



Daigas Group Medium-Term Management Plan 2023

Creating Value for a Sustainable Future

March 10, 2021
Osaka Gas Co., Ltd.



On behalf of the Company, I would like to express my gratitude for your continued support and understanding in regard to the Company's businesses.
Thank you for taking the time to join the briefing today.

I would like to explain our Medium-Term Management Plan 2023.

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Review: Medium-Term Management Plan 2020 – I

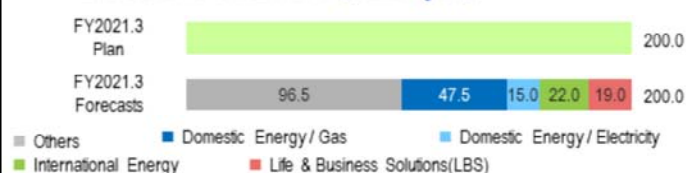
We expect most of our key management indicators to meet the targets set out in the Medium-Term Management Plan 2020 by the end of FY2021.3.

● Progress of Medium-Term Management Plan 2020

		FY2021.3 Forecasts	FY2021.3 Medium-Term Management Plan
Profitability indicators	ROE	7.0%	7.0%
	ROA	3.2%	3.5%
	EBITDA	200.0 billion yen	200.0 billion yen
Financial soundness indicators	Shareholders' equity ratio	50.1%	Around 50%
	D/E ratio*	0.65	Approximately 0.70
Shareholder returns	Payout ratio	30.5%	30% or higher

* Calculated with 50% of issued hybrid bonds as equity

- Breakdown of EBITDA (billion yen)



- Investment for business growth (billion yen)



Under our Medium-Term Management Plan 2020, we have successfully built up new core businesses through investment for business growth and M&A while steadily increasing earnings from our acquired assets in order to meet our goal of being what we aim to be set out in our Long-Term Management Vision 2030.

With regards to the profitability indicators for FY2021.3, we expect to meet our ROE target while almost reaching our ROA target. As for EBITDA, we expect to reach a 200 billion yen level, which is attributable to the earnings growth in our International Energy business and the steady growth of our Domestic Energy and LBS businesses.

In the financial soundness indicators, we expect to exceed the medium-term management plan targets of approximately 50% in shareholders' equity ratio and approximately 0.7 in D/E ratio.

In light of the above results and earnings forecast, we have revised the year-end dividend forecast for FY2021.3 and made a new annual dividend forecast for FY2022.3, both of which are higher than the previous level. As a result, payout ratio will exceed 30%.

Review: Medium-Term Management Plan 2020 – II

During the last four years when we faced business environment changes such as full deregulation of gas and electricity retail markets in Japan, we managed to build the foundation for business portfolio management through investment for growth in the International Energy business and steady growth in the Life and Business Solutions business.

Domestic Energy Business

- Achievement of 9.3 million customer accounts* through expanding electricity retail and wider area businesses in Japan.
- Expanded renewable energy business.
- Improvement of business operations by establishing core energy business companies.
- Enhancement of disaster prevention for early recovery.

*FY2021.3 forecast

International Energy Business

- Expansion of the business foundation in North America.
 - ✓ Acquisition of shale gas development business in North America. (Sabine Oil & Gas Corporation)
 - ✓ Participation in several IPP projects in North America.
 - ✓ Launch of Freeport LNG commercial operation.
- Entered energy business in Southeast Asia such as gas supply in Vietnam.
- Launch of LNG trading business in Singapore.

LBS Business



OSAKA GAS
URBAN DEVELOPMENT Group

- Expanded assets through acquisition of rental properties and completion of sales properties.



OGIS-RI Group

- Contributed to Daigas Group's information technology.
- Expansion of business through utilization of proprietary technology such as AI.



OSAKA GAS
CHEMICALS Group

- Development and sales expansion of high value-added materials that create value for business, consumers, and environment.

In the last four years as we faced a severe competition due to the full deregulation of gas and electricity retail markets in Japan, we have successfully developed the foundation for our business portfolio that we have today, through business activities that go beyond borders in Japan and overseas.

In our Domestic Energy business, we have expanded our customer base through marketing activities for electricity and home services called Sumikata services and joint marketing activities with Chubu Electric Co., Ltd. for gas, electricity, and related services in the Greater Tokyo area. As a result, we have reached 9.3 million in our customer accounts, with the increase in electricity and services accounts exceeding the scale of gas account decrease.

