Long-Term Management Vision 2030 and Medium-Term Management Plan 2023

The Daigas Group has formulated a Long-Term Management Vision that looks toward FY2031.3, aiming to be "an innovative energy and service company that continues to be the first choice of customers" and achieve carbon neutrality by 2050.

In our previous Medium-Term Management Plan, we endeavored to offer optimal solutions and expand our businesses by combining various energies with high-quality technical capabilities as well as attractive products and services in order to meet the diverse needs of our customers.

In our Medium-Term Management Plan 2023, "Creating Value for a Sustainable Future," we have adopted a backcasting approach from our long-term vision in formulating our plan. Our aim is to create "value for a sustainable future" together with our stakeholders and continue to grow as a corporate group that creates value that contributes to solving social issues, with the goal of achieving a sustainable society.

Medium-Term Management Plan 2020
(From FY2018.3 to FY2021.3)

Backcasting

Carbon Neutral Vision
Striving to become carbon neutral by 2050

Long-Term Management Vision 2030
Going Forward Beyond Borders 2030

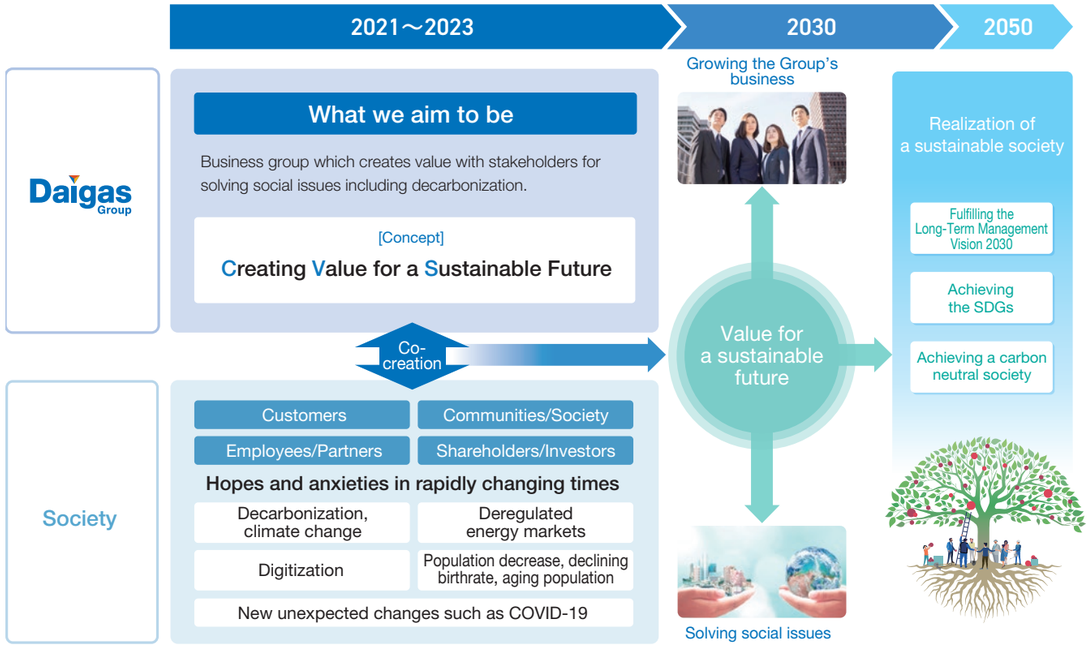
Medium-Term Management Plan 2023

In March 2021, the Daigas Group formulated and announced the "Daigas Group Medium-Term Management Plan 2023 'Creating Value for a Sustainable Future'" that covers the three years from FY2022.3 to FY2024.3. Under the Medium-Term Management Plan 2023, we have committed to creating "value for a sustainable future" with our stakeholders and achieving further growth as a corporate group that provides value that contributes to solving social issues in order to realize a sustainable society.



Medium-Term Management Plan 2023 as a Momentum Builder

Under the Medium-Term Management Plan 2023, we strive to build up momentum for a further growth of our business as a corporate group that provides solutions to achieving a sustainable society, focusing on creating value for a sustainable future with our stakeholders.



Key Strategy

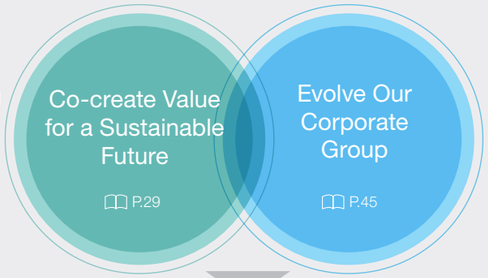
Ⅰ. Co-create Value for a Sustainable Future
Pursuing the creation of value for solving social issues alongside stakeholders.

Ⅱ. Evolve Our Corporate Group
Building a robust business portfolio and strengthening the management foundation to support the enhancement of our business portfolio management.

Key Initiatives

Cooperate with stakeholders globally

- Achieving a Low Carbon / Carbon Neutral Society P.29
- Establishing Lifestyles and Businesses Adjusted to the New Normal P.37
- Enhancing Resilience of Customers and Society P.41



- Enhancing Business Portfolio Management P.45
- Promoting Business Transformation with DX P.47
- Maximizing Value for Each Employee P.49

Key points

Achieving approx. 5% in ROIC; Increasing cash flows from operating activities by 50%*; Distributing shareholder returns when we achieve profit growth

*Total amount from FY2022.3 - FY2024.3 divided by Total forecasts from FY2019.3 - FY2021.3

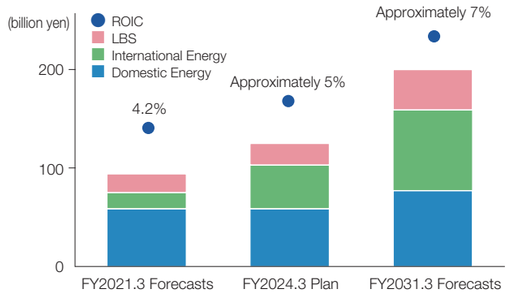
Management Indicators

We aim to enhance our earning capabilities through growth of our existing business and growth by investment and to ensure shareholder returns depending on our profit growth while maintaining our financial soundness. We also strive to achieve growth in each of our business segments, which are Domestic Energy, International Energy, and Life & Business Solutions.

		FY2021.3 Forecasts	FY2024.3 Plan
Profitability indicators	ROIC*1 (Reference)ROE	4.2% (7.0%)	Approximately 5% (Approximately 7.5%)
Shareholder returns	Payout ratio	30.5%	30% or higher*2
Financial soundness indicators	D/E ratio*3	0.65	Approximately 0.7
	Shareholders' equity ratio*3	50.1%	Around 50%

*1 ROIC = NOPAT / Invested capital
NOPAT = Ordinary profit + Interest expenses - Interest income - Income taxes
Invested capital= (Business unit) Working capital + Non-current assets
(Group-wide) Interest-bearing debts + Shareholders' equity (average of the beginning and the end of each fiscal year)
Interest-bearing debts excludes risk-free leased liabilities to us.
Excluding temporary impact on Domestic Energy Business (time-lag effect of Gas Business and Electricity Business).
*2 Excluding short-time fluctuation factors that affect profits
*3 Calculated with 50% of issued hybrid bonds as equity

Forecasts for ordinary profit by segment*4



*4 Excluding temporary impact. (Time-lag effect of Gas Business and Electricity Business)

We aim to achieve proper capital allocation to secure sufficient funds for investment and shareholder returns while minimizing external borrowing by enhancing our capabilities to increase cash flows from operational activities as well as replacing our assets.

Cash In

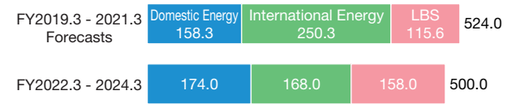
Maintain financial soundness by reducing borrowing from financial institutions through asset replacement and growth of cash flows from operating activities. (Increasing cash flows from operating activities by 50% from the previous period)

Cash Out

Implement strategic and selective investment for business growth in light of investment efficiency.

- Decarbonization area (Renewable energy in domestic and overseas, etc.)
- Areas where steady earnings contribution is expected (Business in North America, power source development, LBS business, etc.)
- New growth areas where strengths can be utilized, such as Asia

[Breakdown of investment for growth] (billion yen)



As for investment for quality improvement, we intend to increase investment in decarbonization, DX, and resilience enhancement.

We strive to distribute shareholder returns depending on our profit growth and in accordance with the Shareholder Return Policy*.

*Maintain stable dividends, a consolidated dividend payout ratio of 30% or higher

Ⅰ. Co-create Value for a Sustainable Future

Achieving a Low Carbon / Carbon Neutral Society

What We Aim to Be

As our contribution to achieving a low carbon / carbon neutral society, we strive to become carbon neutral by 2050 through decarbonization of our gas and electricity and through contribution to the reduction of CO_2 emissions.

Aiming to Become Carbon Neutral by 2050

The Daigas Group aims to become carbon neutral by 2050. We plan to reach the goal through decarbonization of our gas and electricity by introducing methanation to generate gas with renewable energy and hydrogen and by increasing the share of renewables in its power generation portfolio. In the meantime, the Daigas Group set the following targets for 2030 as the milestones for the Group's contribution to the reduction of CO_2 emissions throughout society.

2020 2023 **2030** **2050**

Striving to become carbon neutral in our group business through innovation → **Carbon Neutral**

- Develop technologies, such as methanation for decarbonization of city gas.
- Commercializing methanation technology in 2030 (injecting the carbon-free gas into the city gas pipeline network)
- Decarbonizing electricity mainly by introducing renewable energy.

