

Daigas Group Business Plan for FY2023.3

March 10, 2022 **Osaka Gas Co., Ltd.**



Introduction

In March 2021, we announced the Medium-Term Management Plan 2023: Creating Value for a Sustainable Future, making a pledge to co-create value for a sustainable future and evolve as a corporate group that contributes to resolving social issues. We are committed to operating our business responsibly and contributing to realizing a sustainable society in the face of rapidly changing business environment.

Key Strategy

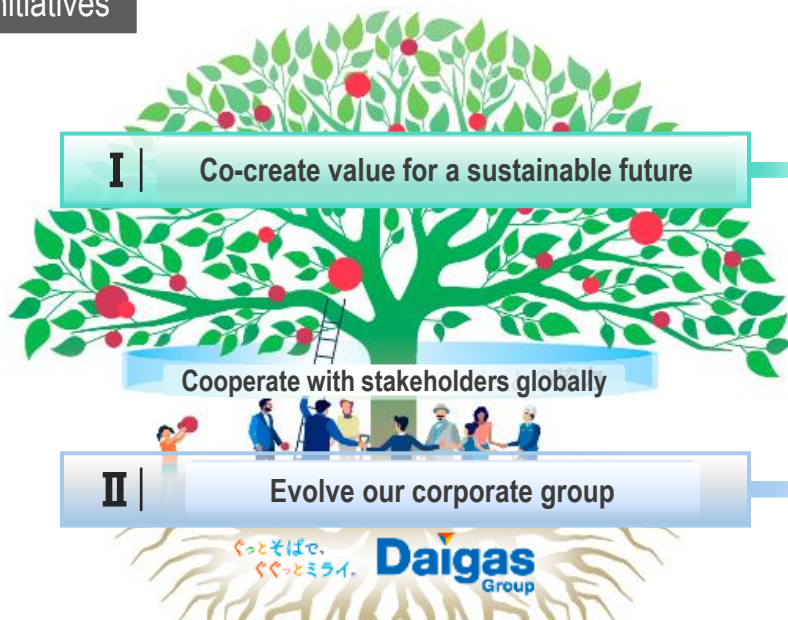
I . Co-create value for a sustainable future

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



Growth toward FY2024.3

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

By the end of FY2022.3, most of our key management indicators are expected to meet the targets set out in the Daigas Group Business Plan for FY2022.3.

Progress in executing the Daigas Group Business Plan for FY2022.3

		FY2022.3 Forecast	FY2022.3 Initial Plan
Profitability indicator	Ordinary profit	95.0 billion yen	95.0 billion yen
	EBITDA	200.0 billion yen	200.0 billion yen
	ROIC*1	4.4%	4.4%
	ROE	7.1%	6.6%
Financial soundness indicator	Shareholders' equity ratio*2	49.3%	49.3%
	D/E ratio*2	0.66	0.66

*1 ROIC= (Ordinary profit + Interest expenses - Interest income - Income taxes) ÷ (Interest-bearing debts + Shareholders' equity)
Interest-bearing debts excludes risk-free leased Liabilities to us

*2 Calculated with 50% of issued hybrid bonds as equity

Segment profit (billion yen)

FY2022.3 Initial Plan	45.5	31.0	19.0	94.5 *3
FY2022.3 Forecasts	30.0	45.5	19.0	94.5

Domestic Energy International Energy LBS *4

Investment for business growth (billion yen)






FY2022.3 Initial Plan	70.0	64.0	56.0	190.0
FY2022.3 Forecasts	70.0	64.0	56.0	190.0

Domestic Energy International Energy LBS *4




*3 Including -1.0 billion yen as an adjustment *4 Life & Business Solutions

We progressed value creation in each segment through customer account increase in the Domestic Energy, business growth advancement in the International Energy, and steady expansion in the Life & Business Solutions, in response to the accelerating decarbonization trends and the changing lifestyles and needs of customers.

