

Disclosures Based on the TCFD Recommendations

March 2022

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Note on forward-looking statements

Forecasts and forward-looking statements contained in this document are based on the information available as of the date of its release and certain assumptions and forecasts. Accordingly, actual performance, results, etc. may differ materially from the forecasts and forward-looking statements depending on the future economic trends, market prices, and various other uncertainties. The Company and information providers will not be liable for any damage caused by errors in the information contained in this document or damage incurred based on this information.

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1. Disclosures based on the TCFD recommendations

At the Itochu Enex Group, we have been delivering energy and services to people stably for more than 50 years under our Corporate Philosophy, "The Best Partner for Life and Society - with Energy, with the Car, with the Home -." We quickly got involved in environmental business and next-generation energy in response to the rapid move toward a carbon-free society. In 2021, we formulated the Sustainability Policy, and further, identified climate change actions as a material issue that we should prioritize and address. We are implementing an action plan to contribute to the creation of a decarbonized society and accelerating initiatives to solve sustainability issues in a Group-wide manner over the medium and long terms.

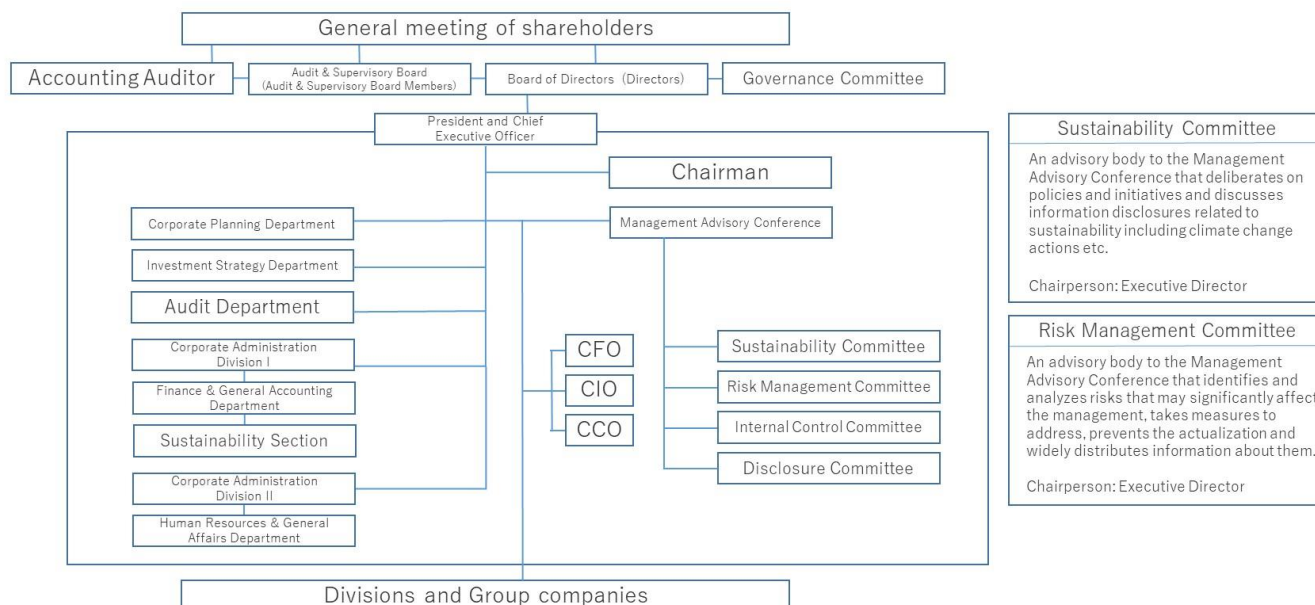
Then, we have recognized the importance of disclosing climate-related financial information and expressed our support for the TCFD recommendations.

Additionally, we will identify the risks and opportunities that climate change affects our business activities, conduct a scenario analyze and disclose them based on the concept of TCFD recommendations. We will continue to enhance our initiatives by maintaining our management strategy of positioning climate change actions as new business opportunities. We will review our disclosures based on the TCFD recommendations appropriately and continue to disclose the information properly.

