

Action Plan for Key Issues (Initiatives) ①

Correspondence to climate change

Risks	-Weakening of the existing energy businesses -Reduction of demand for fossil fuels due to the regulation of businesses' greenhouse gas emissions, etc.
Opportunities	-Expansion of the alternative fuel market and increase of sales opportunities accompanying the rising demand for alternative fuels -Creation of opportunities to construct infrastructure for hydrogen and other new energies -Rising demand for renewable energy and creation of new business opportunities -Expansion of the market that expects that social issues will be solved through business processes

SDGs Target



* The action plan for key issues was revised in fiscal 2023.

Sector	Commodity/business	Initiative	Target	Target Year	Progress and Review																				
Alternative fuel	Renewable diesel	Accelerating advanced use and increased use of next-generation fuel (renewable diesel (RD) and gas-to-liquids (GTL) fuel)	<table border="1"> <tr> <td></td> <td>FY2022</td> <td>FY2023</td> <td>FY2030</td> </tr> <tr> <td>Promote RD sales</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Target</td> <td>3,000 KL</td> <td>1,000 KL</td> <td>100,000 KL</td> </tr> <tr> <td>Results</td> <td>292 KL</td> <td></td> <td></td> </tr> <tr> <td>Achievement rate</td> <td>9.73%</td> <td></td> <td></td> </tr> </table>		FY2022	FY2023	FY2030	Promote RD sales				Target	3,000 KL	1,000 KL	100,000 KL	Results	292 KL			Achievement rate	9.73%			Short term, 2030	Although RD demand was increasing, results did not reach the target due to mitigation measures. ● It began to be used by the 3R Group and others for demonstration experiments and by large general constructors for delivery vehicles. ● It was delivered to the venues of the Formula One Grand Prix race in Japan and the Super Formula event. ● Adopted for the Carbon Neutral Technology Development and Verification Project of Osaka Prefecture ● Maersk, the world's second largest container shipper, and Daikin Industries jointly introduced the RD to land transport.
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Ammonia	Early implementation of ammonia as a marine fuel	Promote R&D to develop ammonia fuel supply locations (Japan and Singapore), the construction of a supply chain and the formulation of supply safety guidelines with the 23 companies participating in a council for the implementation of ammonia as a marine fuel.		2030, 2050	● Ongoing review by the Council																				
Hydrogen	Building a hydrogen value chain	Feb. 2021: ITOCHU ENEX, Air Liquide Japan and ITOCHU Corporation sign a memorandum of understanding on strategic collaboration for construction of a hydrogen value chain. Fiscal 2023: Be involved in the start of construction and operation of hydrogen stations for commercial vehicles and trucks 2030: Enter the hydrogen energy market and the EV market after closing watching these market trends		2030, 2050	● Opening is scheduled in the first half of 2024 as planned. ● Hydrogen station construction is expected to commence around Aug. 2023 and to finish in Dec. 2023.																				
LNG	Creating a business to supply liquefied natural gas (LNG) for vessels	ITOCHU, KYUSHU ELECTRIC POWER CO., INC., NYK Line, and SABBIGAS CO., LTD. will establish a joint venture to build and own an LNG distribution vessel and carry a business selling LNG for vessels in the Kyushu and Setouchi areas.		Start of supply Apr. 2024	● Joint venture of four companies: A bunkering carrier of KEYS Bunkering West Japan will reach completion in Mar. 2024. ● Japan's first case of LNG fuel supply to ships in a broad region covering the Seto Inland Sea and further west ● The carrier is equipped with a dual fuel engine for LNG and heavy oil to exhibit environmental performance.																				