Domestic Energy Business


-  9.8 million customer accounts* reached as business expanded in electricity retailing and outside our network area in Japan (*FY2022.3 forecast)
-  Started sales of carbon-neutral LNG and natural gas
-  Expanded renewable energy business
-  Launched carbon-neutral technology R&D center
-  Completed preparation for legal separation of network business

International Energy Business



-  Expanded business foundation in North America
 - Sabine Oil & Gas' steady shale gas production* in the US (*produced 2.2 million tons in 2020 and 2.8 million tons in 2021)
 - Accelerated renewable energy development in IPP business
 - Freeport LNG's stable commercial operation in all trains
-  Launched solar power business in Vietnam
-  Participation in gas distribution business in India as the first Japanese company

Life & Business Solutions Business


OSAKA GAS URBAN DEVELOPMENT Group

-  Continued investment in competitive rental condo assets in favorable locations, launched large-scale condo rebuilding business, and provision of high-value-added housing and services in response to the needs of society and customers

OGIS-RI Group

-  System preparation completed for network business' legal separation, and contribution to the Daigas Group's digital transformation
-  Expanded sales to existing customers in energy and manufacturing, and growth in strategic fields such as rule-based AI and finance

OSAKA GAS CHEMICALS Group

-  Steady growth in existing materials business, and accelerated development of discontinuous new projects at the Frontier Materials Laboratories

Value for a sustainable future



Achieving a low carbon/carbon neutral society



Establishing lifestyles and businesses adjusted to the new normal



Enhancing resilience of customers and society

The Daigas Group has advanced to a higher stage of a corporate group as it is enhancing business portfolio management with the newly introduced ROIC indicator and the strengthened governance while improving the DX promotion system and the human resources diversity.

► Evolution of Business Portfolio Management



- **ROIC introduced and applied across the Daigas Group, improved business unit management capabilities**
 - ROIC indicators for each business
 - Autonomous ROIC management in each business unit
 - Utilization of ROIC for Investment Assessment
- **Enhanced business portfolio management**
 - Sale and replacement of assets progressed, aiming to meet the ROIC target
 - Idemitsu Snorre, Gas IPPs with expiring PPAs, etc.
 - Increased allocation of resources to the areas of decarbonization and DX (increased personnel and investment)
 - Reviewed businesses portfolio based on ROIC and risk-management, etc.
- **Strengthened governance**
 - Increased ratio of outside directors (increased from 33.3% after the 202nd Annual Shareholders Meeting to 40% after the 203rd Annual Shareholders Meeting)

► Business transformation through DX



- **Top-down DX promotion system established**
- **Business process transformation progressed by utilizing data**
 - AI-based terminal operation support, etc.
- **Strengthened DX education**





► Maximization of value for each employee



- **Promotion of flexible and diverse ways of working**
- **Improved diversity in promotion**
 - Appointed a female executive
- **Increased employment of skilled and experienced talent**

We are facing the accelerating change in business environment, such as the decarbonization trends and the energy price fluctuations, which are increasing the market volatility.

As we respond to the change flexibly, we are speeding up our efforts in resolving social issues.

 Global situations	▶ While on a recovery trend, the global economy has inherent downside risks, such as the disruption and disconnection of supply chain, the acceleration of inflation, and the unstable international situation, including trade conflicts between the United States and China.
 Climate change, carbon emissions reduction, and decarbonisation	▶ Decarbonization trends have been further accelerated by COP26 agreements to phase down coal-fired power generation and Japan's 6th Strategic Energy Plan to substantially increase the renewable energy in the energy mix, which requires accelerated decarbonization investment and technological development while promoting steady transition to a low-carbon society.
 Energy Market Trends	▶ Market volatility increased due to the rise in energy prices in response to 1. the unstable supply-demand situation caused by the global energy transition, growing electricity demand, and deterioration of international situations 2. the price fluctuation in the domestic wholesale electricity market caused by the tight supply-demand balance. Concerns about a backlash that could be triggered by rapid change of situations such as heightened alert for energy security.
 Impact of Covid-19	▶ Covid-19 threat remaining with the Omicron variant spreading across the world. It is critical to exercise vigilance and take measures against the pandemic, which is expected to remain for some time, while responding to the accelerating digitalization trends and increasingly diversified values.

Key Solutions

- Strengthening decarbonization efforts
- Securing and stabilizing energy supply
- Steadily contributing to CO₂ emissions reduction
- Accelerating DX and responding to diversification

We will advance the development of methanation technology and supply chains for new energy such as hydrogen to contribute to realizing carbon neutrality by 2050.