2. Governance

We discuss the climate change problem, including our policies on handling the risks and opportunities related to climate change, our greenhouse gas (GHG) reduction targets, and initiatives for reducing GHG emissions at meetings of the Sustainability Committee (held at least six times a year) where we deliberate overall sustainability issues including issues related to climate change. Chaired by an Executive Director, this committee operates in a way that enables the Board of Directors to monitor important management themes and important matters are reported to the Board of Directors as necessary. The chairman of the Sustainability Committee also attends meetings of the Board of Directors and the Management Advisory Conference to reflect the perspective of climate change actions in business strategies and the risk management of the company as a whole. Heads of functional departments are appointed as members of the committee, and the general managers of sales divisions participate as necessary. Thus, a system is in place that enables each organization to implement climate change actions promptly.

[Our climate change-related governance framework]



3. Strategy

At the Itochu Enex Group, we view various opportunities and risks associated with climate change as one of the important perspectives to be applied when formulating our business strategy. Because the impact of climate change may be actualized in the medium to long term, we consider the impact from a medium- to long-term perspective as well as a short-term one. We will reflect results of the consideration in the process of formulating medium-term business plans.

■ Scenario analysis

In considering our scenario analysis, we referred to the work of the International Energy Agency (IEA) and the International Panel on Climate Change (IPCC). We identified and analyzed items that materially impact us from items included in two separate scenarios including the Beyond 2 °C Scenario. We considered risks and opportunities in the results of the scenario analyses in the aspect of transition, generated by social change caused by government policy, technology and other factors, as well as in the physical aspect generated by natural disasters, rising temperatures, and similar events.

[Conditions]

Time span	Scenario Analysis	Until 2050
	Financial Impact Assessment	as of 2030
Scope		Itochu Enex Co., Ltd. and Consolidated subsidiaries (all businesses)

		Beyond 2 Degree Scenario	4° C scenario
Reference scenarios	Transition	Sustainable Development Scenario (SDS), which is a transition scenario created by the International Energy Agency (IEA)	Stated Policies Scenario (STEPS), which is a transition scenario created by the International Energy Agency (IEA)
	Physical	RCP2.6, which is a climate change forecast scenario created by the Intergovernmental Panel on Climate Change (IPCC)	RCP8.5, which is a climate change forecast scenario created by the Intergovernmental Panel on Climate Change (IPCC)
Vision of society we assume		We assume a society where bold policies are established and technological innovation advances to achieve sustainable development, and as a result, the rise in average temperature is held below 2 ° C until the end of this century and social change resulting from the transition to a decarbonized society affects our businesses.	This scenario reflects policies and targets that have been announced officially at present. In this scenario, we assume a society where the average temperature will rise by around 4 ° C by the end of this century and climate change, including the temperature rise, will affect our businesses.

■ Results of scenario analysis

The degree of impact on business are as expected in 2030. The severity of impact is indicated by the inclination. A risk is indicated as a negative impact and an opportunity as a positive impact.

[Risks to our businesses]

