



# 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.

#### I. Co-create value for a sustainable future Key Strategy 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 1. Achieving a low carbon/carbon neutral society **Establishing lifestyles and businesses** Co-create value for a sustainable future adjusted to the new normal 3. Enhancing resilience of customers and society Cooperate with stakeholders globally **Enhancing Business Portfolio** 1. Management 2. Promoting business transformation with Π Evolve our corporate group digital transformation (DX) Daigas Maximizing value for each employee 3. Achieving approx. 5% Increasing cash flows from Distributing shareholder returns Growth toward FY2024.3 when we achieve profit growth In ROIC operating activities by 50%\*

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



Highlights of FY2022.3

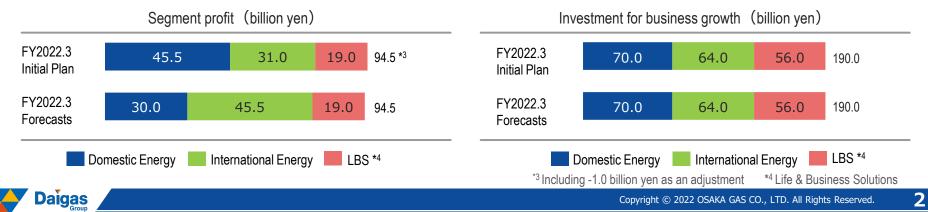
By the end of FY2022.3, most of our key management indicators are expected to meet the targets set out in the Daigas Group Business Plan for FY2022.3.

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

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

<sup>\*2</sup> Calculated with 50% of issued hybrid bonds as equity



# V Highlights of FY2022.3 Business Activities: 2

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 W1
  - Completed preparation for legal separation of network business

#### **International Energy Business**

- Expanded business foundation in North America  $\forall \psi$ 
  - 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 WI Japanese company



#### **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



System preparation completed for

Life & Business Solutions Business

- 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 Al and finance

OSAKA GAS **CHEMICALS Group** 



Steady growth in existing materials business, and accelerated development of

discontinuous new projects at the Frontier Materials Laboratories







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Value for a

sustainable future

## **T** Highlights of FY2022.3 Business Activities: 3



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
- Strengthened governance
  - Increased ratio of outside directors (increased from 33.3% after the 202<sup>nd</sup> Annual Shareholders Meeting to 40% after the 203<sup>rd</sup> Annual Shareholders Meeting)

# Business transformation through DX



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

#### Enhanced business portfolio management Sale and replacement of assets progressed, aiming to meet the ROIC target

- 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.

## Maximization of value for each employee



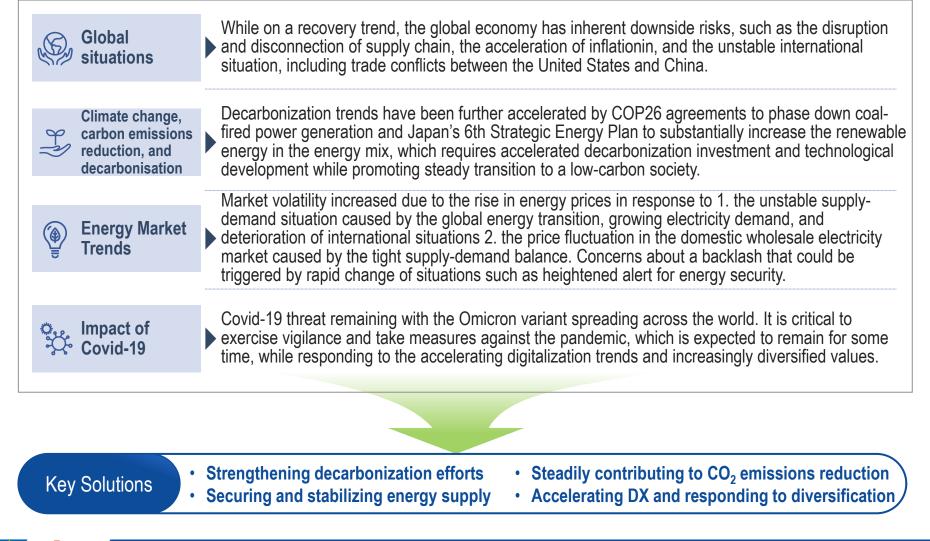
- Promotion of flexible and diverse ways of working
- Improved diversity in promotion
  - Appointed a female executive
- Increased employment of skilled and experienced talent





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.