In the meantime, we will fulfill our role as a responsible energy company by promoting the wider use of natural gas and renewable energy in the transition to a low-carbon and decarbonized society.

Carbon Emissions Reduction

Contributing to a 46% reduction in greenhouse gases (compared to 2013)

By 2030 5GW renewables development contribution
 Nearly 50% renewables in our power portfolio in Japan
 10 million tons of CO₂ emissions reduction contribution

▶▶ Natural gas advanced use and fuel switch from oil/coal

- Promoting wider use of **carbon-neutral LNG and natural gas***
 *carbon offset natural gas using credits
- **Switching power plant fuel from coal/oil to natural gas**
- **Promoting the introduction of cogeneration systems**
- **Providing a variety of low-carbon/decarbonization solutions** to the issues that customers tackle

D-Lineup : Solutions that meet needs such as CO₂ emission reduction

● Low-carbon/ decarbonization	Non-fossil fuel certificates + renewable electricity (D-Green) / Waste utilization (D-Bio) / Solar power generation with zero initial investment (D-Solar) / Water treatment cost reduction (D-Aqua) / Air conditioning / ventilation + energy saving (D-Airing)
● Decentralization	Demand response service (D-Response)
● Digitization	IoT service (D-Fire)

Decarbonization

Innovation for Carbon Neutrality

By 2050 Becoming carbon neutral in our operations across the group companies

▶▶ Carbon neutrality of gaseous energy carriers

Methanation:
practical application,
capacity expansion, and
efficiency improvement

- World largest **methanation demonstration** in Nagaoka, Niigata Prefecture, Japan
- On-site methanation study with industry
- **Technological development of SOEC co-electrolysis methanation**

Supply chain development
overseas

- **Promoting collaboration with overseas energy players** in hydrogen, methanation, etc.

Hydrogen and ammonia
utilization

- **Developing combustion technologies for hydrogen and ammonia**
- Exploring solutions for local network supply of hydrogen

▶▶ Decarbonization of power sources

- Developing renewables (PV, wind, and biomass) ^{*targeting 2.5GW} in the end of FY2024.3
- Exploring solutions for zero emissions in thermal power generation (use of hydrogen and ammonia)

New structure and activities to promote carbon emissions reduction and decarbonization

Appointment of the Head of Carbon Neutral Promotion to exercise top-down approach and accelerate cross-organizational collaboration

Establishment of Carbon Neutral Promotion Office to accelerate initiatives for carbon neutrality

Issuance of transition bonds
(Scheduled for FY2023.3)

We are aiming to achieve sustainable growth through our efforts to be the first choice of customers by providing services and solutions that powers continuous advancement in customers' lives and businesses in response to diversifying customer needs and progressing digitalization.



Providing solutions to residential customers



- **Wider range of high-value-added services and rate plans**
 - Launching a fixed-line telecommunications business and its services
 - Rolling out new gas rate plans offering a discount for bundled services, which are similar to “Style Plan” and “With Plan” for electricity
- **Optimal solutions combining electricity (1.6 million accounts), ENE-FARM, IoT services, Sumikata Service, home renovation, etc.**
- **Digitalizing and diversifying customer contact points**
 - Launching “Sumai LINK,” a platform to offer various services such as home, medical, e-commerce, designed to provide optimal individual customer experience
 - Strengthening web-based marketing
 - Rolling out new digital services such as “Prizero” to digitize paper documents at home

Osaka Gas' internet service

Digital platform to offer various services

NEW さすかネット

NEW スマイLINK

Wider variety of rate plans + value-added services

NEW GASTクーポン

• New gas rate plans offering a discount for bundled services including telecommunications, ENE-FARM, dryers, etc.