Also in our Domestic Energy business, we have built up a foundation for our future growth including the expansion of renewables and the establishment of core energy business companies. Meanwhile, we have reinforced our countermeasures against natural disasters focusing on early recovery of our gas supply based on the experience of the northern Osaka earthquake in 2018 and the Great Hanshin earthquake in 1995.

In our International Energy business, we have successfully promoted the development of our group businesses in North America as the group's key earnings drivers especially since the Freeport LNG project started its full commercial operation and Sabine Oil & Gas Corporation joined our group.

In our Life & Business Solutions business, we have been steadily expanding our operations and earnings.

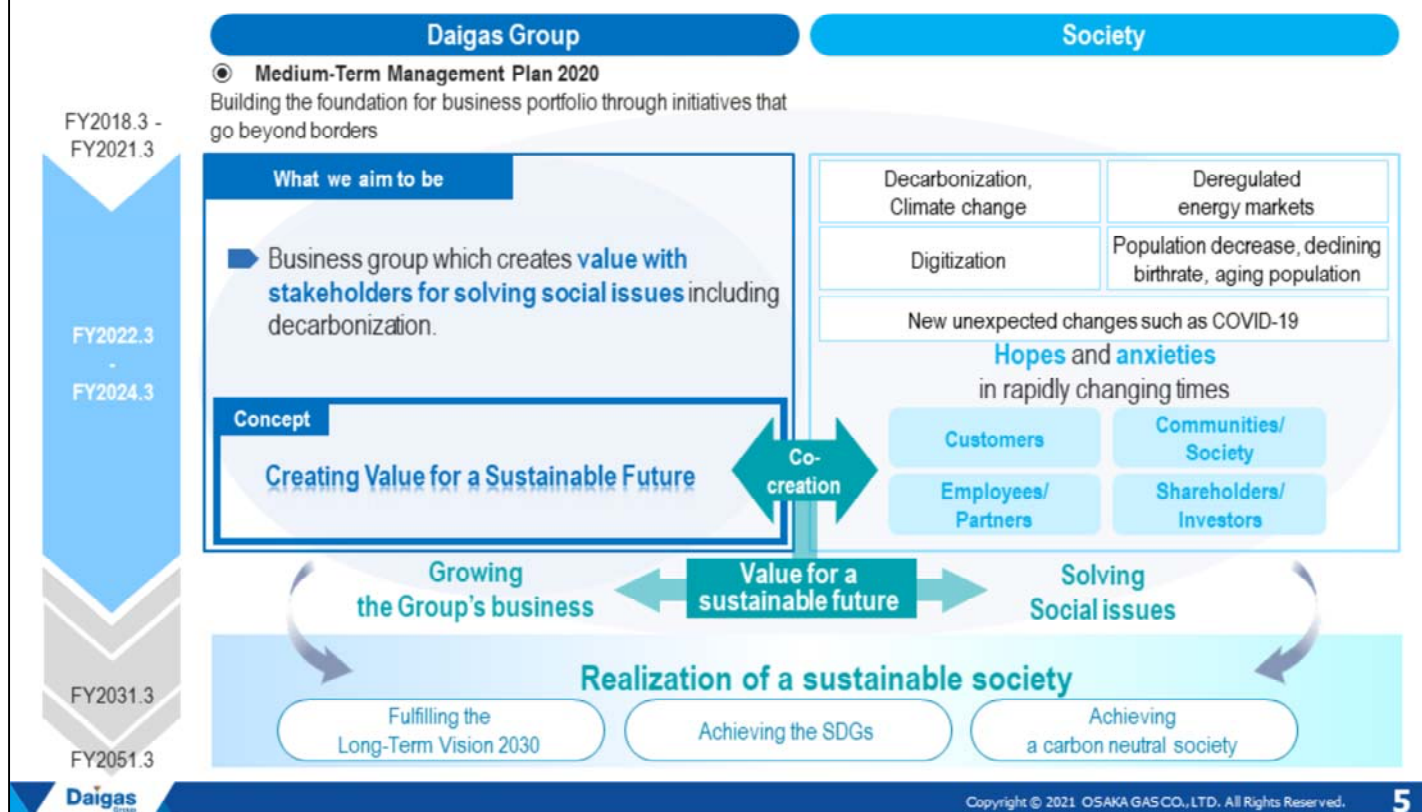
Declaration: Creating Value for a Sustainable Future