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#### Contributing to Realizing a Carbon Neutral Society

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** Decarbonization Contributing to a 46% reduction in greenhouse gases (compared to 2013) Innovation for Carbon Neutrality 5GW renewables development contribution Becoming carbon neutral in our operations **By 2030 By 2050** Nearly 50% renewables in our power portfolio in Japan across the group companies 10 million tons of CO<sub>2</sub> emissions reduction contribution Carbon neutrality of gaseous energy carriers Natural gas advanced use and fuel switch from oil/coal Promoting wider use of carbon-neutral LNG and natural gas\* · World largest methanation demonstration in Methanation: \*carbon offset natural gas using credits Nagaoka, Niigata Prefecture, Japan practical application, Switching power plant fuel from coal/oil to natural gas On-site methanation study with industry capacity expansion, and Promoting the introduction of cogeneration systems Technological development of SOEC coefficiency improvement Providing a variety of low-carbon/decarbonization solutions to the electrolysis methanation issues that customers tackle Supply chain development Promoting collaboration with overseas energy D-Lineup: : Solutions that meet needs such as CO<sub>2</sub> emission reduction players in hydrogen, methanation, etc. overseas Non-fossil fuel certificates + renewable electricity Developing combustion technologies for Hydrogen and ammonia (D-Green) / Waste utilization (D-Bio) / Solar power hydrogen and ammonia Low-carbon/ generation with zero initial investment (D-Solar) / Exploring solutions for local network supply of utilization decarbonization hydrogen Water treatment cost reduction (D-Aqua) / Air conditioning / ventilation + energy saving (D-Airing) **Decarbonization of power sources**  Developing renewables (PV, wind, and biomass) \*targeting 2.5GW in the end of FY2024.3 Decentralization Demand response service (D-Response) Exploring solutions for zero emissions in thermal power generation Digitization IoT service (D-Fire) (use of hydrogen and ammonia) Appointment of the Head of Carbon Neutral New structure and activities to Establishment of Carbon Neutral Issuance of transition bonds

New structure and activities to promote carbon emissions reduction and decarbonization

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

(Scheduled for FY2023.3)

Promotion Office to accelerate initiatives for

carbon neutrality

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#### Evolution as Energy & Service Marketer



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

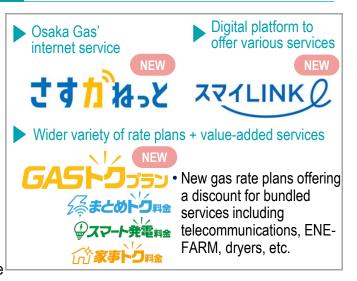
- Wider range of high-value-added services and rate plans
  - Launching a fixed-line telecommunications business and its services
  - Rolling out new gas rate plans offering a discount for bundled services, which are similar to "Style Plan" and "With Plan" for electricity
- Optimal solutions combining 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

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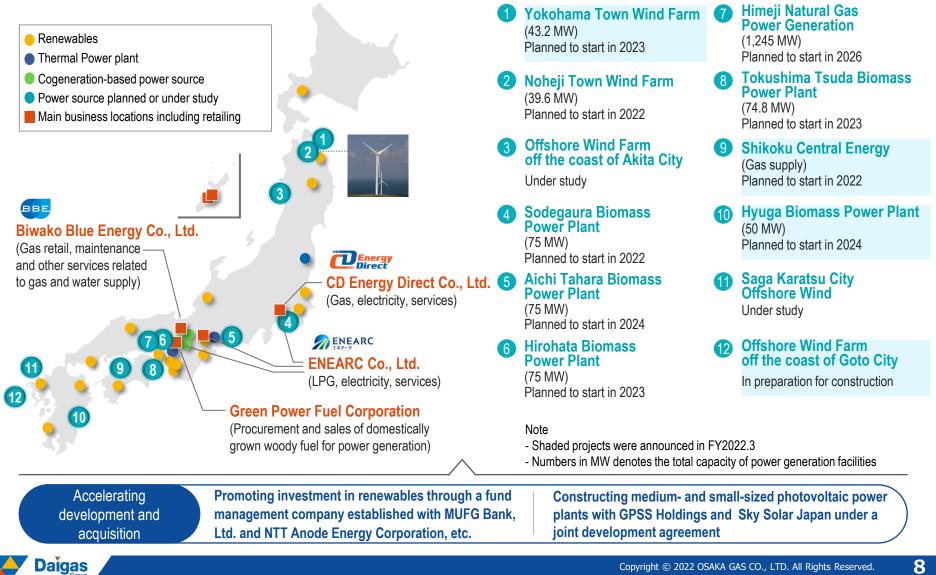
#### Providing solutions to commercial and industrial customers **Daigas Energy**

- **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.



# Energy Infrastructure and Business outside Osaka Gas' Network Area Business Plan for FY2023.3

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





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 Al 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)



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AI AI Camera AI GPS

## Further Growth and Evolution of International Energy Business



We aim to achieve growth and stable operations of the International Energy Business as the Group's fullfledged 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	<ul> <li>Growing earnings of Sabine Oil &amp; Gas in North America through the acceleration of its shale gas development and the enhancement of its production capacity utilization rate</li> <li>Participating in projects to develop new energy businesses such as blue hydrogen and CCS</li> <li>Ensuring steady income flow from existing projects such as Gorgon and Ichthys in Australia</li> </ul>
Mid- and downstream	<ul> <li>Ensuring steady income flow from North American assets including the Freeport LNG terminal</li> <li>Promoting efficient utilization of owned assets such as IPPs in North America and accelerating renewable energy development</li> <li>Developing renewable energy businesses in Europe and Australia, and entering into electricity balancing services business and new energy fields</li> </ul>
Asia	<ul> <li>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</li> </ul>
LNG Trading	<ul> <li>Driving income growth through competitive LNG procurement and LNG trading expansion</li> <li>Enhancing the optimization through trading subsidiaries such as OGEST and OGIT</li> <li>Contributing to decarbonization with carbon-neutral LNG procurement</li> </ul>
Sabine Oil & Gas Shale gas developm	

ded by Freeport LNG Developmer

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.