まとめトク料金

スマート発電料金

家事トク料金

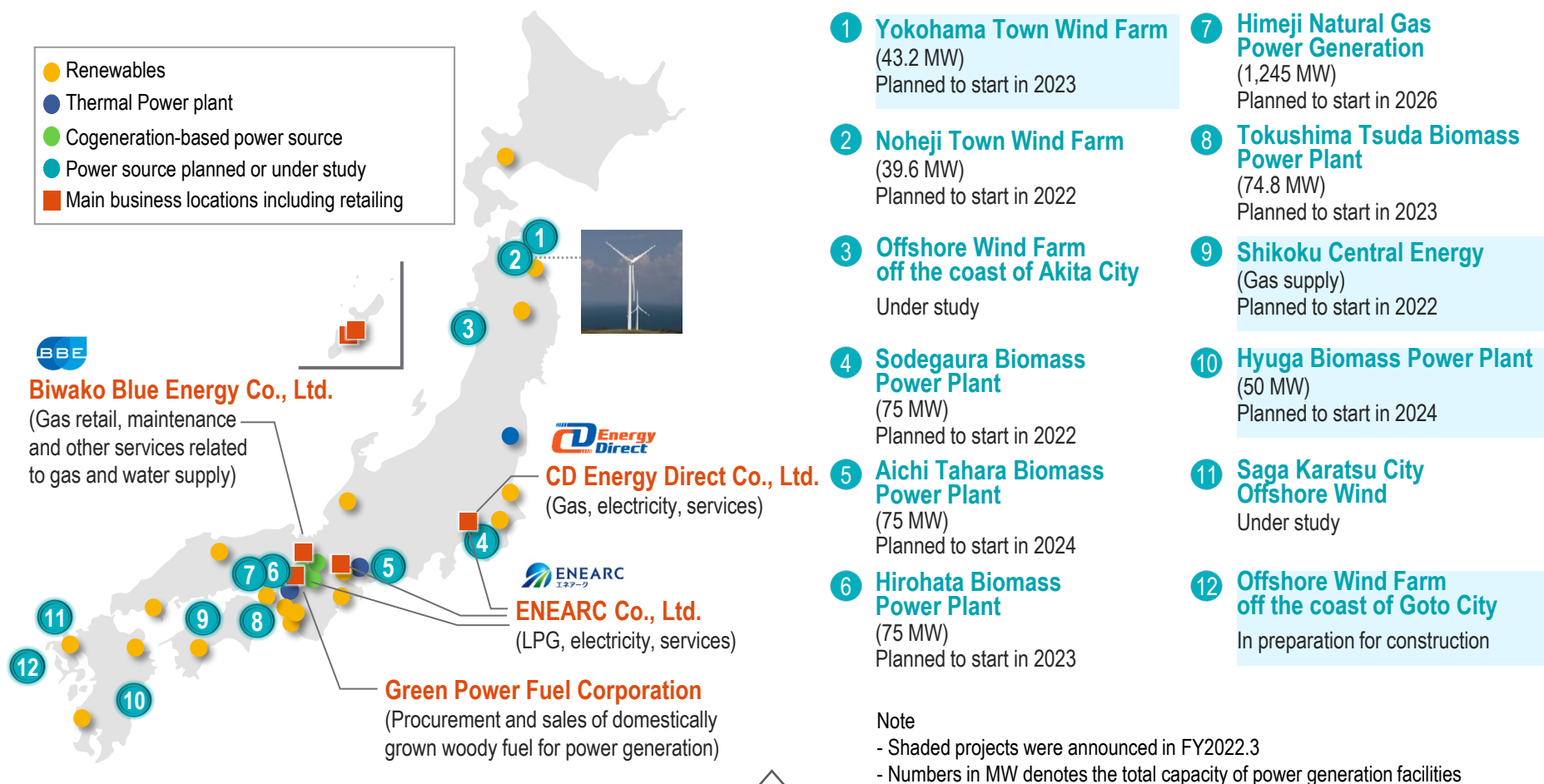


Providing solutions to commercial and industrial customers



- **Total energy solutions** combining gas/electricity with water treatment, ventilation, air conditioning, IoT/ICT services and maintenance. **New electricity businesses** including VPPs.
- Solutions to address social issues such as ESG and BCP: **introduction of carbon-neutral LNG and natural gas, replacement of coal/heavy oil with natural gas for power generation, and expanded use of gas air-conditioning and gas cogeneration**
- **Promoting to provide solutions with expanded lineup of renewable energy related products, D-Lineup: D-Green (renewable power), D-Bio (biogas), etc.**

We are developing competitive energy infrastructure and providing services nationwide to contribute to realizing a low carbon/carbon neutral society.



Accelerating development and acquisition

Promoting investment in renewables through a fund management company established with MUFG Bank, Ltd. and NTT Anode Energy Corporation, etc.

