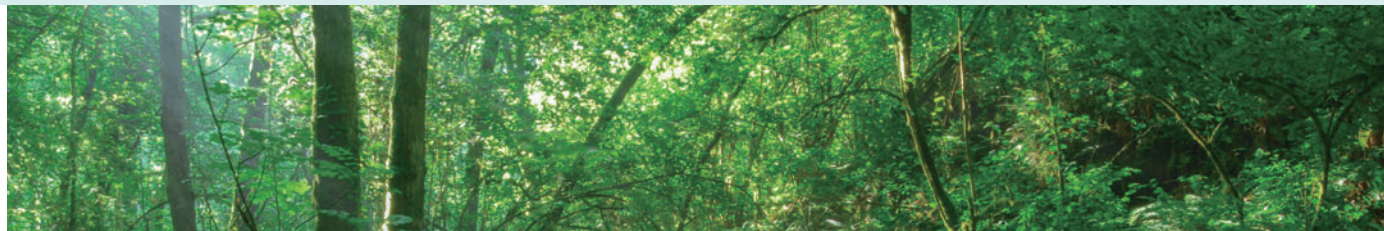


Addressing Climate Change

-Recognition of and Action on Risks and Opportunities-



Principle and Outline

Tackling climate change is seen as one of the Sustainable Development Goals (SDGs) adopted by the United Nations. Since the Paris Agreement came into force in November 2016, initiatives to tackle climate change are being undertaken around the world. In Japan, the government declared net-zero emissions in 2050 in October 2020, making climate action even more critical.

For the Daigas Group, which is engaged primarily in the energy business, climate change represents an important management challenge, and initiatives to reduce CO₂ emissions are a crucial mission. In January 2021, the Daigas Group established and announced the Daigas Group Carbon Neutral Vision, indicating its vision of how it strives to become carbon neutral by 2050.

The Daigas Group announced the Daigas Group Medium-Term Management Plan 2023: Creating Value for a Sustainable Future in March 2021 to further accelerate its efforts toward low-carbon or carbon-free business operations.

The recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) announced in June 2017 (the "TCFD recommendations") encourage companies to disclose climate change-related financial information to promote appropriate investment decisions by investors. Osaka Gas supports the TCFD recommendations and utilizes them as indicators to validate its climate change response. We also participate in the TCFD Consortium,* where discussions take place on efforts toward information disclosure on responses to climate change based on the TCFD recommendations.

* TCFD Consortium: The TCFD Consortium was established on May 27, 2019, whose members from the Japanese private sector discuss how companies can effectively disclose information on tackling climate change and how financial institutions can use the disclosed information to make appropriate investment decisions. From the Japanese government, the Ministry of Economy, Trade and Industry, the Financial Services Agency, and the Ministry of the Environment participate as observers in the consortium.

Governance

The Daigas Group regards tackling climate change as a key management issue. Just as with other important business activities across the Daigas Group, the Board of Directors is responsible for making decisions on and supervising activities aimed at tackling climate change and other environmental issues. At the ESG Council (Management Meeting), which meets three times per year, executives deliberate on plans and reports of activities concerning ESG challenges, including climate change issues, under the supervision of the President.

The Group also has the ESG Committee, chaired by the Executive in Charge of ESG Promotion (Vice President), who supervises the Daigas Group's sustainability activities, and consisting of the heads of related organizations. The ESG Committee meets four times a year for the cross-organizational deliberation, coordination, and supervision of climate-change-related issues, including the planning and promotion of related business activities, progress in achieving relevant targets, and risk management. The committee submits to the Board of Directors deliberation proposals and reports on important agenda items, such as the status of achievement of sustainability-related ESG

management targets and business projects expected to sustain a major financial impact due to climate change.

