ : Total electricity consumption and Scope1・Scope2 and its total attributable to ITOCHU Group, NOx, SOx, VOC emissions of Japanese Bases of ITOCHU Group and hazardous waste of Japanese Bases of ITOCHU Corporation and Japanese Bases of ITOCHU Group.

Independent Assurance Report (P193)

Scope of Aggregation

○: in scope of aggregation

		Japanese Bases of ITOCHU Corporation*1	Group Companies in Japan*2	Overseas Offices*3	Overseas Group Companies*4	
Climate Change	Energy Consumption	Energy Consumption	○	—	—	
		Energy Consumption Attributable to Business Facilities	○	—	—	
		Electricity Consumption	○	○	○	○
		Heat & Steam Consumption	○	○	○	○
		Fuel Consumption	○	○	○	○
	GHG Emission	Scope1・Scope2	○	○	○	○
		GHG Emissions from Business Facilities	○	○	○	○
		Scope1 Total Emissions Breakdown by GHG Type	○	○	○	○
		Scope3	○	○	○	○
		Carbon Intensity	○	○	○	○
Prevention of Pollution & Resource Circulation	Prevention of Pollution	NOx, SOx, VOC	○	○	○	
	Resource Circulation	Waste & Waste Recycling Rate	○	○	○	
		Hazardous Waste	○	○	○	
Water Resources Conservation	Water Withdrawal and Wastewater Discharge	Volume of Water Withdrawal & Wastewater Discharge, Water Withdrawal Amount by Withdrawal Source, Discharge Amount by Discharge Destination, Water Withdrawal in Water Stressed Regions, Water Consumption in Manufacturing Processes that are Highly Dependent on Water Resources (Intensity), Chemical Oxygen Demand (COD)	○	○	○	
Environmental Accounting	Environmental Conservation Costs, Environmental Conservation & Economic Effects	○	—	—	—	

*1 The Tokyo Headquarters, the Osaka Headquarters, 5 Branches (Hokkaido, Tohoku, Chubu, Chugoku & Shikoku, Kyushu). The number of offices including domestic branches: FYE 2018: 6, FYE 2019: 8, FYE 2020: 7, FYE 2021: 6, FYE 2022: 8 (Data coverage in FYE 2022: 100%) Up to FYE 2021, 2 other branches (Hokuriku and Toyama) had been included.

*2 The number of companies covered: FYE 2018: 208, FYE 2019: 220, FYE 2020: 238, FYE 2021: 232, FYE 2022: 233 (Data coverage in FYE 2022: 100%)*5

*3 The number of overseas offices covered: FYE 2018: 15, FYE 2019: 30, FYE 2020: 29, FYE 2021: 49, FYE 2022: 46 (Data coverage in FYE 2022: 100%)

*4 The number of companies covered: FYE 2017: 46, FYE 2018: 299, FYE 2019: 282, FYE 2020: 286, FYE 2021: 274, FYE 2022: 254 (Data coverage in FYE 2022: 100%)*5

*5 The number of companies covered includes all the consolidated subsidiaries, including those held for investment management purposes. 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.

ESG Data (Environment)

Climate Change Performance Data

Energy Consumption

Energy Consumption

		FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
Japanese Bases of ITOCHU Corporation	Purchased and Consumed Non-Renewable Fuel (Unit: MWh)	610	525	691	640	580
	Purchased Non-renewable Power (Unit: MWh)	29,558	29,306	28,747	27,320	27,107
	Other Purchased Non-renewable Energy (e.g., Steam, Heat and Cooling Water) (Unit: MWh)	8,206	7,605	7,385	7,401	6,869
	Generated Renewable Energy (Solar Power Generation*) (Unit: MWh)	58	51	54	60	63
	Total of Energy Consumption Cost (Unit: million JPY)	576	404	537	571	573

* 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 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
Tokyo Headquarters*	130,977	127,824	126,135	121,290	118,419

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

Electricity Consumption

(Unit: 1,000 kWh)

	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
Japanese Bases of ITOCHU Corporation*★	11,084	11,014	10,759	10,231	10,214
Group Companies in Japan	798,054	878,025	1,204,830	1,248,258	1,202,311
Overseas Offices	2,224	2,118	2,098	3,515	3,469
Overseas Group Companies	500,777	590,175	447,462	437,030	422,880
Grand Total of ITOCHU Group◆	1,312,139	1,481,382	1,665,148	1,699,034	1,638,874