Contributing to the reduction of CO_2 emissions throughout society

- Making as much contribution as possible to the reduction of CO_2 emissions while decaronization technologies being developed
- Promoting advanced utilization of natural gas, wider use and expansion of LNG overseas, and development of renewable energy

(FY2031.3 Targets)

Renewables development contribution on a global basis	5 GW
Renewables in our power portfolio in Japan	Nearly 50 %
CO_2 emissions reduction contribution	10 million tons

Daigas Group

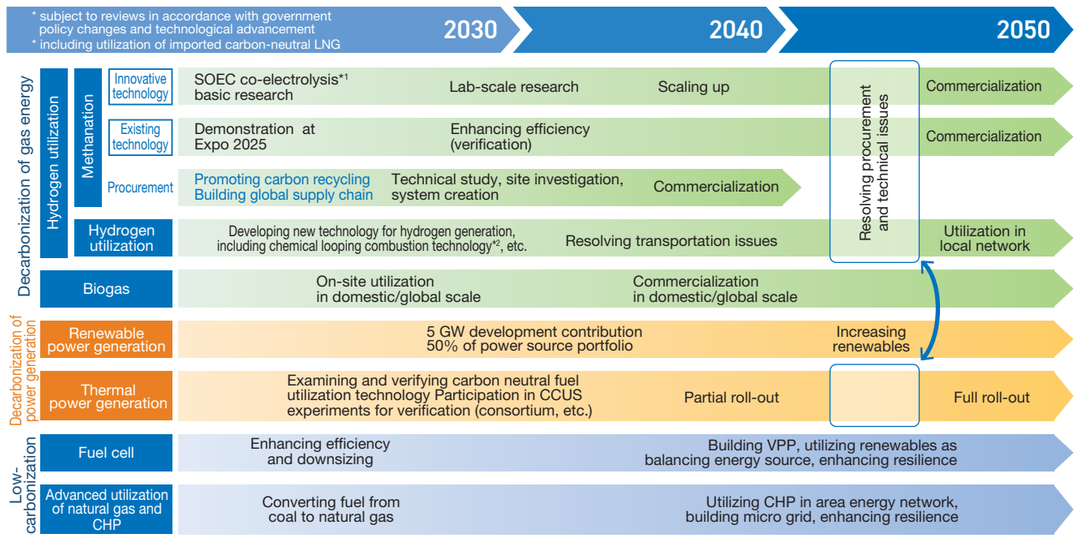
Strengths of the Daigas Group

- Know-how of developing and operating renewable power sources
- Experience in procuring competitively priced LNG and developing shale gas
- Expertise of fuel conversion to natural gas for in-house power generators and heat consuming facilities
- Accumulated knowledge of methanation technology

Key initiatives Implement carbon neutral measures, provide clean energy and expand renewable energy value chain, promote advanced utilization of natural gas and environmental products

Road Map to Carbon Neutrality

We aim to achieve our carbon neutrality goal through our ongoing initiatives including methanation R&D and renewable power generation capacity development and other activities as shown in the road map below.



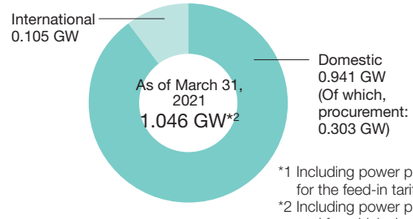
*1 Please see page 31 for details. *2 Please see page 58 for details.

Renewables development contribution on a global basis

Osaka Gas will proceed with developing and holding power sources, and expanding its electric power procurement efforts, aiming for our further target of 5 GW renewables development contribution by FY2031.3.

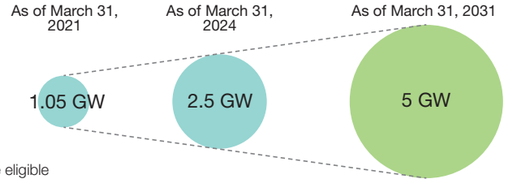
As of March 31, 2021, the Daigas Group had contributed a total of approximately 1.05 GW to the development of renewables in Japan and overseas.

Renewables development contribution*1



*1 Including power projects which are eligible for the feed-in tariff (FIT) scheme
*2 Including power projects under construction and for which decisions have been made

Targets for Medium-Term Management Plan 2023



CO_2 Emissions Reduction Contribution

Several initiatives have been taken from FY2018.3 to FY2021.3. These include cryogenic power generation at our LNG terminals, the introduction of renewable energy sources in Japan and high-efficiency thermal power generation in both Japan and abroad, the introduction of fuel cells and gas-powered air conditioning and high-efficiency hot-water heaters at customer sites, and conversion to the use of natural gas as a fuel in both Japan and abroad. These efforts have resulted in a total of approximately 5.60 million tons in CO_2 emissions reduction contribution.

We aim to contribute to the reduction of CO_2 emissions by 10 million tons* in FY2031.3.

* Reduction in CO_2 emissions by society and customers (compared with FY2017.3)

Ⅰ. Co-create Value for a Sustainable Future

Achieving a Low Carbon / Carbon Neutral Society

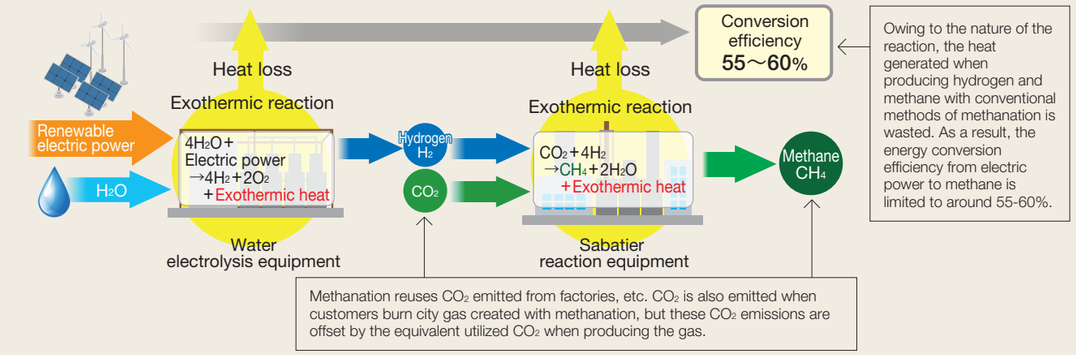
We will utilize the technical capabilities and business expertise that we have developed as a group over many years to create value together with our various stakeholders, and thereby achieve a low carbon / carbon neutral society.

Succeeded in Prototyping a New Type of SOEC, a Key Technology to Realize "Innovative Methanation," Which Contributes to Decarbonization of City Gas

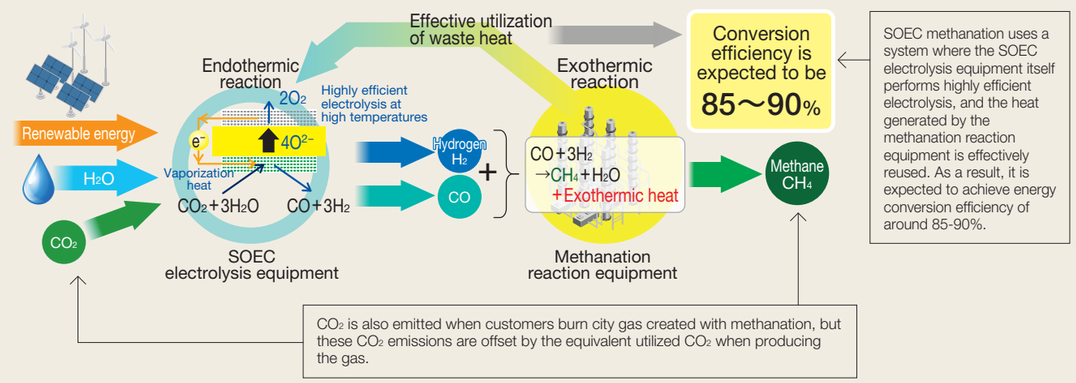
We have been conducting basic research on highly efficient and innovative methanation*1 technology, a promising technology for the decarbonization of city gas, and have succeeded for the first time in Japan in prototyping a practical-sized cell used for a new type of SOEC*2, which is the key to realizing this technology. We believe that this technology will have potential uses not just for the decarbonization of city gas, but also for the efficient manufacturing of carbon neutral fuels such as hydrogen and synthetic liquid fuels, and other substances. Accordingly, we will accelerate our research and development efforts through industry-government-academia collaboration, and alliances with various business partners, as we aim to establish this technology around 2030.

*1 Methanation is a technology using hydrogen (H_2) and carbon dioxide (CO_2), instead of natural gas, to generate methane.
*2 Solid Oxide Electrolysis Cell: An electrolysis element that uses solid oxides. Electrolysis is performed on steam and CO_2 at high temperatures.