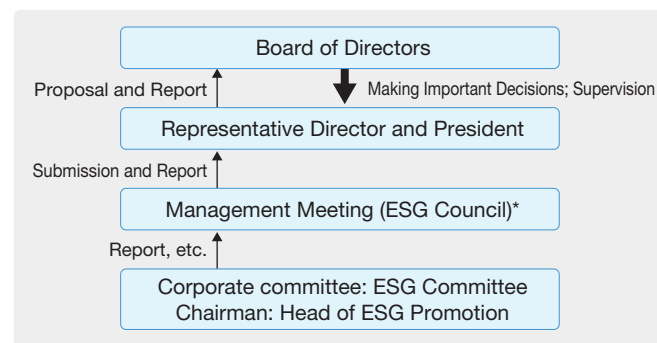
Director remuneration is based on a remuneration system that encourages Directors to achieve sustainable growth of the Group and increase the corporate value over the medium- to long-term. Remuneration for Directors other than Outside Directors consists of basic remuneration as fixed remuneration, performance-linked remuneration, and stock remuneration.

For the purpose of contributing to the enhancement of corporate value over the short-term and medium- to long-term, performance-linked remuneration is determined based on profit attributable to owners of parent for the most recent three years (consolidated profit) and the ESG indicators achievement coefficient* for the previous fiscal year.

Stock-based remuneration is granted annually at a certain time of the year in the form of restricted stock, with the aim of increasing the linkage between remuneration and medium- to long-term improvements in corporate value, as well as promoting further value sharing with shareholders.

* ESG indicators include climate change-related indicators.

Climate Change Governance Organization Chart



- Board of Directors
10 Directors (6 Internal Directors and 4 Outside Directors)
- Management Meeting (ESG Council)
1 Executive President, 3 Executive Vice Presidents and 7 Senior Executive Officers
* In principle, it is held three times per year as "ESG Council."
- ESG Committee
Executive Vice President (Head of ESG Promotion) and heads of related business units, etc.

(As of June 28, 2022)

Strategy

The major risks and opportunities associated with climate change, their business and financial impact, and the Daigas Group's response to this impact, are shown below.

Scenario Analysis

The Daigas Group has been working on climate change scenario analysis that is intended to be utilized as reference material in the evaluation and preparation of countermeasures, and to understand the impact of climate change on the Group's business on a medium- and long-term basis. For the analysis, we used the scenarios published by IEA (see figures on the right).

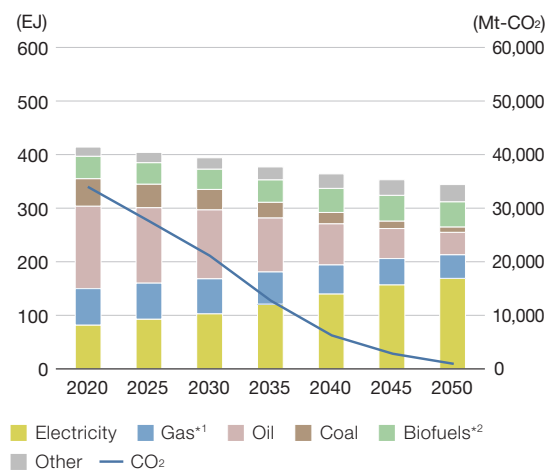
We assessed our energy businesses (gas, electricity and related businesses in Japan and overseas) which are expected to experience the greatest impact from climate change among the Group's businesses, assuming a multi-track scenario that takes into account the progress of energy conservation and changes in the composition of power sources, etc.

We steadily implement initiatives to increase the resilience of the Daigas Group's businesses, while applying the suggestions gained from scenario analysis to our evaluation of medium- and long-term business strategies. Moreover, as the global response to climate change continues to progress, the scenario's preconditions may also change in the future. We will continue to deepen our scenario analysis, renewing our assumptions in line with the latest conditions as necessary, taking into account scenarios established by external authorities.

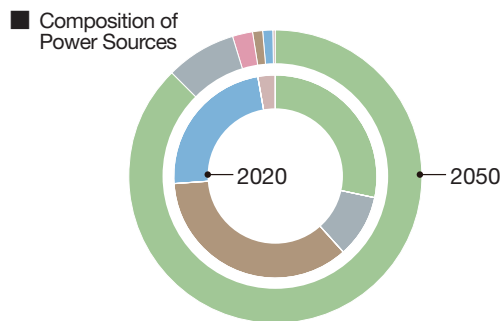
Global Final Energy Consumption and CO₂ Emissions*

1.5°C Scenario (NZE2050)

The scenario in which the world achieves net-zero energy consumption by reducing fossil fuel consumption and overall final energy consumption through progress in energy conservation, etc. In 2050, renewable energy sources will account for about 90% of the power supply mix.



