

Environmental Targets

Principle and Outline

Contributing to regional and global environmental conservation is a pivotal mission of the Daigas Group, which is mainly engaged in the energy business. In line with its Charter of Business Conduct, Code of Business Conduct, and Environmental Policy, the Daigas Group promotes environmental conservation activities.

Having set the medium-term environmental targets for the reduction of GHG emissions from its business activities, resource recycling, and the like, we have devoted active efforts to helping increase the use of natural gas, developing and facilitating more widespread use of highly efficient equipment, including fuel cells, offering customers proposals for the use of energy-saving products and services, and introducing renewable energy.

In line with the worldwide trend toward action against climate change, we are striving to reduce GHG emissions from its business activities, including CO₂ and methane (CH₄), to help realize a low-carbon or decarbonized society. Specifically, we devote positive efforts to reduce CO₂ emissions from liquefied natural gas (LNG) transportation, city gas production, and power generation. We also implement various energy-saving measures at offices.

In addition, as the trend toward decarbonization further accelerates, and as global economic stagnation and increased volatility in the energy market become apparent, it is becoming more important from the perspective of “S + 3Es”^{*}—the basic policy of the nation’s energy policy—to make energy carbon-neutral without compromising stability and security of energy supply.

In line with the “Carbon Neutral Vision” announced in January 2021 and “Medium-Term Management Plan 2023” in March of the same year, we are further accelerating our efforts toward lowcarbon/decarbonized business operations. In March 2023, we announced “Energy Transition 2030 (ET2030),” which provided an overall picture of the path toward low-carbon/carbon-neutral energy solutions.

We will accelerate our efforts to combat climate change toward our medium- to long-term targets.

The results for each target established based on the Daigas Group Environmental Policy and “Medium-Term Management Plan 2023” are presented below.

^{*} S + 3Es: safety, energy security, economic efficiency, and environment

■ Environmental Targets (FY2024.3 Targets) and Results

Osaka Gas underwent a third-party verification by Bureau Veritas Japan Co., Ltd. (Verified items are indicated with an asterisk [*].)

Field	Indicators	Targets	Target fiscal year	FY2024.3 results	
Climate change	CO ₂ emissions of Daigas Group*	Net zero emissions	2051.3	25.63 million tons	
		27.02 million tons* ¹ (5 million tons less than FY18.3)	2031.3	24.63 million tons	
	CO ₂ emissions reductions from our own business activities	Percentage of renewables in our power generation portfolio in Japan	Nearly 50%	2031.3	22.4%
		Contribution to developing renewables capacity on a global basis	5 GW	2031.3	3.17 GW
	2.5 GW		2024.3		
CO ₂ emissions reductions at customer sites and through the value chain	<ul style="list-style-type: none"> Accelerating low-carbonization/decarbonization by facilitating more widespread use of highly energy-efficient and highvalue- added equipment using natural gas, renewable energy, etc. Operating LNG carriers efficiently and increasing the use of low-emission and other environmentally sustainable vehicles Providing environmental value by disseminating high-quality solutions in the fields of informatiOSSn, real estate, and materials 		Every year until 2031.3	Please see □□ P.044 for major initiatives.	
Contribution to CO ₂ emissions reductions across society	Avoided emissions (Including reductions contributed at customer sites and overseas*)	10 million tons (Baseline: FY2017.3)	2031.3	5.01 million tons	
Resource recycling	3R (reduce, reuse, and recycle) efforts in the Group's own business activities	Osaka Gas (including network company and the core energy business companies)	Industrial and general waste (final disposal rate)*	2% or lower	1.4%
		Affiliates	Soil excavated during piping works (final disposal rate)*	1% or lower	0.1%
			Soil excavated during piping works (final disposal rate)*	100%	100%
			Industrial and general waste (final disposal rate)*	98% or higher	99.4%
		Value chain	Promoting 3R efforts concerning used equipment collected from customers or business activities	Gas meters (reuse rate)*	4% or lower
				Please see □□ P.050-052 for major initiatives.	
Biodiversity	Paying due attention to biodiversity in business activities in line with the Daigas Group Biodiversity Promotion Policy		Every year until 2031.3	Please see □□ P.053-058 for major initiatives.	
Development of technology	Facilitating the development of technologies that will contribute to realizing a low-carbon or decarbonized society and provide a strong business foundation		Every year until 2031.3	Please see □□ P.059-062 for major initiatives.	
Green procurement and purchase	Promoting green purchase, the green partner system, etc. in cooperation with business partners		Every year until 2031.3	Please see □□ P.098 for major initiatives.	