Conventional methanation with "water electrolysis / Sabatier reaction technology"



Innovative Methanation "SOEC Methanation Technology"



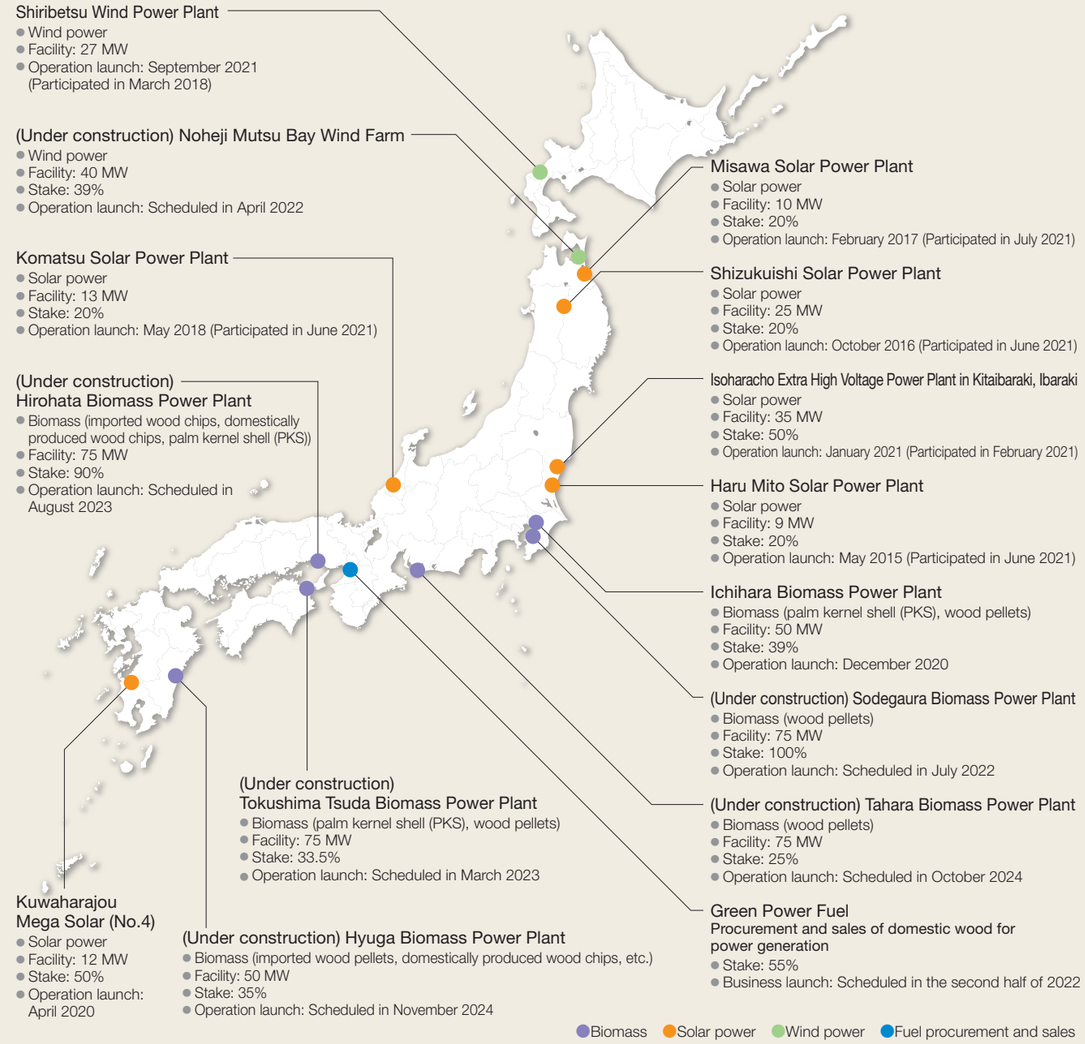
Daigas × Stakeholders

Working with various stakeholders to contribute to the development of renewables

In FY2021.3, we endeavored to contribute to the development of renewables by collaborating with various stakeholders. In terms of developing power sources, we acquired a solar power plant by investing in D&D Solar GK, which was established to hold solar power asset, together with Development Bank of Japan Inc. Additionally, we also focused on developing various power sources, including joint investment in an onshore wind power project and participation in a biomass power project.

With regard to procuring electric power, we entered into a bilateral contract with West Holdings Corporation for the long-term procurement of electricity generated at thousands of small-scale solar power facilities to be developed by West HD in FY2022.3.

Development of renewables (main projects since 2020)



Ⅰ. Co-create Value for a Sustainable Future

Climate Change Initiatives
– Recognition of and Action on Risks and Opportunities –

Backgrounds and Concepts

Tackling global climate change is positioned as one of the "Sustainable Development Goals (SDGs)" adopted by the United Nations. Since the Paris Agreement came into force in November 2016, initiatives are being undertaken around the world. In Japan as well, tackling climate change is becoming increasingly important as Prime Minister Suga declared Japan's aim to realize a carbon neutral society by the year 2050 in his general policy speech on October 26, 2020.

For the Daigas Group, which is engaged primarily in the energy business, climate change represents an important management challenge, and initiatives to reduce CO_2 emissions are an extremely important 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. In March 2021, the Daigas Group announced the "Daigas Group Medium-Term Management Plan 2023 'Creating Value for a Sustainable Future'" to further promote activities toward a low carbon / carbon neutral society.

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.

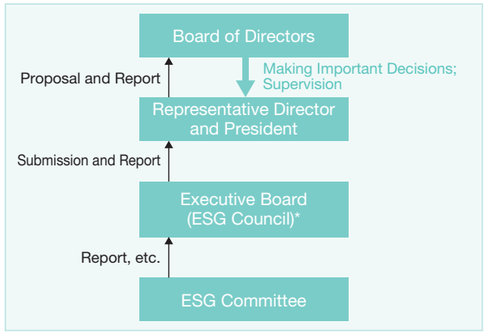
* Established on May 27, 2019, the consortium holds discussions led by private sectors on how companies can effectively disclose information on tackling climate change and how financial institutions can use the disclosed information to make appropriate investment decisions. From the government, the Ministry of Economy, Trade and Industry, the Financial Services Agency and the Ministry of the Environment also participate as observers in the consortium.

Climate Change Governance

The Daigas Group regards climate change response as a key management issue. The Board of Directors, which decides on and supervises the important business activities of the Group as a whole, is responsible for the decision-making and supervision of projects involving climate change issues. At the "ESG Council (Executive Board)," 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.

In addition, the Daigas Group has also established the "ESG Committee," chaired by the "Head of ESG Promotion" (Vice President), the officer overseeing Daigas Group sustainability activities, and composed of the heads of related business units as its members. The "ESG Committee" is held four times per year to formulate and advance plans for business activities concerning climate change response, and engages in Group-wide deliberation, coordination and supervision of issues such as the achievement of targets, risk management and response. Of these, the "ESG Committee" proposes or reports important issues to the Board of Directors, such as performance against ESG management targets, and business plans that are anticipated to be significantly affected financially by climate change.

■ Climate Change Governance Organization Chart



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

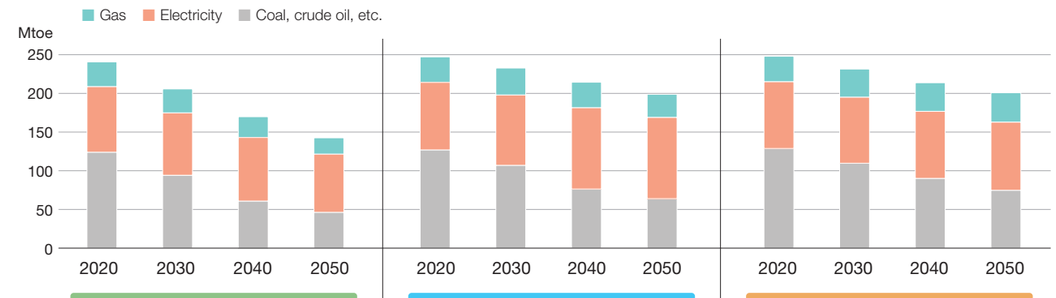
Scenario Analysis

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.

Using this analysis method based on scenarios established by an external authority (IEA), we assessed the impacts on the performances of 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, for the purpose of acquiring suggestions related to relevant factors and measures for mitigating/tapping into the impact. We assumed a multi-track scenario that takes into account the progress of energy conservation and changes in the composition of power sources, etc., as follows.

We will 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.

■ Japan's Final Energy Consumption of Gas, Electricity, etc. under Each Scenario



2℃ Scenario

Measures necessary to achieve the Paris Agreement target of 2°C are implemented, and a significant reduction in CO_2 emissions is achieved. Electricity demand decreases only slightly, due to a rise in the electrification rate, despite a significant decline in energy demand.

CO_2 emissions reduction 2017→2050 **80%***

2℃ Original Scenario

Technology progresses significantly, and a significant reduction in CO_2 emissions is achieved with only a moderate decline in energy demand. The current levels of electricity and gas demand are maintained.

CO_2 emissions reduction 2017→2050 **80%***

4℃ Scenario

Reduction in the necessary volume of CO_2 emissions is limited, despite the implementation of new energy policies and related plans. Both electricity and gas demand will increase slightly in Japan due to a moderate decline in energy demand.

CO_2 emissions reduction 2017→2050 **50%***

* Proportional reduction in CO_2 emissions achieved in FY2051.3 relative to FY2018.3

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 prospect until 2030 and the long term prospect until 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 manufacturing equipment. In addition, it is possible that our businesses may be affected by significant increases in the carbon tax rate in Japan, or an increased desire among our customers to switch to non-fossil fuels. However, promotion of the development of renewables and decarbonization technologies also represents a significant opportunity for the Group.

■ Evaluation of Risks and Opportunities and the Daigas Group's Responses

Impact in the case of the 2℃ scenario and 2℃ original scenario			Risks and Opportunities: Short and Medium Term (~2030)	Risks and Opportunities: Long Term (~2050)
Policy and legal	Introduction of a carbon tax	Risk	Carbon tax burden on gas and thermal power plants	Increasing burden with rising carbon tax rates
	Support for mass introduction of renewable energy sources	Opportunity	Expansion of sales of electricity from renewable energy sources	Reduction in costs of introducing renewable energy and expansion of sales
Technology	Development of renewable energy and CCUS	Opportunity	Sustained sales of electricity from gas and thermal power plants	Expansion of sales by making gas carbon neutral
	Development of AI/IoT	Opportunity	Participation in decentralized power sources aggregation business	Expansion of decentralized power sources aggregation business
Market	Switch to non-fossil fuel energy	Risk	Fall in sales of gas and thermal power	Further fall in sales of gas and thermal power
	Switch to LNG	Opportunity	Increase in demand due to the switch to LNG in Japan and abroad	Increase in demand for LNG abroad
Reputation	Focus of investment criteria on low-carbon or decarbonized businesses	Risk	Fall in capital procurement power in gas-related businesses	Decline in investment in fossil fuels businesses

Financial impact: Small / Financial impact: Large

The Daigas Group's Response

- Contribute to gas sales in Japan and abroad through fuel switching, etc.
- Promote the development and widespread use of high efficiency, compact cogeneration systems and fuel cells
- Verify and participate in the decentralized power sources aggregation business
- Develop renewable energy power sources
- Investigate and verify thermal power generation with CCUS technology
- Examine the use of carbon neutral fuels
- Research, develop and verify methanation technology
- Consider expanding the use of biogas
- Engage in dialogue with investors

Impact in the case of the 4℃ scenario			Risks and Opportunities: Short and Medium Term (~2030)	Risks and Opportunities: Long Term (~2050)
Physical (acute)	More serious and frequent meteorological disasters	Risk	Increase in capital investment costs and insurance premiums	Increase in facilities countermeasure costs Lower competitiveness due to gas price hike
Policy and legal	Policies to heighten resilience	Opportunity	Increase in demand for disaster response equipment	Expansion of decentralized energy systems
Market	Movement to switch from coal and crude oil to LNG	Risk	Increase in prices due to greater competition in LNG procurement	Further price hikes and impediments to procurement, due to increasing competition in LNG procurement
		Opportunity	Increase in demand due to the switch to LNG in Japan and abroad	Increase in LNG demand abroad

Financial impact: Small / Financial impact: Large

The Daigas Group's Response

- Diversify procurement sources
- Divide the supply areas into blocks and operate facilities remotely
- Implement disaster countermeasures for important buildings and facilities
- Promote the development and widespread use of high efficiency, compact cogeneration systems and fuel cells
- Promote widespread use of disaster response equipment
- Contribute to gas sales through fuel switching, etc.