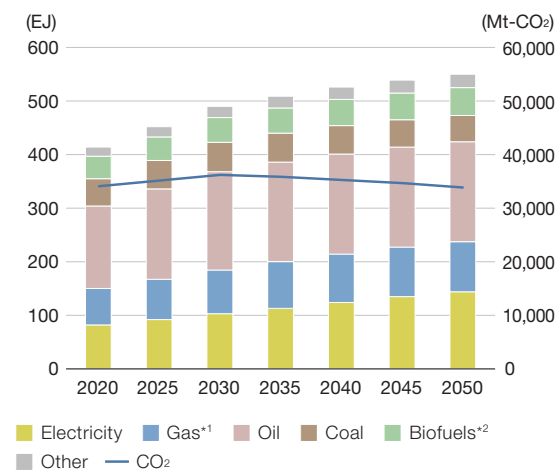
*1 Natural gas, hydrogen, synthetic methane
*2 Liquid fuels, biomethane gas, solid biofuels



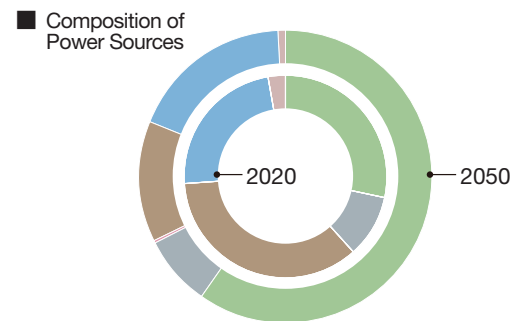
Legend for Composition of Power Sources:
 Renewables (green), Nuclear (grey), Hydrogen/ammonia (pink), Coal (brown), Natural gas (blue), Oil (red)

2.6°C Scenario (STEPS)

The scenario that reflects countries' stated specific policies on climate change. In this scenario, electricity consumption increases and there remains some demand for fossil fuels as a source of energy. The ratio of renewable energy to all power sources doubled from 2020.



*1 Natural gas, hydrogen, synthetic methane
*2 Liquid fuels, biomethane gas, solid biofuels



Legend for Composition of Power Sources:
 Renewables (green), Nuclear (grey), Hydrogen/ammonia (pink), Coal (brown), Natural gas (blue), Oil (red)

*Source: IEA "World Energy Outlook 2021"

Recognition of Risks and Opportunities

Using a multi-track scenario analysis, we pinpointed anticipated risks and opportunities based on the environment surrounding the Daigas Group’s energy businesses in Japan and abroad, evaluated these risks and opportunities and examined countermeasures, in terms of both the short- and medium-term until 2030, and the long-term, to 2050.

The Group is engaged in gas and electricity businesses, primarily in the Kansai area, which use natural

gas as their main raw material and fuel. The external environment is undergoing various changes due to climate change. We have classified the major factors associated with these changes into “transition risks” and “physical risks,” and identified the major risks and opportunities. Significant risks for the Group related to climate change include the possibility that rising sea levels and natural disasters such as typhoons and torrential rains due to localized abnormal weather

events, etc. may cause damage to our production and distribution facilities. In addition, it is possible that our businesses may be affected by the introduction of a carbon tax in Japan and a significant increases in the carbon tax rates, or an increased desire among our customers to switch to non-fossil fuels. However, promotion of the development and spread of renewable energy and decarbonization technologies also represents a significant opportunity for the Group.