* This data has been calculated based on the Act on the Rational Use of Energy for the Japanese Bases of ITOCHU Corporation. The Tokyo Headquarters is sourcing its real CO₂-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

(Unit: GJ)

		FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
ITOCHU Group	Industrial Steam	513,564	494,035	541,932	488,429	520,936
	Non-industrial Steam	17,706	13,998	14,452	15,462	14,532
	Hot Water	10,566	4,781	4,860	5,710	6,285
	Cold Water	106,416	82,139	75,227	67,618	62,874

ESG Data (Environment)

Fuel Consumption

		FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022	
ITOCHU Group	Kerosene (Unit: kL)	4,001	4,468	2,609	3,387	3,086	
	Light Oil (Unit: kL)	35,577	39,362	41,790	48,460	46,262	
	Gasoline (Unit: kL)	10,774	12,598	12,759	12,688	11,547	
	Heavy Oil A (Unit: kL)	25,699	18,289	20,432	18,969	58,137	
	Heavy Oil B and C (Unit: kL)	11,711	16,551	25,942	25,546	13,595	
	Coal (Unit: t)	341,192	333,176	315,148	325,431	292,371	
	Petroleum gas	Liquefied Petroleum Gas (LPG) (Unit: t)	6,321	6,614	11,966	11,294	13,575
		Liquefied Petroleum Gas (LPG) (Unit: 1,000 m ³)	2,454	496	472	469	1,200
		Liquefied Petroleum Gas (LPG) (Unit: kL)	—	—	186	1,209	660
		Petroleum Hydrocarbon Gas (Unit: 1,000 m ³)	2,247	1,860	340	3	3
	Combustible Natural Gas	Liquefied Natural Gas (LNG) (Unit: t)	1,645	3,161	5,698	4,524	11,654
		Other Combustible Natural Gas (Unit: 1,000 m ³)	5,762	14,565	14,115	12,761	7,101
	City Gas, etc.	City Gas (Unit: 1,000 m ³)	204,481	33,552	26,692	46,793	37,107
Other Gas (Unit: 1,000 m ³)		0.017	158	242	404	0	

GHG Emissions

Scope1 • Scope2

(Unit: t-CO₂e)

		FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
Japanese Bases of ITOCHU Corporation★	Scope1	98	91	151	152	138
	Scope2	7,174	6,969	6,740	6,466	6,330
	Scope1+2	7,273	7,060	6,891	6,619	6,468
ITOCHU Group◆	Scope1	1,299,390	1,213,395	1,202,508	1,522,339	1,484,602
	Scope2	617,818	771,204	835,916	799,562	716,176
	Scope1+2	1,917,209	1,984,599	2,038,424	2,321,901	2,200,778

ESG Data (Environment)

GHG Emissions from Business Facilities

(Unit: t-CO₂e)

	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
Japanese Bases of ITOCHU Corporation★	7,273	7,060	6,891	6,619	6,468
Group Companies in Japan	1,280,241	1,361,130	1,526,279	1,611,214	1,507,164
Overseas Offices	1,674	2,769	1,523	2,860	2,892
Overseas Group Companies	628,021	613,640	503,731	701,209	684,254
Grand Total of ITOCHU Group◆	1,917,209	1,984,599	2,038,424	2,321,901	2,200,778

Scope1 Total Emissions Breakdown by GHG Type

(Unit: t-CO₂e)

	Global Warming Potential (GWP)	FYE 2019	FYE 2020	FYE 2021	FYE 2022	
Scope1 Total Emissions	—	1,213,395	1,202,508	1,522,339	1,484,602	
Energy Consumption CO ₂	—	1,161,002	1,158,283	1,233,868	1,214,313	
Total GHG Emissions other than CO ₂ from Energy Consumption (t-CO ₂ e)	—	52,393	44,225	288,471	270,289	
Breakdown	Non-energy Consumption CO ₂	1	0	0	0	
	Methane (CH ₄)	25	0	1,459	118,224	135,884
	Dinitrogen Monoxide (N ₂ O)	298	17,932	18,439	119,278	108,456
	Hydrofluorocarbon (HFCs)	7,390~10,300	34,461	24,327	50,969	25,949
	Perfluorocarbon (PFCs)	—	0	0	0	0
	Sulfur Hexafluoride (SF ₆)	—	0	0	0	0
	Nitrogen Trifluoride (NF ₃)	—	0	0	0	0

* The calculation of GHG uses the GHG Protocol developed by WRI (the World Resources Institute) and WBCSD (the World Business Council for Sustainable Development), and is aggregated 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, business facilities and group companies in Japan. Basic emission factors are used up to FYE 2021, and adjusted emission factors are used for FYE 2022 concerning consumed electricity.