* The intensity of the colors used for risks and opportunities indicates their degree of financial impact (the 2℃ original scenario and 4℃ scenario have been used to calculate quantitative impact)

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 CO_2 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.

Risk Management

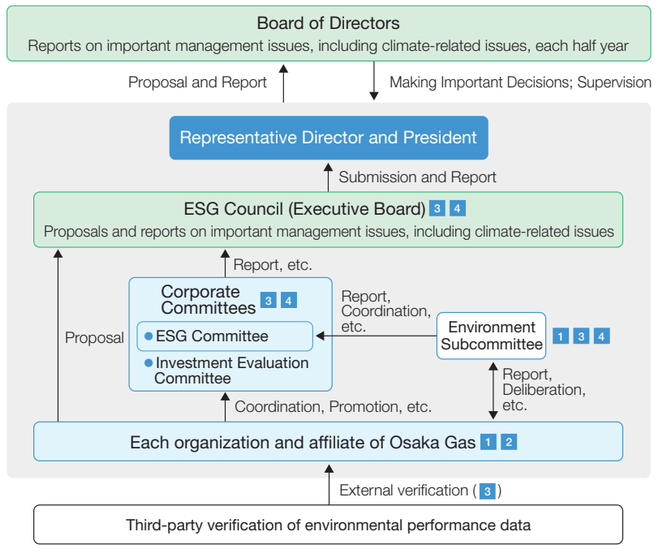
When deciding on the Daigas Group's business plan and investment plan, the internal organizations responsible for the gas, electricity and other businesses analyze the risk factors and their impact on each business, distill and identify risks, and submit these together with other business risks, etc. to the Executive Board for deliberation. Climate change risks in the formulated plans are managed through a PDCA cycle, and are reported and followed up at the Environment Subcommittee, ESG Committee, and ESG Council (Executive Board). The PDCA (plan-do-check-act) cycle is used to manage such actions.

Decisions on climate-related risk and sustainability, including investment decisions, are made by the Board of Directors and the Executive Board.

Matters related to climate change that were proposed or reported by March 31, 2021, included the following.

- Decision on 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 (Executive Board)
- Third party verification of environmental performance data

4 Review
- Issue identification
- Evaluation of countermeasures and improvements

Indicators and Targets

The Daigas Group will proceed to contribute to radically reducing CO_2 emissions and realizing a decarbonized society, through initiatives such as energy conservation, the advanced use of natural gas, and the widespread use of renewable energies.

Field	Item	Target	Target FY
Climate Change	CO_2 emissions across the Group GHG emissions (Scopes 1, 2 and 3)	Zero effective CO_2 emissions	2051.3
CO_2 emissions reductions from our own business activities	Proportion of renewable energy sources in domestic electric power business	Nearly 50%	2031.3
	Contribution to more widespread use of renewable energy	5 GW	2031.3
CO_2 emissions reductions at customer sites and through the value chain	● 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 reduction (t-CO_2) (Including reductions contributed at customer sites and overseas)	10 million tons (relative to FY 2017.3)	2031.3

Ⅰ. Co-create Value for a Sustainable Future

Establishing Lifestyles and Businesses Adjusted to the New Normal

What We Aim to Be

We globally provide services as optimal solutions to each customer's adjustment of their lifestyles and businesses to the new normal.

Provide solutions globally

Achieve 10 million customer accounts

Lifestyle

Offer optimal customer experience for each customer

- Home services and energy that meet increased and diversified customers' demand at home.

Business

Provide work environment that increases business efficiency

- Comfortable work environment with services of air conditioning and ventilation.
- Optimal control and operational efficiency with digital technology and data utilization.

High value-added solutions | Urban development | Environmental solutions

×

Digitization | Innovation

Daigas Group

Strengths of the Daigas Group

- Customer accounts and direct customer touch points
- Various gas and electricity rate plans to meet different customer lifestyles
- Technologies to develop appliances and facilities
- Data assets accumulated through services and maintenance

Key Initiatives Maintain and Expand Customer Base, and Enhance Customer Relationship Management

DX for solutions in the era of new normal

One of the Daigas Group's strengths has been our network of in-person customer contact points based on our approximately 200 service chain partners across our supply area. By combining this real network with digital contact points, we aim to offer a customer experience of the highest quality through an omnichannel strategy, such as offering services at the most appropriate timing for our customers. As part of our efforts to achieve this target, in FY2022.3 we will launch the "Sumai LINK Platform (tentative name)," a life service platform that will enable customers of all generations to digitally access services offered by the Company and our partner companies.

We aim to increase the user base of devices such as the "ENE-FARM" residential fuel cell system in the "Tsunagaru de series" of IoT-compatible gas devices, the "ECO-JOZU" highly energy efficient water heater, and the "Sumapiko" alarm device to 300,000 units by FY2024.3. To that end, we will utilize the strengths of our group companies with unique technology in the digital sphere such as the OGIS-RI Group and Palette Cloud, Inc., while also utilizing the capabilities of the Daigas Group as a group, including coordination with partner companies such as Bitkey Inc. Additionally, we will take steps to grow earnings by offering the expertise we obtain in the course of the above measures to companies outside the Group.

Concept of Life Service Platform
(Scheduled for launch in FY2022.3)

Customers of "My Osaka Gas" | Customers of Business Partners

Offering one-stop service with joint account and combined billing

"Sumai LINK Platform"(tentative name)

Products and services offered by us and our partners

Lifestyle support (housekeeping and health) | E-commerce (daily necessities and foods)

Target of IoT-connected gas appliances (residential)

Approx. **100** thousand units	Approx. **300** thousand units
End of FY2021.3	FY2024.3 Forecast

Lifestyle and businesses solutions in the era of the new normal

The Daigas Group has focused on expanding its range of value-added rate plans and its services related to household affairs and residential facilities in a way that suits to customers' lifestyles and needs, such as through the Style Plans and With Plans. Looking ahead, we aim to quickly achieve our target of 10 million customer accounts prior to FY2031.3 by expanding services in new fields.

In our ESP (energy service provider) business, which we also aim to expand, we plan to provide onestop solutions for services better suited to the commercial and industrial customers in the age of the new normal, such as ventilation and air conditioning. For low carbon / carbon neutral needs, we are offering solutions such as D-Solar service and fuel conversion to natural gas for in-house power generation and heat equipment.

In the Osaka Gas Chemicals Group, we will proceed with the establishment of systems for the development of new products of fine materials for the photoelectron materials market, while continuing to develop activated carbon and the wood preservative and coating agent "Xyladecor" as high-value-added products. Additionally, in the Osaka Gas Urban Development Group, we will promote advanced urban development, including the "Umekita" project near Osaka Station, which is linked to regional and real estate development initiatives on a group-wide basis. In housing development, the group continues increasing the ratio of properties in the Greater Tokyo area through Prime Estate Co., Ltd., its acquired company in Yokohama. Additionally, we have been making efforts to expand into new business domains such as logistics which has been growing in response to the expansion of e-commerce business due to the COVID-19 pandemic. In future, we will continue to create high-quality lifestyles and business environments for customers through real estate solutions that fulfill the needs of customers and society.

Number of customer accounts

Approx. **9.4** million	**10** million
End of FY2021.3	Aim to achieve the target early

ESP target

Increase profit by approximately **50%** (FY2021.3→FY2024.3)

Ⅰ. Co-create Value for a Sustainable Future

Key Initiatives

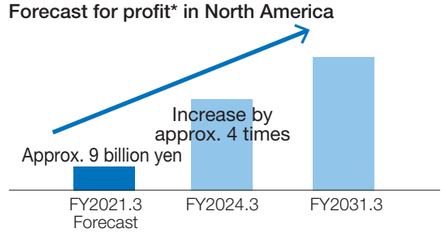
International energy business - North America

Wider use of natural gas
In North America, the pillar of the International Energy Business, we are steadily proceeding with projects in which our participation is already decided, including the Freeport LNG Project and the Sabine Shale Gas Project. While steadily proceeding with projects in which our participation is already decided, we aim to create an earnings platform and improve our business promotion by acquiring new projects in production or development. In the USA, there has been increased demand for stable power supply due to factors such as the decommission of aging coal-fired power plants and the expansion of renewable energy sources. Since participating in North American natural gas thermal power plant projects in 2004, we have acquired projects, mainly in the USA northeast including the PJM Market, one of the largest wholesale power markets in the USA. In addition to expanding profit contributions, we have accumulated expertise on power plant operations, including fuel procurement and sales of electric power to the market. We are taking measures to accelerate the accumulation of business expertise by promoting more independent power plant operations, while making further efforts to achieve sustainable growth in the IPP business in North America.