Constructing medium- and small-sized photovoltaic power plants with GPSS Holdings and Sky Solar Japan under a joint development agreement

In April 2022, we will legally separate the gas pipeline business and start the operation of Osaka Gas Network Co., Ltd. We are committed to building a resilient pipeline network to enhance gas supply stability, safety, and disaster prevention.



Autonomous business operations and growth of Osaka Gas Network Co., Ltd.

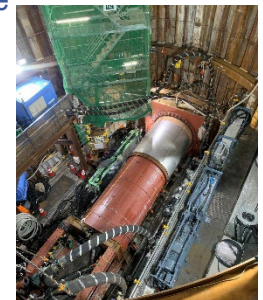
- Establishing Osaka Gas Network Co., Ltd. as the legal separation of the network business of Osaka Gas Co., Ltd.
- Aiming for growth by developing peripheral businesses and enhancing efficiency to realize robust business management that can flexibly respond to changes in the business environment while maintaining the neutrality and transparency as a gas network operator and **pursuing gas supply safety and stability as its fundamental responsibility**



Energy resilience enhancement with robust pipeline network

- Solving aging pipeline issues to **realize the high level of gas safety**
- **Disaster prevention measures** for early recovery from disasters (earthquakes, typhoons, torrential rains)
⇒ Maximizing the number of continuous supply areas (subdividing gas supply areas, etc.) and taking measures to prevent the inundation of governors
- **Developing facilities for future supply stability** by making steady progress in the construction of Amagasaki–Kumiyama Line, a high-pressure line, etc. ▶ Making rounds with vehicles equipped with AI cameras of third-party construction sites
- **Further improving the safety level** by utilizing digital technology
⇒ Making rounds with vehicles equipped with AI cameras of third-party construction sites and using AI to automatically locate underground pipes (world's first)

▶ Amagasaki–Kumiyama Line construction site (high-pressure line)



We aim to achieve growth and stable operations of the International Energy Business as the Group's full-fledged earnings driver. We are committed to contributing to global carbon emissions reduction and decarbonization through our increasing efforts in the renewable energy and new energy development while striving to maintain the stable procurement and supply of natural gas and expand the use of natural gas, which plays an important role in the energy transition.

Upstream

- Growing earnings of **Sabine Oil & Gas in North America** through the **acceleration of its shale gas development** and the enhancement of its production capacity utilization rate
- Participating in projects to develop **new energy businesses** such as blue hydrogen and CCS
- Ensuring steady income flow from existing projects such as Gorgon and Ichthys in Australia

Mid- and downstream

- Ensuring steady income flow from North American assets including **the Freeport LNG terminal**
- **Promoting efficient utilization of owned assets** such as IPPs in North America and **accelerating renewable energy development**
- Developing renewable energy businesses in Europe and Australia, and entering into electricity balancing services business and new energy fields

Asia

- Switching fuel to natural gas and developing gas infrastructure in **Southeast Asia and India**, markets with growing gas demand, and contributing to carbon emissions reduction through the development of renewables

LNG Trading

- Driving income growth through **competitive LNG procurement and LNG trading expansion**
- Enhancing the optimization through trading subsidiaries such as OGEST and OGIT
- Contributing to decarbonization with **carbon-neutral LNG** procurement



Sabine Oil & Gas
Shale gas development
in the US



Freeport LNG
Liquefaction facility
in the US

Provided by Freeport LNG Development, L.P.



Brighter Future PV
IPP in the US



AG&P CGD
City gas distribution
business in India

We will promote the growth of the LBS business as a larger pillar of the Daigas Group through the expansion of the segment's core three business fields.

Real Estate Development Business

 **Osaka Gas Urban Development Group**



▶ Offering housing for comfortable, healthy, and high quality living and providing offices for enhanced productivity

- Osaka Gas Urban Development and Prime Estate: pursue acquisition of prime residential assets and profitability maximization of owned assets
- OGFA^{*1}'s building maintenance business: strengthen efforts to increase the number of orders for external construction and facility management, and enhance the management services for owners
- KRP^{*2}'s Research Park business: lab management outside the current area
- Expand businesses in the areas of logistics real estate and owned land development

^{*1} Osaka Gas Facilities ^{*2} Kyoto Research Park

Materials Solutions Business

 **Osaka Gas Chemicals Group**



▶ Creating value for customers by providing high-performance materials and contributing to the sustainability of society