* From FYE 2020, the data has been calculated based on the CO₂ 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 CO₂ conversion coefficient between 2010 and 2012. We used IEA 2019 data for calculation of the figures of FYE 2022.

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

* We started including "CH₄ and N₂O 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", "CH₄ emissions associated with composting and landfilling waste" and "N₂O 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 CO₂ from energy consumption is based on GWP 100 of the IPCC 4th Assessment Report (AR4).

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

ESG Data (Environment)

Scope3

(Unit: t-CO₂e)

	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
Capital Goods*1	145,712	372,734	799,796	660,270	620,742
Fuel & Energy Related Activities*2	240,554	238,657	328,407	310,195	389,213
Domestic Transportation*3★	15,599	14,828	13,041	12,034	10,387
Waste Generated in Operations*4	85,717	229,207	234,592	369,119	349,698
Business Travel*5	66,040	70,933	56,414	20,620	24,577
Employee Commuting*6	23,867	27,017	25,468	25,150	23,409
Franchises*7	0	1,221,525	1,151,693	1,089,140	1,048,474

Emission intensity is selected mainly from the Inventory Database for Calculation of an Organization's GHG Emissions through the Supply Chain issued by the Ministry of Environment of Japan and the Inventory Database for Environmental Analysis (IDEA) developed by National Institute of Advanced Industrial Science and Technology (AIST) and Japan Environmental Management Association for Industry.

- *1 Calculated from the amount of consolidated fixed assets acquired in the relevant fiscal year using the emission intensity per capital goods price.
- *2 Calculated using various emission intensities for fuel, heat, and purchased electricity collected during Scope 1 and Scope 2 calculations. Emissions from the generation of wholesale and retail electricity are also included in this category.
- *3 Emissions related to domestic contracted transportation of ITOCHU Corporation as the shipper are calculated based on the Greenhouse Gas Emissions Calculation and Reporting Manual issued by the Ministry of the Environment and the Ministry of Economy, Trade and Industry.
- *4 Calculated based on various waste and wastewater emissions intensity for the entire ITOCHU Group.
- *5 Calculated based on the consolidated accounting data of the ITOCHU Group. The emissions intensity is used for each type of business trip.
- *6 The consolidated commuting expenses are estimated based on ITOCHU's commuting expenses and the number of employees, and then the figure is calculated using the emission intensity of railway commuting.
- *7 The difference between Scope 1 and Scope 2 of franchisees and Scope 1 and Scope 2 of related consolidated subsidiaries of the ITOCHU Group is recorded.

Carbon Intensity

CO₂ Emissions from ITOCHU's Domestic Sites and ITOCHU Group (Intensity Unit)

(Unit: t-CO₂e)

	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
Per Employee (Total of Japanese Bases of ITOCHU Corporation)	1.660	1.622	1.596	1.552	1.540
Per One Square Meter of All Floor Space (Total of Japanese Bases of ITOCHU Corporation)	0.063	0.061	0.068	0.058	0.057
Per MWh of Electricity Consumption (Grand Total of ITOCHU Group)	0.506	0.524	0.502	0.471	0.437

* The denominators of intensity figures per one square meter of all floor space are as follows:
 FYE 2018: 115,905m², FYE 2019: 115,842m², FYE 2020: 101,545m², FYE 2021: 114,920m², FYE 2022: 113,434m²

CO₂ Emissions by Beverage Manufacturing Companies (Intensity Unit)

Business Profile	Company Name (Boundary)	Unit	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
Beverage Manufacturing	Clear Water Tsunan Co., Ltd. (Soft drink manufacturing and sales business)	CO ₂ e / production capacity in kL	Non-consolidated	0.091	0.081	0.088	0.080

ESG Data (Environment)

Pollution Prevention and Resource Circulation Performance Data

Pollution Prevention

NOx, SOx, VOC

(Unit: t)

		FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
Japanese Bases of ITOCHU Group *1	NOx (Nitrogen Oxides) ◆*2	1,976	1,337	1,378	1,569	1,346
	SOx (Sulfur Oxides) ◆*2	425	442	514	416	416
	VOC (Volatile Organic Compounds) ◆*3	394	419	424	445	400
Overseas Bases of ITOCHU Group	NOx (Nitrogen Oxides) *2	0	1,403	1,293	1,458	1,656
	SOx (Sulfur Oxides) *2	0	795	648	333	545
	VOC (Volatile Organic Compounds) *3	106	168	168	182	192
Grand Total of ITOCHU Group	NOx (Nitrogen Oxides) *2	1,976	2,740	2,671	3,027	3,002
	SOx (Sulfur Oxides) *2	425	1,237	1,162	749	961
	VOC (Volatile Organic Compounds) *3	500	587	592	627	592

*1 The data are calculated for the business bases located in Japan.
 *2 NOx and SOx emissions are calculated for soot and smoke generating facilities under the Air Pollution Control Act.
 *3 VOC emissions are calculated for compounds that fall under the VOC 100 types*4 indicated in the notification of the Air Pollution Control Act by the Ministry of the Environment. The main compounds to be counted include ethyl acetate, propyl acetate and isopropyl alcohol.
 *4 See Attachment 1 of "Enforcement of the Act to Partially Amend the Air Pollution Control Act" (Notice of the Ministry of the Environment, No. 050617001, Kankan Daihatsu, dated June 17, 2005).

ESG Data (Environment)

Resource Circulation

Waste and Waste Recycling Rate

		FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
Tokyo Headquarters★	Waste (Unit: t)	698	680	767	465	469
	Waste Non-recycled	43	48	44	31	30
	Waste Recycled	655	632	723	434	439
	Recycling Rate (Unit: %)	93.8	92.9	94.3	93.4	93.7
Osaka Headquarters, Branches and Other Business Facilities in Japan	Waste (Unit: t)	—	6,758	1,354	1,226	2,265
Group Companies in Japan	Waste (Unit: t)	177,526	89,210	149,949	248,465	141,355
Overseas Offices	Waste (Unit: t)	5	17	9	41	238
Overseas Group Companies	Waste (Unit: t)	141,392	364,476	461,018	504,085	504,296
Grand Total of ITOCHU Group	Waste (Unit: t)	319,621	460,844	613,097	754,283	648,623
	Waste Non-recycled	—	—	450,376	584,567	194,374
	Waste Recycled	—	—	162,721	169,716	454,249
	Recycling rate (Unit: %)	—	—	27	23	70

* The waste 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.

Hazardous Waste

(Unit: t)

		FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
Japanese Bases of ITOCHU Corporation • Japanese Bases of ITOCHU Group◆*1*2		0.3	0.3	329	750	251
Overseas Offices • Overseas Bases of ITOCHU Group		—	—	1,111	1,111	1,063
Grand Total of ITOCHU Group		—	—	1,440	1,861	1,314

*1 The data are calculated for the business bases located in Japan.
 *2 The amount of specially controlled industrial waste specified in the "Waste Disposal and Public Cleansing Law" is totaled.
 * The data of FYE 2018 and FYE 2019 include only those of Tokyo Headquarters and Osaka Headquarters of ITOCHU Corporation.

Paper Consumption

(Unit: 1,000 sheets (A4 equivalent))

		FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
Japanese Bases of ITOCHU Corporation	Copy Paper Consumption	32,949	30,711	26,913	19,167	14,916

ESG Data (Environment)

Water Resources Performance Data

Water Withdrawal and Wastewater Discharge

Volume of Water Withdrawal & Wastewater Discharge

(Unit: 1,000 m³)

		FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
Tokyo Headquarters★	City Water Usage	43	47	42	29	30
	Treated water production volume	34	31	34	25	27
	Wastewater Discharge	58	59	60	41	41
Osaka Headquarters, Branches and Other Business Facilities in Japan*	Water withdrawal	—	—	73	61	84
	Wastewater discharge	—	—	170	133	169
Japanese Bases of ITOCHU Corporation★	Water withdrawal	—	—	115	90	115
	Wastewater discharge	—	—	230	173	210
Group Companies in Japan*	Water withdrawal	—	32,335	21,947	24,540	25,228
	Wastewater discharge	14,629	51,913	9,594	14,269	14,926
Overseas Offices*	Water withdrawal	—	5	5	16	31
	Wastewater discharge	6	5	5	15	31
Overseas Group Companies*	Water withdrawal	—	106,182	72,064	48,494	32,747
	Wastewater discharge	11,832	34,380	16,394	21,723	16,319
Grand Total of ITOCHU Group	Water withdrawal	—	—	94,132	73,140	58,120
	Wastewater discharge	—	—	26,223	36,180	31,486

* 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.