Expansion of renewable energy business
In addition to the investment in solar project developer, SolAmerica Energy, LLC, we will also consider opportunities to participate in renewable energy businesses, an area that is expected to grow significantly in the USA.

Driving business development in North America
We have designated Osaka Gas USA Corporation as our regional headquarters in North America, which is responsible for the business development of the Freeport LNG Project, Sabine Shale Gas Project, and IPP projects, including renewable energy. With Osaka Gas USA Corporation gaining control over the decision making on asset acquisition and replacement with agility, we expect the acceleration of our earnings growth in North America, aiming for a fourfold increase from FY2021.3 to FY2024.3

Forecast for profit* in North America



* Operating profit + Share of profit (loss) of entities accounted for using equity method

International energy business – businesses in Asia, trading, decarbonization

Asia
Southeast Asia, where natural gas demand is expected to grow, is a key region for the Daigas Group. We will steadily grow the natural gas sales business in Singapore and Vietnam and the energy services business in Thailand and Indonesia in which we have already participated. We will also consider expanding new businesses such as participation in projects for LNG terminals and natural gas-fired power plants, as well as renewable energy development projects in collaboration with our local partner companies.


Scene at onsite survey in Singapore

Trading
A natural gas liquefaction project in Texas, USA started from December 2019, which has increased the number of countries with suppliers we source from. We also entered into a new type of procurement where LNG procurement prices are indexed to Henry Hub prices, one of the price indexes for natural gas in the USA, in addition to traditional procurement in which LNG prices are generally linked to the crude oil price. The diversification of price indexation will help stabilize LNG prices when crude oil prices fluctuate. In addition, by investing in liquefaction projects, we will contribute to ensuring price-competitive LNG procurement by focusing on the low-cost procurement of the raw materials for gas in the USA market.

We established Osaka Gas Energy Supply and Trading Pte. Ltd., an LNG trading company in Singapore, and aim to reduce costs for energy resource procurement while responding to customer needs through the utilization of the company and our group carrier fleet, and optimization leveraging our diversified procurement portfolio.

Decarbonization
We continue exploring new potential projects and technologies such as CCS/CCUS and hydrogen to capture great opportunities presented by the globally accelerating wave of decarbonization businesses. In addition, we also identifying and responding to the needs for carbon neutral LNG supply.

Establishing Lifestyles and Businesses Adjusted to the New Normal

We aim to utilize the Daigas Group's strengths in solutions and innovation and create value together with stakeholders, thereby establishing new lifestyles and businesses adjusted to the new normal.

Daigas × Stakeholders

Holding "Internet-based promotion campaign" allowing people to participate online from their own homes

In anticipation of the age of COVID-19 and even afterward, the Daigas Group has focused on creating opportunities for new contact points with customers. In 1955, we began holding our annual promotion campaign, an exhibition event for customers using the Company's gas. Now, we hold this campaign every year in approximately 100 event spaces in commercial facilities and other venues, with total attendants numbering over 400,000 people. We adopted an online format for the first time in FY2021.3 as the 66th year holding this campaign. We provided a variety of content, including introductions to products and services by video, etc., as well as a lottery that customers could apply for online.

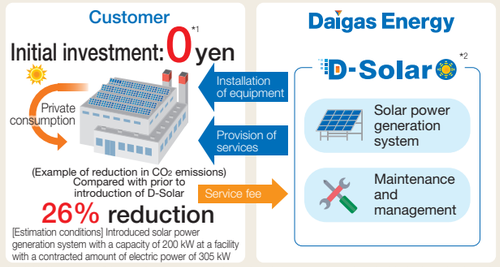
This format enabled customers to participate from anywhere at any time that suits them. As a result, a total of over 400,000 customers participated in the lottery.

Additionally, we also implemented our new social contribution program "Tsunagaru Project" at the campaign. The project is an initiative in which we donate 10 yen per lottery entrant to an eligible NPO as aid money. As a result, we donated a total of approximately 4.07 million yen to 10 organizations.

We will offer enduring support for the lives of our customers directly facing environmental changes, and vigorously and continuously develop new solutions and services based on digital technology that fulfill customers' expectations.

"D-Solar" - a solar power generation service for private consumption*

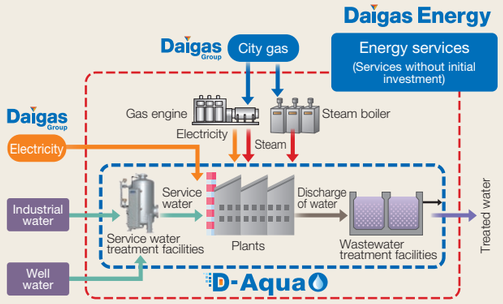
In June 2020, we released "D-Solar," a solar power generation service for private consumption as part of the Daigas Group's efforts to achieve a decarbonized society. In this service, we install solar power generation systems on the rooves of our customers' facilities and supply the electric power generated to the customers, enabling customers to "reduce CO_2 emissions" and "strengthen BCP measures" with zero initial investment. The electric power generated by these solar power generation systems has zero CO_2 emissions. Additionally, in the event of power outage, the solar power generation systems can secure power source during the daytime, and thereby allow businesses to continue and resume activities early.



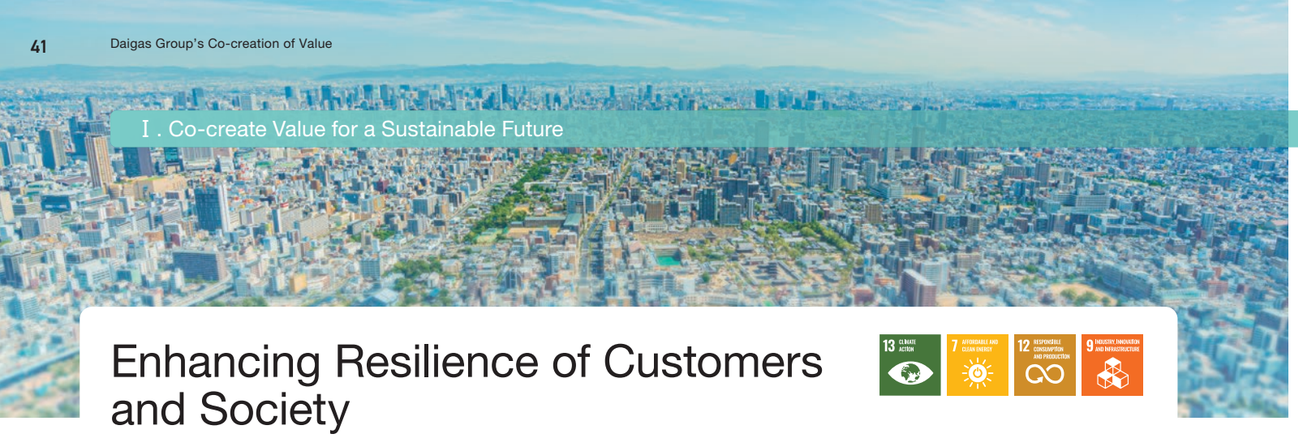
*1 "Initial investment" here refers to construction-related expenses associated with the introduction of D-Solar (construction fees, equipment fees, design and technical expenses, etc.). There may be separate expenses associated with revenue stamps depending on the amount of the contract, structural calculations to assess whether it is possible to install solar panels on the building, etc.
*2 Prescribed screening is required when entering into contracts.

"D-Aqua," a one-stop water treatment service*

In response to recent growth in demand among customers for solutions that address environmental issues, the Daigas Group entered into a business alliance with Miura Co., Ltd. and Aquas Corporation with the aim of creating a one-stop service by enhancing maintenance services in water treatment services and expanding our range of products. Looking ahead, we have renamed our water treatment services to "D-Aqua," and will strive to further improve the service. We will provide our customers with a one-stop service for utilities as a whole, including the use of well water and industrial water, as well as wastewater treatment through our partnership with these two companies in addition to technology for addressing energy and environmental issues.



* " D " series: Products and services offered by Daigas Energy Co., Ltd., a wholly owned subsidiary of Osaka Gas. These products and services contribute to (1) Digitalization, (2) Decarbonization, and (3) Decentralization.



Ⅰ. Co-create Value for a Sustainable Future

Enhancing Resilience of Customers and Society

What We Aim to Be

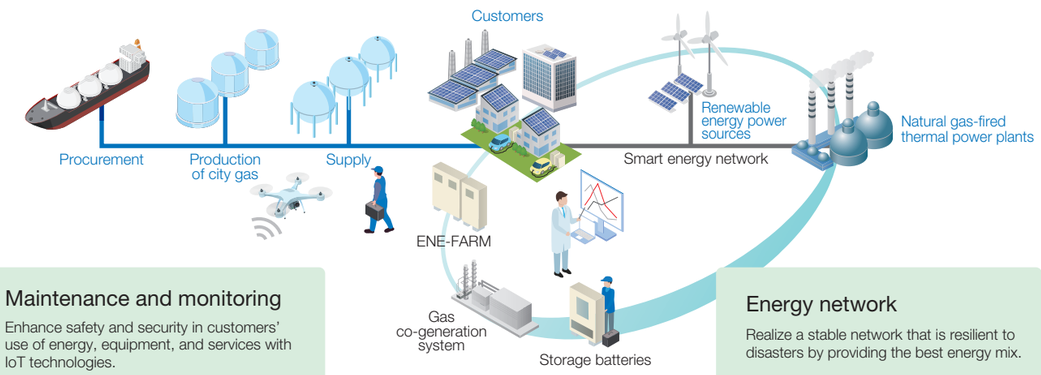
We aim to enhance energy resilience for customers and society by reinforcing gas supply chain infrastructure for stable supply and expanding energy network combined with distributed power sources.

Gas supply chain

Ensure stable LNG procurement, energy security and stable supply, early recovery from natural disasters while preventing secondary disasters.