Evaluation of Risks and Opportunities

		Scenario	Impact	Impact on Business		
				Short- and Medium-Term	Long-Term	
Risks	Physical	Physical Risks	2.6°C	Damage to facilities arising from meteorological disasters	Increase in capital investment costs and insurance premiums	Increase in facilities countermeasure costs
	Transition	Market	2.6°C	Switch to natural gas	Increase in prices due to greater competition in LNG procurement	Further price hikes and impediments to procurement, due to increasing competition in LNG procurement
		Market	1.5°C	Switch to non-fossil fuel energy	Fall in sales of gas and thermal power	Fall in sales of gas and thermal power
	Reputation	1.5°C	Focus of investment criteria on low-carbon or decarbonized businesses	Diminished capital procurement power in gas-related businesses	Declining investment in fossil fuels businesses	
Opportunity	Physical	National energy policy	1.5°C / 2.6°C	Introduction of a carbon tax	Carbon tax burden on gas and thermal power businesses	Increasing burden with rising carbon tax rates
		Physical Opportunity	2.6°C	Increase in awareness and support measures for weather disaster countermeasures	Increase in sales of products / services with disaster response function	Expansion of decentralized energy systems
	Transition	Market	2.6°C	Switch to natural gas	Switch to LNG in Japan; Expansion of LNG business overseas	Switch to LNG and expansion of sales of high-efficiency equipment abroad
		Technology	1.5°C	Development of renewable energy and CCUS technologies	Expansion of development of renewable energy sources	Introduction of synthetic methane, expansion of renewable energy sources, increase in value of thermal power generation with CCS technology in providing transition energy
	National energy policy	1.5°C / 2.6°C	Implementation of a national policy for the mass introduction of renewable energy sources	Expansion of sales of electricity from renewable energy sources	Expansion of sales of electricity from renewable energy sources	
		Technology	1.5°C / 2.6°C	Development of AI/IoT	Participation in decentralized power sources aggregation business	Expansion of decentralized power sources aggregation business

Financial impact : Small Financial impact : Large

Strategies/Countermeasures for Risks and Opportunities

The Daigas Group aims to achieve sustainable growth by promoting business portfolio management with diverse businesses in order to appropriately respond to identified risks and opportunities.

		Short- and Medium-Term	Long-Term
		Risks	<ul style="list-style-type: none"> ● Implement disaster countermeasures for facilities
Opportunity	Physical	<ul style="list-style-type: none"> ● Investigate, develop, and verify CCUS / synthetic methane technologies 	<ul style="list-style-type: none"> ● Conduct verification and establish supply chains toward the introduction of CCUS / synthetic methane, hydrogen, etc.
	Transition	<ul style="list-style-type: none"> ● Development and sale of equipment with disaster response functions ● Develop and expand sales of renewable energy power sources in Japan and abroad ● Develop and market high efficiency, compact decentralized power sources (CHP, fuel cells) ● Expand fuel switching, sales of high efficiency equipment in Japan and abroad ● Verify and participate in the decentralized power sources aggregation business 	<ul style="list-style-type: none"> ● Further develop energy-saving technologies ● Conduct verification and establish supply chains toward the introduction of CCUS / synthetic methane, hydrogen, etc.

Financial Impact of Climate Change Risks and Opportunities

The Daigas Group's Medium-Term Management Plan has identified "achieving a low carbon / carbon neutral society" as a priority issue, and expects to spend 150 billion yen on decarbonization related investments in the period from 2021 to 2023 as it works toward achieving the goal of carbon neutrality in 2050.

The Daigas Group is actively contributing to the spread of renewable energy, and estimates that the impact on sales of its renewable energy business expansion will be in the order of 100 billion yen in FY2031.3.

It should be noted that there are uncertainties and assumptions in the above estimation of financial impact. In practice, the impact may vary significantly as a result of changes in key factors.

Initiatives to Reduce Greenhouse Gas Emissions

Initiatives to reduce greenhouse gas emissions are a crucial mission for the Daigas Group. We focus on reducing CO₂ emissions, not only from our own business activities, but also from customers who use the energy we provide. Please see our sustainability website for details on the specific initiatives by the Daigas Group to reduce greenhouse gas emissions.

Under the Daigas Group Carbon Neutral Vision, we have established the goal of contributing 10 million tons per year of CO₂ emissions reductions in FY2031.3 as a management target, in order to further advance these business activities. This indicator will enable us to contribute to reductions throughout society, and we therefore use it as a management target linked to the Group's business initiatives.