- Osaka Gas Chemicals: ensure steady growth of existing businesses and accelerate discontinuous new project development
- Jacobi: diversify raw material sources and expand production capacity in response to growing demand for activated carbon and expand sales of ion-exchange resin through Finex
- Mizusawa Industrial Chemicals: expand sales overseas of antiblocking agents for plastic films and stabilize earnings in stabilizer business

Information Solutions Business

 **OGIS-RI Group**



▶ Promoting the advancement of customers' businesses and lifestyles through digital transformation

- OGIS-RI Group: accelerate contribution to the digital transformation of the Daigas Group
- OGIS-RI: accelerate growth in strategic areas for external sales (rule-based AI, finance, embedded system, cloud, services, etc.)
- Sakura Information Systems and Ube Information Systems: promoting DX for their shareholders, expand external sales solutions that have advantages in HR, accounting, imaging, etc.
- Develop new growth areas through collaboration with AGNIE CONSULTING INDIA and IT ventures

We are implementing digital transformation to transform business processes and provide new digital services in line with the changing times. We are accelerating the process by strengthening the DX promotion system and human resource development and recruitment.



Evolving data management

- Data marketing
- AI-based terminal operation support, etc.



Creating innovative services

- Sumai LINK service platform
- Enhancing energy management
- Business collaboration with AVITA, an avatar service company



Home service platform
Sumai LINK



Avatar



Transforming operational processes

- Absolute coordinates for pipelines, AI-based rounds of construction sites
- Improving the productivity of sales, billing, and maintenance work
- Introducing mobile operations such as for expense application



Transit bus



Camera + AI



Top-down DX promotion system

- Enhancing the utilization of the DX Promotion Committee
- Establishing the DX Strategy Department
- Dialogue with outside experts and company executives



Development and recruitment of digital talent

- Launching DX training programs
- Increasing the recruitment of skilled and experience talent
- Collaborating with venture fund WiL, LLC







System renovation, and security enhancement

- Enhancing the utilization of SaaS (Microsoft 365, Slack, etc.)
- Renewing data analysis infrastructure
- Studying transition to the zero trust security model

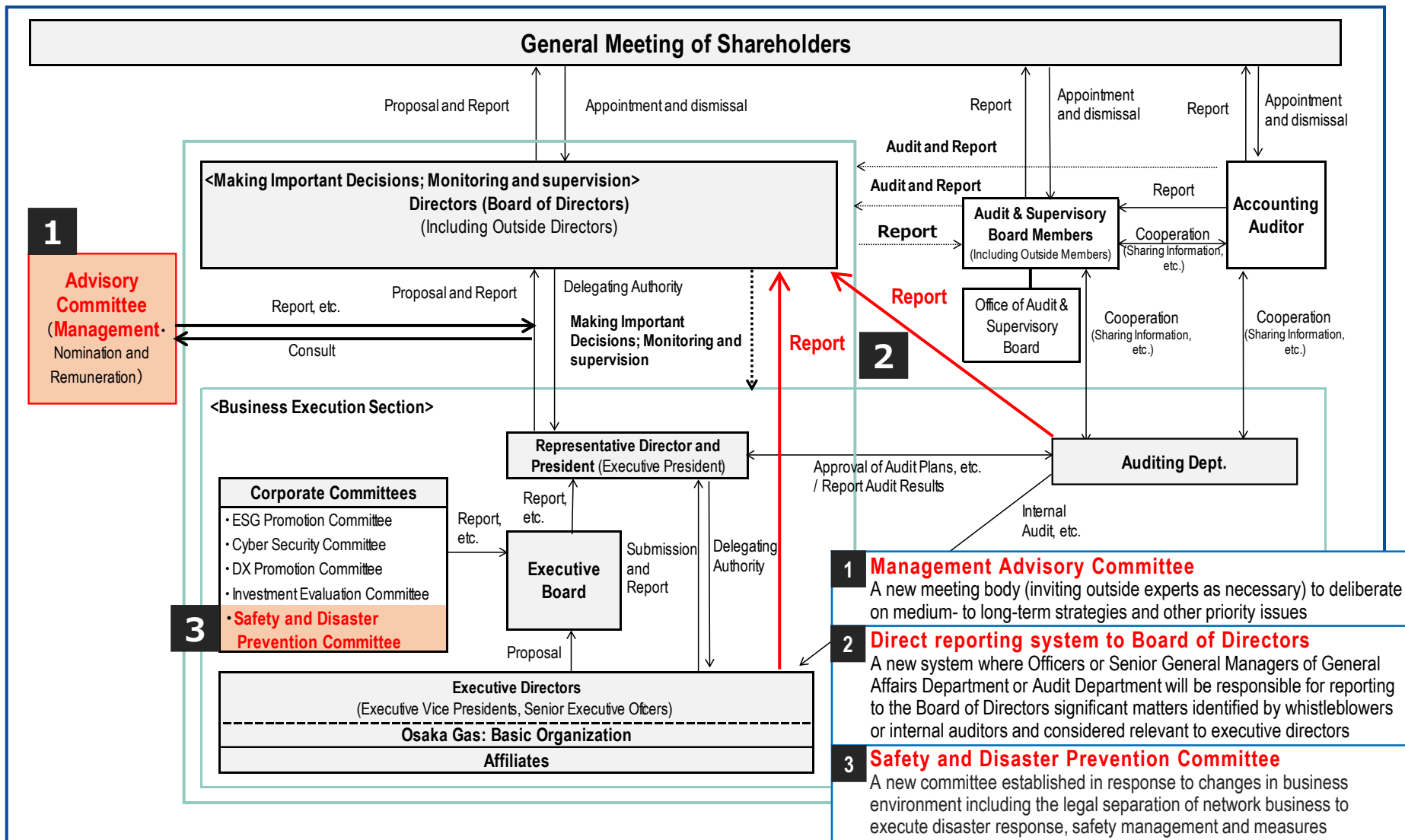
The Daigas Group's ESG management has received a certain degree of recognition* from external organizations. We will continue promoting ESG initiatives while responding to social demands, disclosing information responsibly, and striving for sustainable growth.