Renewable energy	Renewable Energy Business	Promoting solar power generation businesses	Expand the number of renewable energy power generation facilities operated by the Group.	2030	● Renewable energy generation capacity as of Jul. 31, 2023: 269 MW (Breakdown: 27.9 MW owned by the Group + 240.8 MW owned by EIF)																				
	Biomass power generation business	Commencement of the biomass power generation business	Development and start of operation of a biomass power plant.	Short term	● Trial operation will begin in Dec. 2022, and commercial operation will begin in Apr. 2023 (in collaboration with Oji in Anan City, Tokushima Prefecture)																				
	Self-consumption solar power generation business and solar power-based agricultural business (solar power sharing)	Developing a self-consumption solar power generation business and a solar power-based agricultural business (solar power sharing)	[Private consumption type] Promote the popularization of solar power generation by installing solar power generation systems in factories, stores and houses and proactively developing a business of leasing these systems. [Agricultural] Begin the verification of a solar power-based agricultural business (solar power sharing) to promote the popularization of renewable energy and the efficient use of unused arable land (fiscal 2021).		Short term, 2030	[Private consumption type] As of the end of Jul. 2023, systems had been introduced to a total of 10 locations. (Enex Fleet Nishinomiya Interchange Car-Life Station, Kohnan, Watanabe Sato, Kinugasa Transport, ITOCHU INDUSTRIAL GAS Matsuyama Plant, Sanyo's Plant No. 1, Onomichi Kumika Industry, Ichimasa Kamaboko Headquarters Factory No. 2, and ITOCHU ENEX Sodegaura Asphalt Base) [Agricultural] Four in operation (FIT) in Anan City, Tokushima Prefecture (as of the end of Jul. 2023)																			
	Energy Storage Business	Develop a storage battery business	Respond to demand and develop a storage battery business for businesses and homes.	2030	● Power storage stations for the grid and a business of storage batteries for businesses and for households remain under consideration.																				
	Overseas development of other businesses related to renewable energy	Overseas development of other businesses related to renewable energy	Expand a Thai subsidiary's business leasing solar power generation equipment.	2030	● As of the end of Jul. 2023, seven contracts had been signed in Thailand.																				
Electric vehicles	Sales	Sales of Nissan electric vehicles that are environmentally friendly zero emissions cars	Promote sales of electric vehicles.	Every year	● Sales of EV vehicles are strong at Nissan Osaka Sales Co., Ltd. After application of life cycle assessment (LCA), CO2 emissions from EVs are around 32% lower with regard to the LEAF brand, around 18% lower with respect to the ARYA brand, and around 17% lower for the SAKURA brand, when compared with those of Japan-made gasoline vehicles in their respective comparable grades. (according to a comparison when driving 10 km with vehicles made in Japan)																				
	Infrastructure development	Increased convenience for electric vehicle users	Increase the stores equipped with electric vehicle chargers and improve services.	Every year	● Number of chargers installed at directly operated CS and dealers as of Jun. 30, 2023: 94 units (89 locations)																				
	Electric vehicle sharing service	Developing an electric vehicle sharing service	Launched the TERASEL Car Share community electric-vehicle-based car sharing service in fiscal 2021. Contribute to the decarbonization of communities through a combination of EVs and renewable energy.	2030	● Operating for public offices (existing EVs for public use). Creating case studies and considering sales strategies for the private sector.																				
Energy solutions for storage batteries / household products	Smart devices	Promote sales of household storage batteries and power generation systems	Promote proposals for the introduction of two electricity generating systems: solar power generation systems and ENE-FARM, which are high-performance products. Promote sales of a home-use lithium ion power storage system that enables to use electric appliances using batteries even in the event of a blackout due to a disaster.	Every year	Sales of smart devices results ● 157 Enefarm units (as of the end of Mar. 2023) ● 19 storage battery units (as of the end of Mar. 2023)																				
	LPG (for household and business use) and high-efficiency equipment	Reduction of CO2 emissions through sales of LPG (for household and business use) and high-efficiency equipment	- Promote the popularization of ENE-FARM, ECO-JOZU, GHP, and glass-topped induction stoves. - Promote self-consumption through the popularization of solar power generation plus lithium ion batteries. Develop a surplus electricity purchasing service for customers who no longer benefit from FIT.	Every year	LPG high-efficiency equipment sales results ● Glass-top stoves: 11,192 units (as of the end of Mar. 2023) ● Eco Joes: 23,079 units (as of the end of Mar. 2023) ● GHPs: 19 units (as of the end of Mar. 2023)																				
Other environmental businesses	Provision of heat	Contributing to energy conservation by expanding the regional heat supply business.	Contribute to the efficient use of energy and town development from the initial development stages to subsequent management in cooperation with customers and communities to contribute to the realization of a decarbonized society.	Every year	● Tokyo Toshi Service continues offering regional heat supply and energy management services.																				