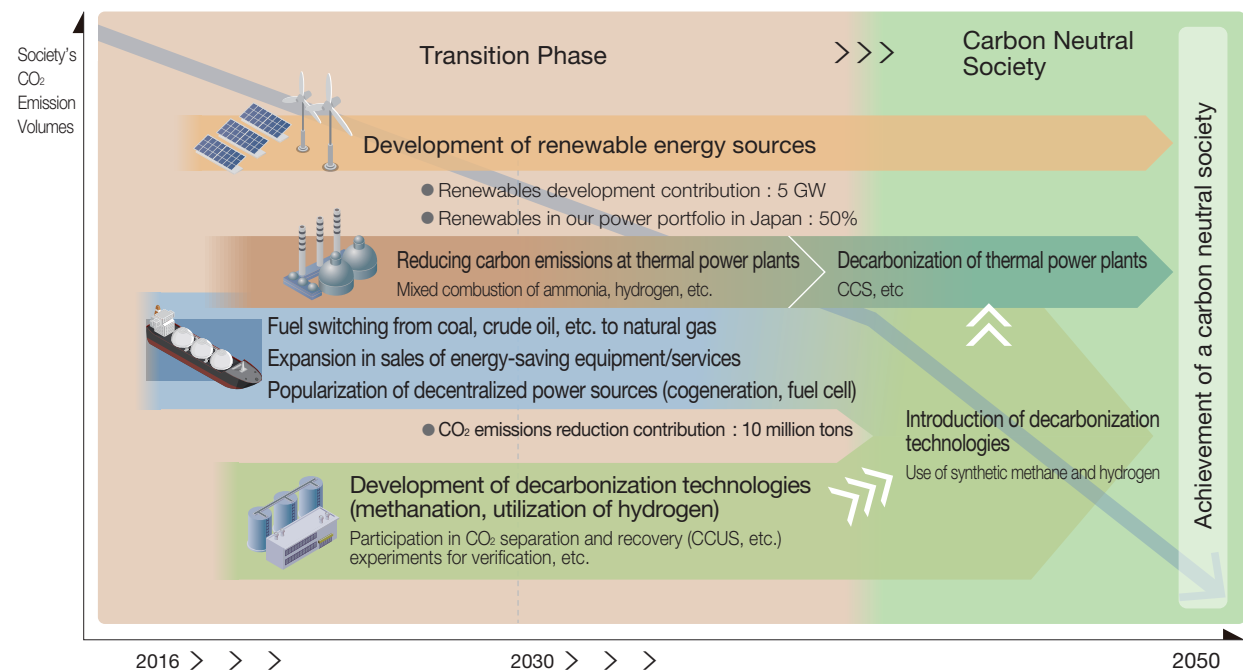
Initiatives Ensuring Resiliency for a Decarbonized Society

Securing a stable supply of energy, a core social infrastructure, is one of the major climate change-driven challenges facing society as a whole. By continuing to provide a range of services, including multiple sources of clean energy such as gas and electricity utilizing decarbonization technologies, disaster response equipment, and the widespread and advanced use of energy, the Daigas Group will strive to contribute to society in terms of stable supply and resilience for a

decarbonized society.

In response to the growing global trend towards decarbonization, we will engage in activities to contribute to reducing CO₂ emissions across society, promote the advanced use of gas, and advance initiatives to develop decarbonization technologies, aiming to balance business growth with the stability of the core social infrastructure.