Risks to our businesses			Beyond 2 Degree Scenario	Degree of impact on our businesses	4° C scenario	Degree of impact on our businesses
Transition	Policies	Regulations on CO ₂ emissions	<ul style="list-style-type: none"> Introduction of a carbon tax and tougher regulations on gasoline vehicles and energy conservation standards, etc. will result in a decline in demand for existing products (petroleum and gas) and an increase in cost associated with investments to renew our equipment. 	↑	<ul style="list-style-type: none"> Tougher regulations on gasoline vehicles and energy conservation standards, etc. will result in a decline in demand for existing products. 	→
		Change in energy mix	<ul style="list-style-type: none"> Destabilization of procured power Tougher regulations on coal-fired power plants and an increase in reputation risk 	↗	<ul style="list-style-type: none"> Destabilization of procured power 	→
	Markets	Changes in energy demand	<ul style="list-style-type: none"> Electrification will result in the shrinking of the existing fuel market, a decline in the value of owned assets, and a decline in customer intimacy. 	↑	<ul style="list-style-type: none"> The impact will be minor because the decline in demand will be within our current assumptions. 	→
		Changes in customers' behaviors	<ul style="list-style-type: none"> A decline in demand for existing fuels resulting from a change in consumer awareness 	↗	<ul style="list-style-type: none"> The impact will be minor because changes in customer behaviors will be within our current assumptions. 	→
		Progress of next-generation technologies	<ul style="list-style-type: none"> An increase in equipment cost for next-generation energy infrastructure 	↗	<ul style="list-style-type: none"> The impact will be minor because next-generation technologies will not rapidly progress and the changes will be within our assumptions 	→
Physical	Acute	Increasingly serious extreme weather	<ul style="list-style-type: none"> The impact will be minor because the frequency of abnormal weather will not increase significantly from the current level if the temperature rise is held below 2 ° C 	→	<ul style="list-style-type: none"> An increase in disaster response expenses for our equipment and facilities and an increase in the risk of shutdowns 	↑
	Chronic	Temperature rise	<ul style="list-style-type: none"> The impact will be minor because the risk generated by the steep rise in temperature will remain at the current level if the temperature rise is held below 2 ° C. 	→	<ul style="list-style-type: none"> A decline in demand for LPG, kerosene, and electricity resulting from higher temperatures in winter A steep rise in prices in the electricity market resulting from a higher frequency of extremely high temperatures in summer 	↑

[Opportunities for our businesses]

Opportunities for our businesses			Beyond 2 Degree Scenario	Degree of impact on our businesses	4° C scenario	Degree of impact on our businesses
Transition	Policies	Regulations on CO2 emissions	<ul style="list-style-type: none"> An increase in demand for environmental products, including alternative fuels and renewable energy An increase in demand for the support of energy conversion, energy conservation, and decarbonization 	↑	<ul style="list-style-type: none"> A slow increase in the demand for environmental products (with demand for existing fuels remaining at the current level) An increase in demand for alternative fuels and energy-saving equipment in the transition period 	↗
		Change in energy mix	<ul style="list-style-type: none"> An increase in opportunities to use storage batteries, EVs, etc. as they are capable of adjusting supply and demand 	↑	<ul style="list-style-type: none"> An increase in opportunities to use storage batteries and EVs, and the maintenance of the competitiveness of existing thermal power generation capabilities 	→
	Markets	Changes in energy demand	<ul style="list-style-type: none"> An increase in demand for electricity, industry reorganization, and diversification of demand for energy 	↗	<ul style="list-style-type: none"> Roles of existing fuels will be maintained because energy demand will not change greatly. 	→
		Changes in customers' behaviors	<ul style="list-style-type: none"> An increase in demand for environmental products reflecting growing environmental awareness 	↗	<ul style="list-style-type: none"> Although opportunities to sell environmental products will increase, the impact will be minor because changes will be within our current assumptions. 	→
		Progress of next-generation technologies	<ul style="list-style-type: none"> Competitiveness created using our customer network A decline in procurement costs resulting from the expansion of next-generation technologies 	↑	<ul style="list-style-type: none"> An increase in opportunities to sell next-generation fuels (including hydrogen and ammonia) An increase in opportunities to provide EV-related solutions 	↗
Physical	Acute	Increasingly serious extreme weather	<ul style="list-style-type: none"> Growth of demand for LP gas as distributed energy that enables people to respond to emergencies, and an increase in opportunities to use Car-Life Stations 	↗	<ul style="list-style-type: none"> An increase in opportunities to use Car-Life Stations and LP gas business to respond to disasters 	↗
	Chronic	Temperature rise	<ul style="list-style-type: none"> The impact will be minor because seasonal changes in temperature rise are expected to remain at the current level if the temperature rise is held below 2° C. 	→	<ul style="list-style-type: none"> Increase in demand for power supply 	→

[How we will respond]