- 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\*<sup>2</sup>'s Research Park business: lab management outside the current area
- Expand businesses in the areas of logistics real estate and owned land development

- 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

- 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

\*1 Osaka Gas Facilities \*2 Kyoto Research Park

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## **Digital Transformation to Transform Business**



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

Al-based terminal operation support, etc.

**Creating innovative services** 

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





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





Home service platform Sumai LINK

Avatar

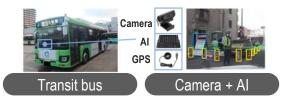
Development and recruitment of digital talent

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



**Transforming operational** processes

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



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

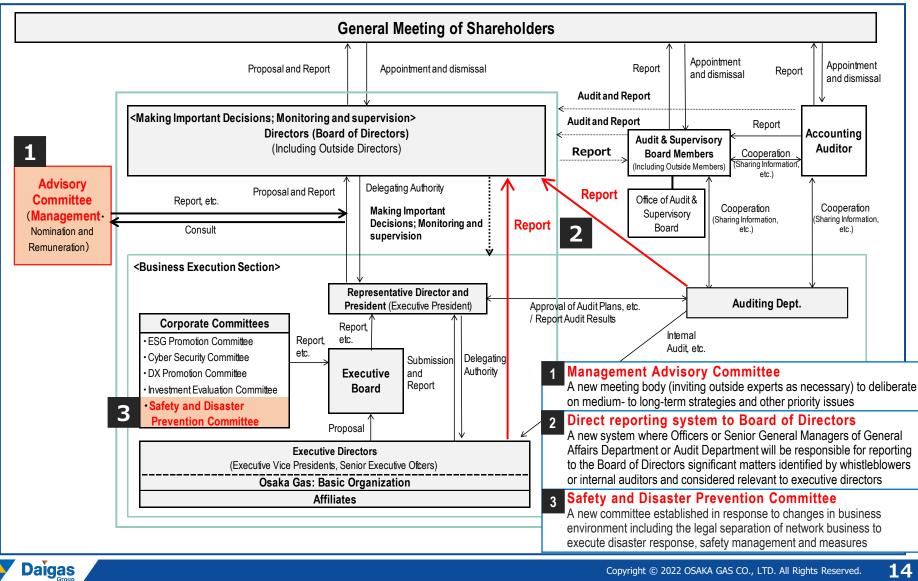
	harter of usiness Conduct	Value for a sustainable future	Initiative to create value for a sustainable future	Indicator		Target year
	Creating value	Establishing lifestyles and businesses adjusted to the new normal	Maintain and expand customer base	Number of customer accounts	10 million or more	FY2031.3
	for customers	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
			Implement carbon neutral measures	CO <sub>2</sub> emissions of Daigas Group	Net zero emissions	FY2051.3
	Contributing to	Achieving a low carbon/carbon neutral society	Provide clean energy and expand renewable energy value chain	Percentage of renewables in our power generation portfolio in Japan	Nearly 50%	FY2031.3
1	II the sustainability of the environment and society			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 <sub>2</sub> emissions reduction contribution (compared to FY2017.3)	10 million t	FY2031.3
I	Engaging with and contributing to society		Promote communication with local communities	Number of our participation in local governments' activities (i.e. community development planning)	14 cases	FY2024.3
Γ	Respecting human rights	Building foundations	Build a responsible supply chain	Appropriate new supplier ratio	100%	FY2024.3
٦	Complying with laws and regulations	that support the realization of value for a sustainable future ports es'	Promote the Group's compliance	Number of serious violations of laws and regulations	Zero serious violations	FY2024.3
	Providing work environment		Create a workplace where employees can feel a sense of fulfillment	Attitude survey (Royalty Score)	Maintained and improved employee engagement	FY2031.3
V	I that supports employees' personal growth		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	n the whole for initiatives, indicators,	and goals.



#### Enhanced Governance System



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.



#### **V** FY2023.3 Management Indicators

(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 <sup>*1</sup>	4.4%	4.5%	-
ROE	7.1%	6.8%	-
Dividend forecast	57.5 yen/share	60.0 yen/share	-
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)

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	Segment Profit <sup>*2</sup>		
(billion yen)	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

## **V** FY2023.3 Management Indicators

	(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
Tot	al 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

<sup>\*1</sup> Calculated with 50% of issued hybrid bonds as equity

	(million m <sup>3</sup> )	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
E	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	102,540 to 136,080 yen/ton	-0.14 billion yen
Business	higher than 136,080 yen/ton	-0.46 billion yen

<sup>\*2</sup> Average fuel price<sup>\*</sup> =  $A \times \alpha + B \times \beta + C \times \gamma$  (\*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.