	AdBlue	Manufacture and sale of AdBlue, a water and urea solution	Improve the purchasing portfolio and expand delivery centers (SP) to arrange a stable supply system to be ready for quantity increases.	Short term, 2030	● For fiscal 2023, efforts will be made for greater delivery efficiency and continued sales expansion.																				
	Support decarbonization management	Stepping up customer support for decarbonization management	Work with business partners supporting the visualization of greenhouse gas (GHG) emissions for customers to provide support for GHG emissions visualization and energy conservation support as a decarbonization management solution for customers.	Short term	● Initiatives for SDGs business feasibility assessments were conducted for fiscal 2022. ● Support for GHG emissions visualization and for target settings and planning and services to support the introduction of reduction solutions were established and are now being offered. ● ITOCHU ENEX's sales department carried out a calculation using primary data on Scope 1, 2 and 3 emissions. ● In Aug. 2022, the Tange Textile Industrial Association in the city of Kyotango commenced steam supply from LP gas-fired boilers and Tokyo Toshi Service started remote monitoring of facilities. Continue to maintain and improve boiler efficiency.																				
Reduction of environmental impact within the organization	Energy conservation, transition to green energy at offices and green office activities	Accelerating the transition to green energy and reducing the consumption of electric power, fuels, photocopy paper and water and the amount of waste	[Energy conservation in offices and business facilities] Reduce general electricity consumption, offices' fuel consumption (LPG and fuel oil), and vehicles' fuel usage (reduce the use of gasoline, light fuel oil, autogas, switch to GTL, HVO, electricity and e-fuel). Reduce copier paper, water consumption, and waste output (99% of the previous year's results respectively). [Transition to green energy at offices] Reduce power consumption by installing solar panels at retail stores. Install solar panels at 32 Car-Life Stations run by Enex Fleet and 10 run by Kyushu Energy (by 2030).	Every year, 2030	[FY2022 results for energy savings] ● General electricity consumption: 91% (Achieved compared to the target and the previous year. Reduction by power saving and use of LED lighting in offices) ● Fuel for offices: 90% (achieved over the previous year), fuel for vehicles: 99% (achieved over the previous year) ● Copy paper: 97% (target and previous year's levels achieved) [FY2022 results for green energy conversion] ● A self-consumption solar power generation system was installed at Enex Fleet Nishinomiya Interchange Car-Life Station. ● A self-consumption solar power generation system was installed and the fuel for heating boilers was shifted from heavy oil to the GTL fuel at ITOCHU ENEX Sodegaura Asphalt Base. ● A self-consumption solar power generation system was installed at Itochu Industrial Gas Higashimatsuyama Plant. ● Green electricity with a non-fossil certificate was introduced to the Head Office in Kasumigaseki in fiscal 2020 (and it has since been used there). ● All lighting at the Head Office in Kasumigaseki was replaced with LED lighting (by the manager of the building). ● Solar power generation systems were installed at plants, warehouses and other facilities to provide services that help customers cut their CO2 emissions and energy costs.																				