Electricity supply chain

Build a robust power source portfolio through diversification of power sources and capacity expansion of renewable energy and other sources.



Maintenance and monitoring

Enhance safety and security in customers' use of energy, equipment, and services with IoT technologies.

Energy network

Realize a stable network that is resilient to disasters by providing the best energy mix.

Taking measures against infectious diseases such as COVID-19

Daigas Group

Strengths of the Daigas Group

- Secure and stable energy supply & capability to respond to disasters
- The achievements of operation in remote facility management by utilizing IoT
- Use of natural gas-fired thermal power sources, renewable energy sources, and decentralized power sources

Key Initiatives Maintain Safety and Quality Levels, and Strengthen Resilience of Energy Supply

Pursuit of resiliency and efficiency at LNG terminals, power plants and gas supply networks

In order to enhance energy resilience, we plan to improve productivity while pursuing safety as a priority. In gas production, we are increasing efficiency and lowering costs by utilizing smart factory technologies for remote monitoring and operation. In our gas pipeline network operation, we are enhancing both security and productivity through digital transformation.

In order to minimize the impact of large scale natural disasters on customers, we are expanding remote operations and strengthening the earthquake resistance of our facilities while ensuring stable energy supply on a daily basis. In the meantime, we are enhancing our post-disaster quick recovery measures and service recovery status visualization system.

Subdivided areas* for earthquake countermeasures

End of FY2021.3	FY2024.3 Forecast	FY2031.3 Forecast
171	688	705

*Area Subdivision Plan is scheduled to be implemented in FY2022.3

Distributed power sources to enhance resilience

In light of the expected heightened risk of natural disasters due to climate change and the greater reliance on renewable energy, we need higher levels of resilience and safety of the electric power supply than ever before. We have been already combining renewables and gas cogeneration in specific locations to establish a number of microgrids, where local power supply continues even during an outage. We have been also conducting verification tests on a VPP incorporating 3,600 ENE-FARM units. We plan to further develop projects such as building a new energy network by combining multiple energy sources in view of the shift to a society with decentralized power sources.

Residential fuel cells "ENE-FARM type S"

Disaster Prevention Measures (Earthquake Countermeasures)

Preventive Measures

We are advancing efforts to minimize damage caused by earthquakes, such as promoting the spread of intelligent gas meters (residential use) that automatically stop gas when large shakes are detected, and actively adopting polyethylene pipes for low-pressure gas pipes.

Intelligent gas meters

Before Great Hanshin-Awaji (Kobe) Earthquake
Approx. 75%
▼
End of March 2021
Approx. 99.9%

Highly flexible polyethylene pipes

Before Great Hanshin-Awaji (Kobe) Earthquake
About 1,200 km
▼
End of March 2021
About 17,200 km

Emergency Measures

We are stepping up our preparedness for earthquakes, by dividing the pipeline network into blocks, which enables gas supply suspension only for severely damaged areas, and having in place a Central Control Back-up Center which will take over the Central Control Office of the head office if it is affected.

Segmenting the pipeline network into blocks

Before Great Hanshin-Awaji (Kobe) Earthquake
55 blocks
▶ As of April 2021
660 blocks

Recovery Measures

We have stockpiled materials and equipment and carried out system maintenance for post-disaster quick recovery. In addition, a system to visualize the recovery situation provides gas recovery information in an easy-to-understand manner to customers in areas where gas supply is suspended when a large-scale earthquake occurs.

System to visualize the recovery situation

Visualization of gas recovery status at the municipal level
(Maps and lists are provided for ease of reference.)

Ⅰ. Co-create Value for a Sustainable Future

Enhancing Resilience of Customers and Society

The Daigas Group aim to utilize our strengths in solutions and innovation and create value together with stakeholders, thereby enhancing the resilience of our customers and society.

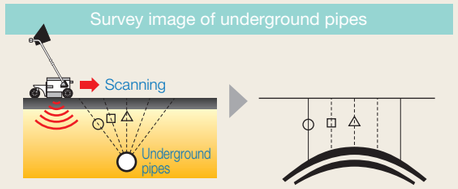
Daigas × Stakeholders

Development of "AI radar locator," which uses AI to locate underground pipes

Osaka Gas has developed and uses an "AI radar locator" that allows anyone to easily detect underground pipes with a high degree of accuracy, thanks to the adoption of AI image diagnostic technology. The radar locator emits radio waves toward the ground, and generates survey images based on the reflection of the waves from underground pipes. Operators can then estimate the location of underground pipes by interpreting the shape of the waves in the images. There were cases in which it was difficult to detect locations depending on the status of pipes and the quality of soil, and it required significant technical skill to identify the location of underground pipes with certainty. In this development, however, the AI system that learns the judgment of experienced workers enabled operators to automatically make judgments about the location of underground pipes, without relying on the expertise of them. We will focus on further technical development for enhancing the safety of our gas operations in order to ensure that our customers can continue to use gas safely and with peace of mind.

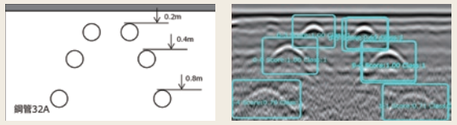
Gas pipes survey using a radar locator

Survey image of underground pipes



Ground penetrating radar　Image obtained by exploration

Example of judgments made by AI on the location of underground pipes



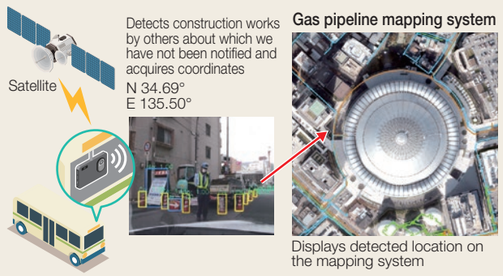
Cross-section　Example of cross-section made by AI

Move to absolute coordinates for pipe mapping systems

The Company manages location information of gas pipes with a mapping system to implement construction, maintenance, and operations. Previously, this location information was expressed in the form of relative coordinates based on geographical features such as roads and rivers on a topographic map. As such, in order to identify the location of gas pipes at sites, it was necessary to measure the distance from the origin of the relative coordinates. There were cases where the location of the origin needed to be changed because of road construction or other reasons, requiring significant labor for maintenance. Now, we have replaced the maps used in our pipe mapping system with high-accuracy and high-resolution aerial photographs with absolute coordinates, thereby proceeding with our efforts to allocate absolute coordinates to gas pipes. As a result, we will be able to identify the location of gas pipes with pinpoint accuracy, even when it has become impossible to identify the origin of relative coordinates due to road expansions or sediment deposition caused by natural disasters, and other reasons.

Using the location information of gas pipes expressed in absolute coordinates, we began a trial operation utilizing AI for gas pipe patrols, jointly with Osaka City Bus Corporation, starting in June 2021. For roads where medium-pressure gas pipes are buried, we have traditionally been taking steps to prevent damage to the gas pipes by operating patrol cars that travel along designated routes every day to detect any construction work in the vicinity of the gas pipes about which the Company are not notified. Now, we have developed a camera that automatically recognizes construction sites by using AI systems, and have installed the camera in route buses along with GPS, thereby making efforts to identify construction works taking place in the vicinity of medium-pressure gas pipes on the bus routes. By so doing, we will be able to increase the frequency of patrols and enhance safety quality, while also increasing the productivity of our operations.

In the future, it will become possible to identify the location of gas pipes even with general-purpose devices such as smartphones, by managing the location information of gas pipes based on absolute coordinates. This also offers the prospect of future transformations in operations, etc. We will continue enhancing the quality of our operations from the perspective of ensuring safety and preventing disasters to improve the resilience of our customers and society.

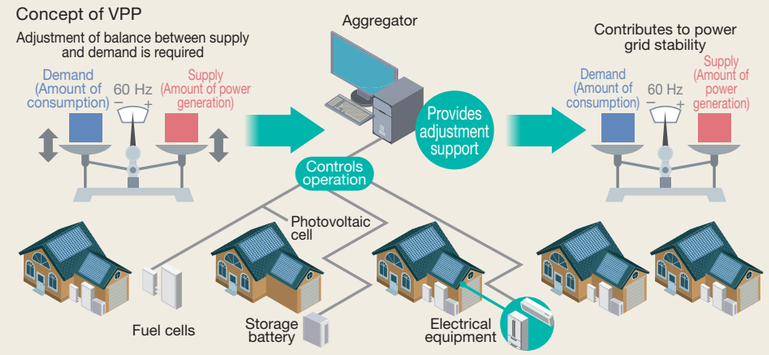


Displays detected location on the mapping system

Launch of verification project to establish virtual power plant (VPP) using residential fuel cell "ENE-FARM" —VPP verification project connecting 3,600 units—

Electricity cannot be stored, so continual adjustments of power generation must be made to ensure a balance between supply and demand. If power generation is not balanced, the frequency of the electricity will fluctuate, potentially resulting in large-scale power outages, in the worst-case scenario. As a result, general electricity transmission and distribution utilities currently maintain frequencies within a certain range, mainly by limiting the output of power stations to match demand.

Renewable energy, which does not generate CO_2 when electricity is generated, may become a key energy source in future under Japan's energy policies. Still, solar power generation and wind power generation are affected by weather conditions such as the amount of solar radiation and strength of the wind, causing issues when adjusting the balance of grid electricity supply and demand. On the other hand, fuel cells have the characteristic of being able to freely control the output of power, and are attracting attention as a resource that can contribute to the adjustment of grid electricity supply and demand in a society in which a large amount of renewable energy is introduced.



Innovation by the Daigas Group

Osaka Gas is conducting a verification project to build a virtual power plant (VPP)*1 that controls approximately 3,600 units of the residential fuel cell system, "ENE-FARM," installed at customers' homes (a total potential supply capacity*2 of around 1 MW) as energy resources as if it were a single power plant, so as to utilize it for effective adjustment of grid electricity supply and demand and for avoiding imbalance in the grid. While the aggregation coordinator*3 in this verification project is ENERES Co., Ltd., Osaka Gas participates in the project as a resource aggregator*4.