*Selected as Asia Pacific Index of Dow Jones Sustainability Index 2021 and rated "A" for water and "A-" for climate change by CDP

Charter of Business Conduct	Value for a sustainable future	Initiative to create value for a sustainable future	Indicator	Goal	Target year
I Creating value for customers	 Establishing lifestyles and businesses adjusted to the new normal	Maintain and expand customer base	Number of customer accounts	10 million or more	FY2031.3
	 Enhancing resilience of customers and society	Strengthen resilience of energy supply	Build resilient energy supply facilities	Implementation of measures for disaster prevention and aging pipes	FY2031.3
II Contributing to the sustainability of the environment and society	 Achieving a low carbon/carbon neutral society	Implement carbon neutral measures	CO ₂ emissions of Daigas Group	Net zero emissions	FY2051.3
		Provide clean energy and expand renewable energy value chain	Percentage of renewables in our power generation portfolio in Japan	Nearly 50%	FY2031.3
			Contribution to developing renewables capacity on a global basis	5 GW	FY2031.3
				2.5 GW	FY2024.3
		Promote advanced utilization of natural gas and environmental products	CO ₂ emissions reduction contribution (compared to FY2017.3)	10 million t	FY2031.3
III Engaging with and contributing to society	 Building foundations that support the realization of value for a sustainable future	Promote communication with local communities	Number of our participation in local governments' activities (i.e. community development planning)	14 cases	FY2024.3
IV Respecting human rights		Build a responsible supply chain	Appropriate new supplier ratio	100%	FY2024.3
V Complying with laws and regulations		Promote the Group's compliance	Number of serious violations of laws and regulations	Zero serious violations	FY2024.3
VI Providing work environment that supports employees' personal growth		Create a workplace where employees can feel a sense of fulfillment	Attitude survey (Royalty Score)	Maintained and improved employee engagement	FY2031.3
		Promote diversity and inclusion	Percentage of women in 1. Executives and 2. New recruits for career-track positions	1. 20% or more 2. Continue 30% or more	FY2031.3

*Some items are excerpted from the whole for initiatives, indicators, and goals.

We aim to increase the corporate value over the medium to long term and strengthen risk management through our governance system what has been enhanced, as shown below, in response to changes in business environment.