	Preventing environmental pollution	Preventing soil/environmental pollution	Prevent soil/environmental pollution. Reduce impact. Reduce drainage discharge and the use of harmful substances and appropriately dispose of harmful substances.	Every year	● Ongoing																				
	Increasing the efficiency of systems and logistics	Reducing CO2 emissions and improving efficiency in the transport process through DX	Give eco-driving training that raises energy-saving awareness and helps fulfill the obligations of specified consignors under the Act on Rationalizing Energy Use and reduce CO2 to supply chains (delivery personnel of commissioned truck operators and group companies) once a year, implement automatic meter reading with the use of the low-power wide-area (LPWA) system and streamline deliveries for CO2 reduction. Promote customers' introduction of LPWA for direct sales. Conduct inspections using iPads to enable paperless operations and improve efficiency.	Every year	[Eco-driving training for supply chains] ● Ongoing [State of introduction of LPWA terminals (at eight sales companies in the Home-Life business)] ● A total of 437,127 terminals installed to cover 79% of the customers (on the basis of valves opened)(as of Mar. 2023)																				
	Coal-fired power plant	Reducing the environmental impact of coal-fired power plants	Utilize non-fossil fuels (mixed fuel firing demonstration experiment under consideration). Change and appropriately operate equipment and other initiatives.	2030	● In Dec. 2022, Hoku Energy Service succeeded in the experiment of mixed combustion with black pellets. ● Measures for lowering environmental impacts, including a fuel shift, are being considered ahead of the reduction target for fiscal 2030.																				
	ISO activities (environmental management)	ISO14001 (environmental management)	Maintain certification. Promote environmental protection and improvement activities. Continue to implement the PDCA cycle at all group companies appropriately using their functional environmental management systems. Ensure safe operations through thorough compliance at all offices.	Every year	● In Jul. 2022, ITOCHU ENEX underwent an annual surveillance audit performed by the Japan Audit and Certification Organization for Environment and Quality (JACO) to maintain certification for fiscal 2022. We will continue to work on efficient energy consumption and legal compliance based on our environmental management system. (The audit for fiscal 2023 is scheduled in July.)																				
Environmental Management	Environmental conservation activities	Forest and marine environment, biodiversity conservation activities	[Environmental preservation] Contribute to CO2 absorption by contributing to afforestation and environmental conservation. Contribute to CO2 absorption through environmental conservation activities, such as the regeneration of blue carbon ecosystems. Commence initiatives in fiscal 2022. [Biodiversity conservation] Promote the activity of conservation of biodiversity.	2030, Every year	[Environmental preservation] ● ITOCHU ENEX made donations for fiscal 2022 to forest preservation projects for two local governments, namely the Yushihara-cho and Nichinan-cho town governments, through the Corporate Version of Hometown Tax. That helps plant trees in an appropriate total of 35 hectares since fiscal 2021 and reduce approximately 570 t of CO2 over five years. ● ITOCHU ENEX signed an agreement for joint research on blue carbon with the University of Tokyo and with the Fukuura Fisheries Industry Cooperative Society. They started cultivation of wakame seaweed in Dec. 2022, harvested in Apr. 2023 and carried out measurements and others. On the basis of findings from the verification in 2022, preparations are being made for a second cultivation in winter 2023 and for the quantification of blue carbon. [Biodiversity conservation] ● ITOCHU ENEX donated 100 yen per case of electronic exercise of shareholders' voting rights to the building of a community in the Hokkaido town of Nagamura-cho where the red-crowned crane (Grus japonensis) can live.(614,100 yen donated in fiscal 2023)																				
	Conservation of regional environments through compliance with security checks, and improving security knowledge	Reinforcing a security system, strengthening security checks, and improving security knowledge	Fully prevent accidents by standardizing and improving security management systems in accordance with non-statutory security standards in addition to legally mandated inspections. Carry out training activities and improve awareness. Promote the digitalization of computerized documents for security inspections and audits.	Every year	● Various materials for safety education (15 types per product) and seven manuals related to submissions to governmental offices were prepared. ● Safety education was provided using videos (e-learning). ● Follow-up to promote qualification acquisition ● For smart safety initiatives, the introduction of DX was considered and facility-related materials were converted into digital materials (to increase work efficiency and pass down technologies to future generations). ● New HL Security Audit System (ESAS) will be operational in Jun. 2023. Improved operational efficiency by completing audits, reports, and transmittals within the system.																				