In the previous fiscal year, the Company participated in a verification project for a VPP that involved verifying the operation of over 1,500 ENE-FARM units. This fiscal year, we intend to conduct a technical verification that aims to provide adjustment capabilities with the use of approximately 3,600 ENE-FARM units, exceeding the previous fiscal year, while also aiming to enhance the accuracy of controlling ENE-FARM units remotely in accordance with the supply-demand balance in the grid. Additionally, it has been required to avoid imbalances of renewable energy ahead of the introduction of the FIP scheme. Therefore, in this verification, the Company will verify the technology used to avoid imbalances by controlling the power generated by ENE-FARM units in accordance with the output of power from our Yura Solar Power Plant.

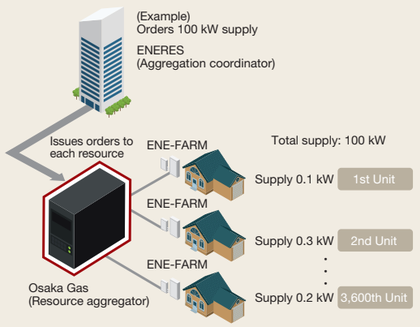
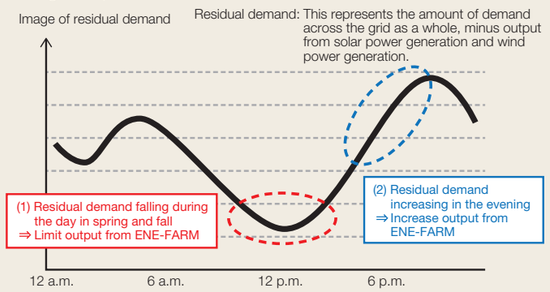


Image of operation



*1 Virtual power plant. It is utilized by a business operator called "aggregator" that aggregates the adjustment capacity supplied by distributed power sources
*2 The amount of adjustment capacity that can be offered to the market
*3 A business operator who aggregates the electric power controlled by a resource aggregator, and trades electricity directly with general electricity transmission and distribution utilities and electricity retailers
*4 A business operator who controls resources by directly concluding VPP service contracts with customers

Ⅱ. Evolve Our Corporate Group

Enhancing Business Portfolio Management

What We Aim To Be

We plan to evolve into a group of enterprises with a robust business portfolio by promoting each business unit's autonomous growth and optimally allocating resources throughout the Group. We strive to improve our business portfolio management and governance while enhancing profit earning capabilities of each business unit by introducing ROIC.

- **Improve each business unit's capabilities of autonomous management and expansion**
- **Build a robust business portfolio**

Enhance Business Portfolio Management including introduction of ROIC

Domestic Energy Business | **International Energy Business** | **LBS Business**

Business Unit

- LNG, Power & Engineering
- Network
- Energy Solution
- Energy Resources & International
- Urban Development
- IT
- Materials

Main Business

- LNG, Power & Engineering: LNG & Engineering; Power Generation; Renewable Energy
- Network: Network
- Energy Solution: Residential; Non-residential
- Energy Resources & International: Trading*; Upstream; IPP in North America; Mid- & Downstream in North America; Asia
- Urban Development: Urban Development
- IT: IT
- Materials: Materials

*Trading is included in the Domestic Energy Business segment.

Enhancing Business Portfolio

In order to create value for a sustainable future, we need the growth of earnings and capital efficiency of each business unit and a robust portfolio comprising those businesses. Under CVS 2023, we are improving our business management through the introduction of ROIC as a new management indicator, with the aim of boosting the earning capabilities of each business unit with more focus on the balance sheet.

At the same time, we are increasing the business control functions of each business unit, which enhances their flexibility and agility in business operations. We are also introducing more frequent review of our business plan and resource allocation at the group headquarters. These measures are efficiently improving the robustness of our business portfolio while enabling it to quickly adapt to change.

Business Unit	Operations with focus on ROIC Operations with focus on both profit and capital efficiency rather than only on profit	Speedier business development (Core energy business companies, overseas regional headquarters)	**Enhancement of autonomous management and growth capabilities**
Corporate	More frequent review of business portfolio based on ROIC and risk-management Selection and diversification through flexible asset replacement and resource allocation	Further promote compliance throughout the organization Enhance the diversity of the Board of Directors	**Robust business portfolio responsive to changes**

Introduction of ROIC

ROIC = NOPAT*1 / Invested capital*2

- We have introduced ROIC as an indicator of how efficiently we earn profits from assets associated with our business
- Monitor ROIC as a common indicator for each business unit and the Group as a whole

*1 NOPAT = Ordinary profit + Interest expenses - Interest income - Income taxes

*2 Invested capital= (Business unit) Working capital + Non-current assets
(Group-wide) Interest-bearing debts + Shareholders' equity (average of the beginning and the end of each fiscal year)
Interest-bearing debts excludes risk-free leased liabilities to us.

Operation of Business Unit

Set ROIC targets for each business unit

- Domestic Energy
- International Energy
- LBS
- LNG, Power & Engineering
- Energy Resources & International
- Urban Development
- Network
- IT
- Energy Solution
- Materials

Promote autonomous management of business units

Periodic reviews

ROIC target for FY2031.3: Approx. 7%

Resource allocation
Assets replacement

Business Portfolio Management

Set, evaluate, and manage an ROIC target for the entire business portfolio

Capital cost < **ROIC target**

Business risk ↔ Financial soundness

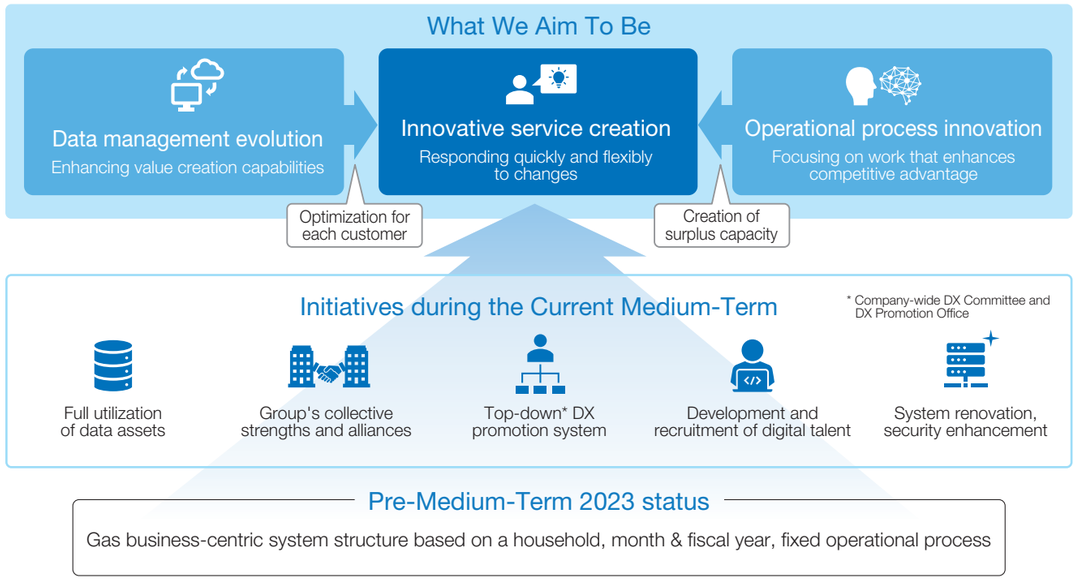
Build a business portfolio with a balanced risk-return

Ⅱ. Evolve Our Corporate Group

Promoting Business Transformation with DX

What We Aim To Be

We will proactively leverage digital technology, which is progressing rapidly, for our business, and accelerate innovative service creation, data management evolution, and operational process innovation to continue providing value amid rapid change in society and the working environment as well as changes in customer values. We will launch the DX Committee and the DX Promotion Office for implementing effective and swift digital transformation under the leadership of top management.

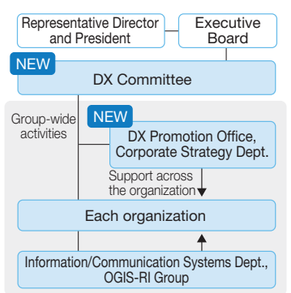


Basic Policy

We will change our business operations to enable them to respond rapidly and flexibly to any changes to enhance productivity dramatically to create value sustainably for realizing the Medium-Term Management Plan 2023 and the Long-Term Management Vision 2030. In the new age in which both our customers and services rapidly change, we will aim for transformation of the business itself and for innovation as a corporate group that can keep on changing by revising constantly and flexibly our business model, operations, rules, and systems that used to be taken for granted. In order to make a major transformation to realize our vision, we will work on building a promotion system driven by top management, strengthening human resources development, demonstrating the comprehensive strength of the Daigas Group including OGIS-RI Co., Ltd., and building alliances with our partner companies.

DX Promotion System

In addition to DX promotion at each organization for realizing what we aim to be, we established the "DX Committee" and the "DX Promotion Office" in April 2021 to increase our top commitment and to accelerate DX by demonstrating direction, coordination, and support functions from a group-wide perspective. As a group-wide initiative, we will aim for realizing the vision and business transformation.



Key Initiatives

Practicing Innovative Service Creation

We will offer various services with higher value by incorporating trends and the diverse needs of customers without delay. This does not only refer to the development of new businesses and new services, but also leads to increasing sophistication in existing businesses, resulting in an increase in customer accounts, business opportunities, and net sales as well as raising business operations to the next level. In rapidly changing times, it is important to "accelerate the trial and error cycle". We will acquire skills through practice, innovate the system itself and foster customs and mindsets across the entire Group, which enable the Group to move forward with new initiatives aggressively and quickly.