¹ Emissions in domestic supply chain (Scopes 1, 2 and 3) (Targets for FY2031.3 newly set in “ET2030”)

New Environmental Targets

In March 2024, the Daigas Group announced Medium-Term Management Plan 2026, in which we presented our key strategy, positioning the 2024-2026 period as a period to be focused on contributing to the energy transition toward achieving carbon neutrality in 2050 and building a foundation to accelerate our initiatives for a carbon neutral society.

In addition, we revised the Daigas Group Biodiversity Promotion Policy and the Daigas Group Environmental Policy in April 2024, with reference to the National Biodiversity Strategy and Action Plan of Japan 2023-2030 formulated based on the launch of the Taskforce on Nature-related Financial Disclosures (TNFD) in June 2021 and Kunming-Montreal Global Biodiversity Framework, which was adopted at the 15th Conference of the Parties to the Convention on Biological Diversity (COP15) held in December 2022.

Based on these policies, we have established new environmental targets.

Daigas Group Environmental Targets (2024-2026)

Field	Indicators		Targets	Target fiscal year
Climate change	CO ₂ emissions of Daigas Group	Net-zero CO ₂ emissions		2051.3
		27.02 million tons* ¹ Domestic: 5 million tons less than FY2018.3.		2031.3
	Contribution to CO ₂ emissions reductions across society	Avoided emissions* ²	10 million tons	2031.3
			7 million tons	2027.3
	CO ₂ emissions reductions from our own business activities	Renewable energy development contribution	5 GW	2031.3
			4 GW	2027.3
		Percentage of renewables in our power generation portfolio in Japan	Nearly 50%	2031.3
			Nearly 30%	2027.3
	CO ₂ emissions reduction in the Group company offices and vehicles	100%	2031.3	
		67%	2027.3	
Contribution by development of technologies	Promotion of e-methane practical application	1% e-methane in gas grid	2031.3	
		Final investment decisions in e-methane supply chain PJ	2027.3	
	Promotion of methanation technology development	Establishing a pilot-scale (400 Nm ³ /h class) SOEC technology	2031.3	
Transition to the second phase of SOEC GI funds business		2027.3		
Resource recycling	Osaka Gas, core energy business companies, and Osaka Gas Network	Industrial and general waste	Recycling rate: 98% or higher	Every year until 2031.3
		Polyethylene (PE) pipes	Recycling rate: 100%	
		Gas meters	Recycling rate: 100%	
	Affiliates	Industrial and general waste	Recycling rate: 96% or higher	
Value chain	Promoting 3R efforts concerning used equipment collected from customers or business activities			
Biodiversity	Identifying risks and promoting conservation initiatives through biodiversity impact assessments			Every year until 2031.3
	Conserving the environment by promoting reuse of soil excavated during gas piping works	Recycling rate of soil excavated during piping works: 99% or higher		
Water resources	Identifying water risks through water stress impact assessments and promoting water resources conservation			Every year until 2031.3
	Preventing water pollution	Violation of environmental regulations related to water pollution: 0		

*1 Emissions in domestic supply chain (Scopes 1, 2 and 3)

*2 Calculate the estimated effect of CO₂ emissions reduction in one year of the calculation FY by introducing high efficiency facilities and low carbon energy, etc. to customer side and the company's business activities in and after FY2018.3.