How we will respond			Beyond 2 Degree Scenario	4° C scenario
Transition	Policies	Regulations on CO2 emissions	<ul style="list-style-type: none"> Increasing opportunities to sell environmental products Reviewing owned assets and business structure Providing solutions that combine EVs, storage batteries, energy-saving equipment, etc. 	<ul style="list-style-type: none"> Maintaining and expanding the customer base Diversifying options of environmental products and existing fuels
		Change in energy mix	<ul style="list-style-type: none"> Facilitating energy conversion for existing customers Expanding and spreading solar power generation for self-consumption and farming-type solar power generation Mixed combustion of coal and biomass fuel at coal-fired power plants 	<ul style="list-style-type: none"> Continuing to secure a stable supply system Achieving both economic efficiency and environmental value
	Markets	Changes in energy demand	<ul style="list-style-type: none"> Streamlining the existing business structure Providing diverse energy options 	<ul style="list-style-type: none"> Maintaining and expanding the customer base Achieving both economic efficiency and environmental value
		Changes in customers' behaviors	<ul style="list-style-type: none"> Increasing opportunities to sell environmental products Reducing operational cost through digitalization 	<ul style="list-style-type: none"> Increasing opportunities to sell environmental products in response to changes in customers' behaviors
		Progress of next-generation technologies	<ul style="list-style-type: none"> Early establishment of supply and distribution infrastructure Securing competitiveness using existing infrastructure Increasing opportunities to sell next-generation fuels 	<ul style="list-style-type: none"> Expanding sales of next-generation fuels Strengthening provision of EV-related solutions
Physical	Acute	Increasingly serious extreme weather	<ul style="list-style-type: none"> Increasing efforts to accommodate demand for emergency responses Spreading distributed energy and enhancing relevant initiatives 	<ul style="list-style-type: none"> Increasing efforts to accommodate demand for emergency responses Ensuring thorough facility management
	Chronic	Temperature rise	<ul style="list-style-type: none"> Carrying out optimal supply operations in response to seasonal demand 	<ul style="list-style-type: none"> Expanding peripheral businesses Securing stable power supply and expanding sales of storage batteries

■ Financial Impact Assessment

The Itochu Enex Group understands the importance of disclosing climate-related financial information and we strive to disclose more information in accordance with the TCFD recommendations. Estimations of financial impact involve many potential risks, uncertainties and assumptions, and actual results may differ materially from each scenario due to changes in important factors. Moving forward, we will aim to improve the precision of the analysis.

[Major financial impacts of transition risks]

- ① Cost increase resulting from the introduction of a carbon tax

The Itochu Enex Group has established a plan to reduce our CO₂ emissions by 50% by 2030. In this scenario, the costs generated by carbon taxes will increase, but we will address this risk by further reducing our environmental impact and enhancing environmentally friendly businesses in our efforts to achieve carbon neutrality.

- ② Decline in demand for petroleum resulting from progress in electrification and growing environmental awareness

According to the SDS scenario in the IEA's World Energy Outlook 2020, domestic demand for petroleum in 2030 will be around 20% below the 2020 level. Decrease in the sales volume of our petroleum products is likely to affect our profits. However, we will further strengthen sales of various alternative fuels, the low-carbon products that we have been offering, in our efforts to increase profits in ways that more than offset the decline in demand for petroleum products.

[Major financial impacts of transition opportunities]

- ① Increase in demand for renewable energy

We expect demand for renewable energy and EVs to increase in line with the progress in decarbonization and the shift to a recycling-oriented society. Assuming the expansion of these markets, we expect that profit from operating activities related to the Group's renewable energy business and EV business in 2030 will be far greater than the current level. The Itochu Enex Group will proactively operate growth businesses with high environmental value while we also pursue economic efficiency and convenience in our efforts to increase our corporate value.

- ② Increase in demand for alternative fuels

We expect demand for hydrogen, renewable energy, and EVs to increase toward 2050 in line with the progress in decarbonization and shift to a recycling-oriented society. At the Itochu Enex Group, we will actively engage in new business fields, the environmental business and next-generation energy in our efforts to achieve sustainable growth.