Transition Plan Overview



Risk Management

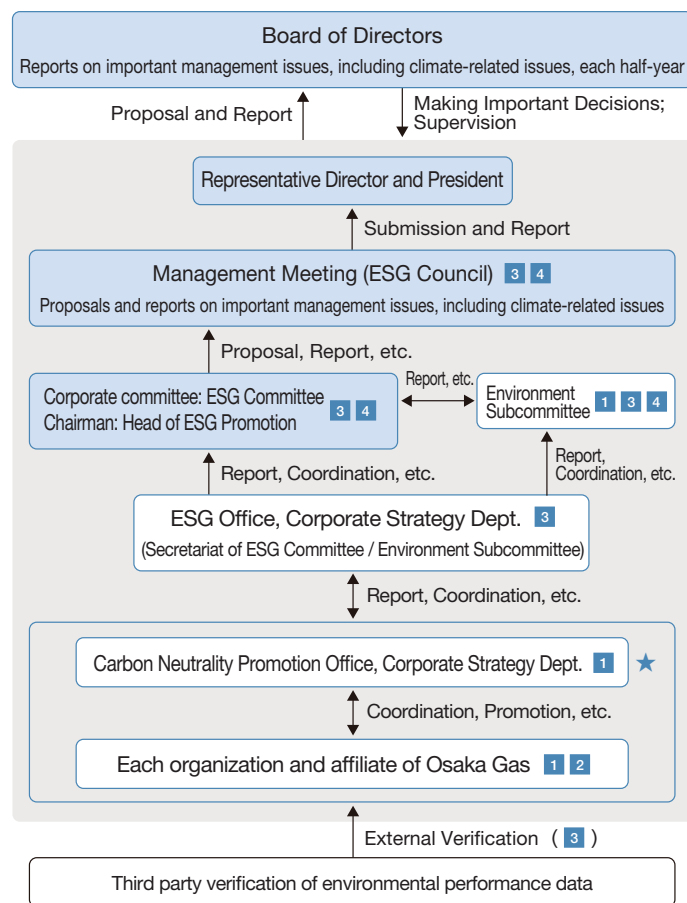
When deciding on the Daigas Group's business plan and investment plan, the internal organizations responsible for the gas, electricity and other businesses analyze the risk factors and their impact on each business, distill and identify risks, and submit these together with other business risks, etc. to the Management Meeting for deliberation. Climate change risks in the formulated plans are managed through a PDCA cycle (plan-do-check-act), and are reported and followed up

at the Environment Subcommittee, ESG Committee, and ESG Council (Management Meeting).

Decisions on climate-related risk and sustainability, including investment decisions, are made by the Board of Directors and the Management Meeting. Matters related to climate change that were proposed or reported by March 31, 2022, included those listed to the right.

- Follow up on the progress of the Medium-Term Management Plan, incorporating the Carbon Neutral Vision
- Recognition and disclosure of risks, opportunities and countermeasures related to climate change, based on scenario analysis
- Monitoring of the results for indicators used to manage climate change response, etc.

Climate-related Risk Management Structure



1 Plan formulation

* Risks and opportunities associated with climate change

Response to cross-cutting environmental issues*
Formulation of environmental strategy*
Reflection in activities of each organization

2 Implementation/Operation

Actions for each target
Performance tracking for each indicator

3 Checking

Report and follow-up for each target and performance at the Environment Subcommittee, ESG Committee, and ESG Council (Management Meeting); third party verification of environmental performance data

4 Review

Issue identification
Evaluation of countermeasures and improvements

★ Establishment of Carbon Neutrality Promotion Office (April 2022)

Oversight of establishment and promotion of strategies to achieve carbon neutrality; coordination, planning promotion and follow-up with each organization and affiliate.

Indicators and Targets

The Daigas Group will proceed to contribute to radically reducing CO₂ emissions and realizing a decarbonized society, through initiatives such as energy conservation, the advanced use of natural gas, and the contribution to widespread use of renewable energies.

Field	Item	Target	Target FY	
Climate Change	CO ₂ emissions across the Group	Zero effective CO ₂ emissions	2051.3	
	CO ₂ emissions reductions from our own business activities	Proportion of power sourced from renewable energy in our electricity business in Japan	Nearly 50%	2031.3
		Contribution to more widespread use of renewable energy	5 GW	2031.3
	2.5 GW		2024.3	
	CO ₂ emissions reductions at customer sites and through the value chain	<ul style="list-style-type: none"> ● Promote carbon reduction and decarbonization through more widespread use of high efficiency, high value-added equipment with natural gas, renewable energy, etc. ● Efficient operation of LNG tankers and expanded use of low emission vehicles, etc. ● Provide environmental value through the dissemination of high-quality solutions in the fields of information, real estate, and materials 	Each year until 2031.3	
Contribution to CO ₂ emissions reductions across society	Contribution to CO ₂ emissions reductions (t-CO ₂) (Including reductions contributed at customer sites and overseas)	10 million tons (relative to FY 2017.3)	2031.3	