Data Management Evolution

The Group has been leading efforts to utilize data, placing "Business Analysis Center" at its core. In the future, utilizing valuable assets such as data as our strengths is the key to value creation and growth strengths. For example, if we can catch customer's needs from data, we can offer services optimized for each customer. We will continue to create new value in customer experiences and our supply chain by developing our initiatives in the past and evolving data management further.

Operational Process Innovation

We will thoroughly review our internal operations from "the perspective of customers," not from an internal point of view. We will also focus on merging and abolishing operations as well as standardizing and aggregating different procedural operations among organizations to broadly redesign the entire operational process. Furthermore, the workload for remaining operations will be reduced with digital technologies such as AI and RPA. Through these transformations, Group employees will be able to generate extra power to work on more non-routine and discretionary operations as well as operations that require higher expertise and judgment in a pleasant working environment. This will allow employees to devote more energy to providing better value to customers.

Human Resources Development

We will enhance programs in sequence by leveraging the knowledge on the development of human resources that can utilize data, an effort that we have been making proactively for years while accumulating expertise on creating innovative services and drastic transformation on operational processes. In addition, we will provide a wide range of experience and practical chances for employees of various ages and positions, including "TORCH," a program for new business creation for young employees, training schemes for executives and manager-level employees and new business development collaborated with venture capitals. Furthermore, we will help employees grow by providing them feedback on upskilling through these programs.

Major Activities

"TORCH": A Program for New Business Creation by Young Employees

We launched a program in which young employees create new businesses in 2017 and named it "TORCH." Business ideas are presented to Group employees in a contest format, and ones that gain high evaluation will move to a commercialization process, where internal and external experts work together to launch them in the market. In December 2020, we released "taknal," an app that enables users to encounter new books by using the location data of smartphones, and received a positive response. Aiming for creating new businesses that are free from boundaries defining existing businesses, we will establish a culture of creating innovation firmly across the entire group.


A TORCH presentation (By the "taknal" team)

Optimization of LNG Tank Operation Plan

LNG tank operation plans at LNG terminals must be formulated taking into account the complex facility configurations, LNG ship acceptance, and demands of city gas. Accordingly, those plans heavily depend on experts who understand operations at the sites well. Therefore, LNG terminals and "Business Analysis Center" of the Information/Communication Systems Dept. collaborated to develop a model by combining expert knowledge and a mathematical programming approach to perform an initiative to automate and optimize formulation of LNG tank operation plans. In the future, we will work on increasing the sophistication of our business with a view to optimize the entire LNG value chain.


LNG terminal

Business Creation and Human Resources Development through Capital Injection to Venture Funds

In June 2021, we invested in a fund operated by WiL, LLC, a venture capital company headquartered in Silicon Valley in the USA. Using this investment as a foothold, we aim to invest in and form alliances with ventures including those in DX-related areas mainly in Japan and the USA, and create convenient services and business solutions using digital technologies and develop human resources by utilizing WiL's wealth of investment experiences and insight on advanced technologies and services.

A photo of workshop at WiL

Ⅱ. Evolve Our Corporate Group

Maximizing Value for Each Employee

What We Aim To Be

We intend to build an organization with diverse talent and ways of work where employees can achieve personal growth through challenging tasks and feel a sense of fulfillment through social issue resolution.

Diverse talent and ways of work

- Promote **diversity and inclusion** for active participation of diverse talent
- **Reform business processes** with DX
- Improve the quality of work environment **regardless of locations**

Organization that provides personal growth and a sense of fulfillment

- **Enhance employees' engagement through social issue resolution**
- Foster **the culture of welcoming ambitions to take on challenges**
- **Maximize value for employees** by accelerating the personnel assignment for their higher sense of fulfillment while maintaining close communication

Ensuring safety and promoting health maintenance

Promotion Policy

The Daigas Group is committed to promoting diversity, equal opportunity, and inclusion in the organization in order to be a corporate group with diverse talent that continues creating new types of value.

We aim to be a group of enterprises that provide a work environment that values uniqueness of each employee, tolerates no discrimination, acknowledges employee diversity including gender, age, physical disabilities, nationalities, form of employment, lifestyles*1, religions, sexual orientation*2, and gender identity*3.

We provide support in realizing highly productive way of working and suitable work-life balance for each employee as a basis for them to pursue their career opportunities.

*1 Lifestyles: Working styles that meet the needs required in one's various life stages such as raising children and caring for family members.
*2 Sexual orientation: The tendency of sexual attraction, such as homosexuality, heterosexuality, bisexuality.
*3 Gender identity: Self-recognition of gender where one belongs to, including transgender.

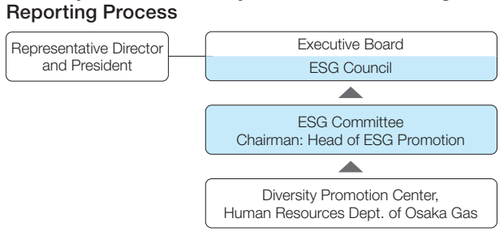
Diversity Promotion System

In 2013, the Daigas Group established the "Diversity Promotion Center" within the Human Resources Department of Osaka Gas as a specialized department for promoting diversity. We proceeded to formulate the "Diversity Promotion Policy" in 2014, and have taken an active approach toward this policy by including it in the Long-term Management Vision announced in 2017.

The targets set forth in the policy are linked to the materiality "Diversity and Inclusion." Progress we have made on achieving these targets is reported at the ESG Council every year, and relevant activities are, in principle, reported monthly to executives through direct distribution or by being posted on the Group portal site. Items related to promoting diversity are also included in the Daigas Group's Employee Attitude Survey* to ascertain the extent to which this sentiment has diffused throughout the entire Group.

* Daigas Group's Employee Attitude Survey: A survey conducted annually to confirm changes over time in the attitudes of Group employees.

Diversity Promotion Policy Formulation and Progress Reporting Process



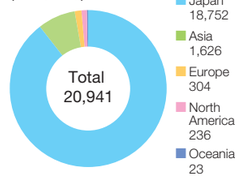
Key Initiatives

Promoting Diversity, Equal Opportunity and Inclusion

With a wide variety of business development and innovation, the Group strives to contribute to the comfortable living of customers and business growth through new value creation that corresponds to the times. In order to achieve these goals, we are working on hiring and developing a variety of human resources that are active in Japan and overseas.

In addition, we aim to become a company at which all employees can find not just employment but also personal growth through their work. We have introduced career-course-specific human resources systems designed to respect and put to full use the individuality and autonomy of employees, and we have been conducting a wide range of training.

Number of Employees by Region (FY2021.3)



Osaka Gas, for example, has introduced an employee evaluation system that is highly objective and a structure that allows employees to develop their careers voluntarily by offering a program to develop employees who can play active roles globally and Management by Objectives (MBO).

[Major Initiatives]
- Overseas business training systems
- Studying-abroad programs
- Provision of human resources development menu to the Group

Also, we believe that it is essential for all Group employees to share the understanding that diversity is a management strategy and we have made various efforts such as arranging a forum for child rearing employees to participate in together with their supervisors, providing diversity training for all employees, and holding the Diversity Promotion Forum.

[Major Initiatives]
- Child Rearing Employee + Supervisor Forum
- Diversity promotion training for all employees
- Holding a Diversity Promotion Forum
- Extensive information provision through Group portal site and online newsletters
- Holding luncheon meetings on all sorts of themes

[Major Activities] **Raising awareness in Osaka Gas employees**

In order to raise awareness of diversity promotion, we believe that it is important for male employees to understand and participate in childcare, and in addition to our system allowing employees to take childcare leave, we have set up an original method of providing paid leave we call "nurturing leave*" as our system for providing support. About 90% of all eligible employees take nurturing leave, and more than 80% of this population are male employees. As for childcare leave, the number of male employees who take childcare leave is gradually increasing, and male employees are becoming more aware of childcare and participating in more active roles.

Child Rearing Employee + Supervisor Forum

Number of Employees Taking Childcare-related Leave System (persons)

	FY2017.3	FY2018.3	FY2019.3	FY2020.3	FY2021.3
Male employees who took childcare leave	1	4	5	14	17
Employees who took nurturing leave (Rate)	168 (76.7%)	198 (88.8%)	201 (84.1%)	201 (93.1%)	111 (93.3%)
Of which, male employees	149	172	178	172	97

* Osaka Gas's original system for providing paid leave. Employees can take one day off within the first 3 months after a child's birth.

Initiatives to Ensure Safety and Promote Health Maintenance

Convinced that ensuring employees' safety and maintaining/improving their physical and mental well-being are keys to all our operations, the Group has been undertaking efforts to treat and prevent employees' diseases. In 1975, we raised "promoting fitness" in our management policy and established the Osaka Gas Health Development Center. Since then, the Company and Group companies have been working on thorough health checkups and individual health guidance by health care professionals.

Based on the idea that being healthy for an entire lifetime has great significance not only for employees but also for society, we put together our attitude for Kenkou Keiei* (employee health management), which we described in the "Daigas Group Corporate Principles," the "Daigas Group Charter of Business Conduct," and the "Daigas Group Code of Business Conduct," into the "Daigas Group Declaration of Health and Productivity Management" in March 2021."

In addition, in order to create a workplace where employees can work safely, based on the idea that ensuring safety and maintaining and improving physical and mental well-being are key to all operations, we declared in the "Daigas Group Code of Business Conduct" that we will prevent work accidents and promote fitness.

* Kenkou Keiei® is a registered trademark of Nonprofit Organization Kenkokeiei.

Daigas Group Declaration of Health and Productivity Management

The Daigas Group believes that we can create value that meets the expectations of customers, society, shareholders and employees by ensuring that our employees stay healthy both mentally and physically, and fully exercise their abilities, individuality and initiative, and thereby remain motivated and satisfied with their jobs.

The Daigas group will work as one to maintain and improve the health of employees and create a vibrant workplace filled with people who are mentally and physically energetic, with the aim of becoming a corporate group that powers continuous advancement in customer and business life.