4. Risk Management

Itochu Enex Co., Ltd.'s Risk Management Committee is an advisory body to the Management Advisory Conference which identifies and assesses risks that materially impact our management and businesses as priority risks under the company-wide risk management framework. We discuss and monitor both climate change risks and opportunities and deliberate them from the perspectives of both strategy formulation and the operation of individual businesses, with the Sustainability Committee playing a leading role before the risks and opportunities are reported to the Risk Management Committee, the Management Advisory Conference and the Board of Directors.

In addition, while we have delegated authority to each business division to ensure prompt decision-making, we have adopted a system under which the Project Review Committee examines projects with certain scales and conditions. When considering important investments and loans, we use an ESG due diligence checklist to assess environmental risks including climate change risks and impacts

related to human rights, the labor environment, safety and health and other issues.

5. Metrics and Targets

The Itochu Enex Group aims to reduce our GHG emissions by 50% (from the FY2018 level) by 2030 and achieve carbon neutrality by 2050. We also contribute to society as a whole's reduction of GHG emissions by reducing emissions from the entire supply chain and through our businesses, aiming for zero offset. Moving forward, we will manage progress in the reduction of GHG emissions, report it to the Board of Directors, and disclose information about our progress every fiscal year.

[GHG emissions reduction targets]

	2030	2050
*1 Scope 1 + Scope 2	GHG emissions from the Itochu Enex Group Down 50% (Compared to FY2018)	GHG emissions from the Itochu Enex Group Carbon neutrality
Scope 3 emissions and contribution to society as a whole	We will contribute to the reduction of society as a whole's GHG emissions by reducing emissions from the entire supply chain and through our businesses, aiming for a zero offset economy.	

[GHG emissions and benchmark year]

Scope1+Scope2						Scope3					
Unit : Thousand tons-CO2						Unit : Thousand tons-CO2					
Category	2018 (Benchm ark year)	2019	2020	2021	2022	Category	2018 (Benchm ark year)	2019	2020	2021	2022
Kerosene	0	1	1	0	1	Category1 e.g.:CO2 emitted in the processes of mining, import, and refining fuel before we procure the products from primary distributors	4,252	3,975	3,399	3,282	3,487
Diesel	2	2	2	2	2	Category3 e.g.:CO2 emitted in the processes of producing fuel such as mining, import, transportation for in-house power plants	128	113	95	76	53
Gasoline	3	3	4	4	4	Category 4 e.g.:CO2 emitted by chartered tanker lorries while they are running	108	103	64	98	103
Heavy oil	30	31	26	24	28	Category6・7 e.g.:CO2 emitted by business trips and commuting	2	2	2	2	2
Coal	760	716	742	664	432	Category11 e.g.:CO2 emitted when consumers consume gasoline that we have sold	18,834	18,033	17,383	17,195	17,961
GTL	0	0	0	1	1	TOTAL	23,324	22,227	20,979	20,653	21,607
LP gas	2	2	2	2	2						
City gas・LNG	20	17	57	29	35						
Scope 1 (fuels)	817	771	833	728	505						
Scope 2 (Electricity・Heat)	78	77	65	67	63						
Renewable Energy Certificate/Electricity produced in-house	△3	△3	△2	△2	△1						
TOTAL	893	846	896	793	566						

*The ITOCHU Enex Group in the calculation of GHG emissions are parent company + consolidated subsidiaries (For Scope 1 and 2, excluding companies with no more than 10 employees).

* GHG emissions were calculated using the GHG Protocol, which was developed under the initiative of World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD).

*In calculating GHG emissions, CO2 originating from energy is the subject of data collection.

*The figures are rounded to the nearest unit (1,000 t-CO₂e).

*Scope 1 total, Scope 2 total, and Scope 1+2 of the 2022 GHG emissions have assured by an independent third-party in ENEX REPORT 2023.

*Review of GHG emissions data: In FY2023, the Group revised the scope of calculation of GHG emissions data for the period between FY2018 and FY2021.

<https://www.itcenex.com/en/index.html>