* The amount of wastewater discharge from Japanese Bases of ITOCHU Corporation includes wastewater from sewage treatment plants that receive and treat sewage from third parties, so the amount of wastewater greatly exceeds the amount of water withdrawal.

ESG Data (Environment)

Water Withdrawal Amount by Withdrawal Source

(Unit: 1,000 m³)

		FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
ITOCHU Group	Supplied Water Usage, Industrial Water	12,952	9,560	10,764	12,119	11,655
	Groundwater Withdrawal	17,118	92,899	46,764	20,516	16,702
	Water Taken from Rivers, Lakes, Rainwater	43,919	31,740	26,323	31,402	19,729
	Water Taken from Seawater	0	4,339	10,269	9,068	10,015
	Others (Produced Water, etc.)	0	0	11	34	19
Grand Total		73,989	138,538	94,132	73,140	58,120

Discharge Amount by Discharge Destination

(Unit: 1,000 m³)

		FYE 2019	FYE 2020	FYE 2021	FYE 2022
ITOCHU Group	Water Discharged to Treatment Facility (e.g. Sewage)	57,669	3,664	7,181	9,893
	Water Discharged to Groundwater	9,243	5,731	11,639	6,464
	Water Discharged to Rivers, Lakes	12,992	10,464	10,251	12,581
	Water Discharged to Sea	6,453	6,130	6,679	1,905
	Others	—	—	431	642
Grand Total		86,358	25,989	36,181	31,486

ESG Data (Environment)

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) (P62) is as follows.

		FYE 2019	FYE 2020	FYE 2021	FYE 2022
High Risk (40-80%)	Number of Sites	5	6	7	4
	Water Withdrawal (1,000 m ³)	188	2,201	2,786	2,449
Extremely High Risk (>80%)	Number of Sites	2	2	3	3
	Water Withdrawal (1,000 m ³)	583	623	1,096	1,362

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

Category	Boundary	Unit	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022
Beverage Manufacturing	Clear Water Tsunan Co., Ltd. (Soft drink manufacturing and sales business)	Water Consumption m ³ / Production Volume in kL	Not-Consolidated	2.01	1.95	1.85	1.82

Chemical Oxygen Demand (COD)

Category	Boundary	Unit	FYE 2019	FYE 2020	FYE 2021	FYE 2022
Chemical	C.I. TAKIRON Corporation (factory)	mg/l	3.90	2.78	2.20	2.80

ESG Data (Environment)

Environmental Accounting

Environmental Conservation Costs

(Unit: 1,000 JPY)

	Classification	Items	FYE 2022
Japanese Bases of ITOCHU Corporation	Costs inside Business Areas	Costs related to pollution prevention, global environmental conservation, and resource recycling	917,191
	Upstream & Downstream Costs	Additional costs for reducing environmental impact, green procurement costs, and containers and packaging recycling.	10,831
	(Green Procurement Costs)		5,836
	Management Activity Costs	Costs for the development and operation of environmental management systems and environmental education for employees	226,933
	Research and Development Costs	R & D costs for products contributing to environmental conservation	500
	Social Activity Costs	Costs for environmental improvement measures such as nature conservation, greening, beautification, and landscape preservation, as well as donations and support to organizations engaged in environmental conservation	6,310
	Costs to Address Environmental Damage	Costs for nature restoration, compensation for damages related to environmental conservation, etc.	20,000
	Grand Total of Japanese Bases of ITOCHU Corporation		

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

Environmental Conservation & Economic Effects

		FYE 2022	
		Environmental Conservation Effects	Economic Effects (Unit: 1,000 JPY)
Japanese Bases of ITOCHU Corporation	Paper Usage	4,215 thousand sheets	2,847
	Electricity Usage	17,000 kWh	-2,455
Tokyo Head Office	Waste Emissions	-4 t	-18
	Water Usage	-1.413 m ³	286

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

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. As of March 2022, we estimate the cost of waste disposal at JPY 10 million, which is a reasonably estimable amount (shadow cost) for future environmental liabilities.