(billion yen)	FY2022.3 Forecast	FY2023.3 Plan	Rate of change
Net sales	1,547.0	1,853.0	+19.8%
Operating profit	80.5	106.5	+32.3%
Ordinary profit	95.0	115.0	+21.1%
Profit attributable to owners of parent	77.5	82.0	+5.8%
EBITDA	200.0	230.0	+15.0%
ROIC ^{*1}	4.4%	4.5%	-
ROE	7.1%	6.8%	-

Dividend forecast	57.5 yen/share	60.0 yen/share	-
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Time-lag effect on gas	-31.0	2.6	-
Time-lag effect on electricity	-15.2	0.5	-
Ordinary profit excluding time-lag effect	141.2	111.8	-

Assumptions for FY2023.3 financial plan (FY2022.3 Forecast)

Crude oil price (all-Japan CIF price)	95.0 USD/bbl (76.7 USD/bbl)	Exchange rate	115.0 JPY/USD (112.1 JPY/USD)
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(billion yen)	Segment Profit ^{*2}		
	FY2022.3 Forecast	FY2023.3 Plan	Rate of change
Domestic Energy (Electricity)	30.0 (12.0)	42.5 (17.5)	+41.7% (+45.8%)
International Energy	45.5	57.0	+25.3%
LBS	19.0	21.5	+13.2%
Adjustment	0.0	-1.0	-
Total	94.5	120.0	+27.0%

^{*1} ROIC = (Ordinary profit + Interest expenses - Interest income - Income taxes) ÷
(Interest-bearing debts + Shareholders' equity)

Interest-bearing debts excludes risk-free leased Liabilities to us.

^{*2} Segment Breakdown (Trading is included in the Domestic Energy Business segment)

Domestic Energy	International Energy	LBS
LNG, Power & Engineering	Energy Resources & International Business	Real Estate
Network		IT
Energy Solution		Materials

(billion yen)	FY2022.3 Forecast	FY2023.3 Plan
Investment for quality improvement	69.0	74.0
Investment for growth	190.0	200.0
Domestic Energy	70.0	59.0
International Energy	64.0	89.0
LBS	56.0	52.0
Total investment	259.0	274.0

Capital expenditures (included in the total)	196.0	192.0
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	FY2022.3 Forecast	FY2023.3 Plan
Shareholders' equity ratio ^{*1}	49.3%	50.7%
D/E ratio ^{*1}	0.66	0.63

^{*1} Calculated with 50% of issued hybrid bonds as equity

(million m ³)	FY2022.3 Forecast	FY2023.3 Plan	Rate of change
Gas sales volume (Consolidated)	6,987	6,834	-2.2%
Residential	1,736	1,732	-0.3%
Non-residential	5,251	5,102	-2.8%

(GWh)	FY2022.3 Forecast	FY2023.3 Plan	Rate of change
Electricity sales volume	18,024	18,201	+1.0%

Sensitivity to fluctuations in crude oil prices and exchange rates to consolidated ordinary profit

1 USD/bbl increase in crude oil price	-0.67 billion yen
1 JPY/USD increase in exchange rate (depreciation of the yen)	-0.66 billion yen

Note: Additional impact from crude oil price fluctuation for the below price bands

	Average fuel price (Upper price band)	1 USD/bbl increase in crude oil price
Electricity Business	higher than 40,700 yen/kl ^{*2}	-0.1 billion yen
Gas Business	102,540 to 136,080 yen/ton	-0.14 billion yen
	higher than 136,080 yen/ton	-0.46 billion yen

^{*2} Average fuel price^{*} = $A \times \alpha + B \times \beta + C \times \gamma$ (*rounded to the nearest 100 yen)
 A: Average crude oil price per kl for each average fuel price calculation period,
 B: Average LNG price per ton for each average fuel price calculation period,
 C: Average coal price per ton for each average fuel price calculation period
 (α : 0.0140, β : 0.3483, γ : 0.7227; α , β , and γ are calculated by multiplying the crude oil conversion rate by the heat composition ratio of each fuel type)



Disclaimer

Certain statements contained herein are forward-looking statements, strategies, and plans, which reflect our judgment based on the information so far available. Actual results may differ materially from those discussed in such statements. Among the factors that could cause actual results to differ materially are: economic trends in Japan, sharp fluctuations in exchange rates and crude oil prices, and extraordinary weather conditions.