- With the effects of climate change growing, the trend toward decarbonization accelerating, and COVID-19 spreading globally, people's way of life, work, lifestyles, and values are dramatically changing, which is increasing the importance of sustainability.
- In this Medium-Term Management Plan 2023, **we aim to solve various issues in building a sustainable society by taking on new challenges as well as existing ones while thereby achieving further growth of the Daigas Group.**
- We focus our efforts on **creating value for a sustainable future with our stakeholders by utilizing our strengths in developing solutions and innovations, and share the achievements with our stakeholders.**
- In the meantime, we intend to **enhance our business portfolio management** by taking various measures such as introducing ROIC to our KMLs.
- **We aim to be an innovative energy and service company that continues to be the first choice of customers while striving to make contributions to achieving a sustainable society.**

Our Medium-Term Management Plan 2023: Creating Value for a Sustainable Future (CVS2023) covers the period between FY2022.3 and FY2024.3. In CVS2023, we are committed, as stated in this page, to creating value for a sustainable future through various measures, which are described in the following pages.

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.



Our business environment has been dramatically changing with much greater than anticipated speed and scope because of continuing energy market competition, increasing severity of natural disasters due to climate change, accelerating trend toward carbon neutrality, and the COVID-19 pandemic, all of which are also considerably affecting our way of life, work, values, and lifestyles.

While we have already been contributing to solving issues for achieving a sustainable society as an energy infrastructure company, we now need to take up a higher corporate mission in response to changing times. We are committed to creating new social and economic value by undertaking the challenge of solving the social issues in this age of change, by which we aim to enhance our group's corporate value and achieve sustainable growth.

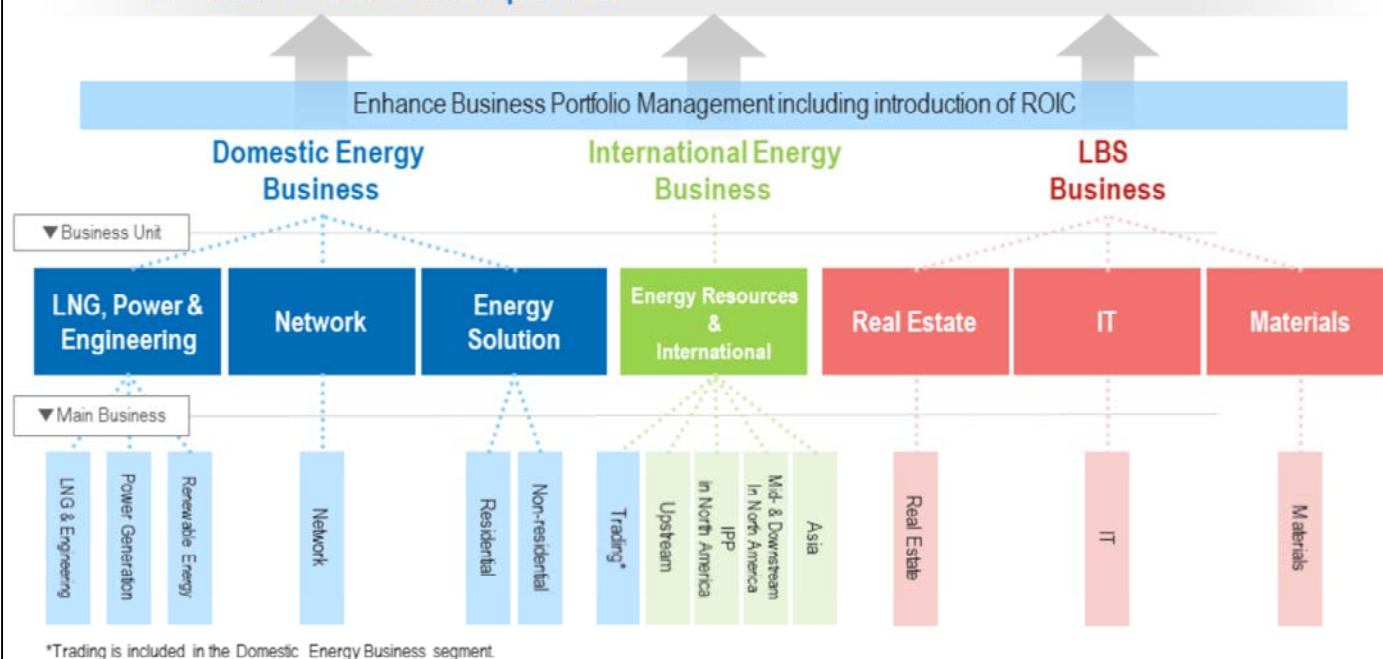
In CVS2023, we have defined three approaches to creating value for a sustainable future to resolve social issues, and we are pursuing the three approaches by leveraging our strengths in creating solutions and innovation combined with the strengths of co-creation with our stakeholders in order to realize and share that value.

These are very challenging tasks that can only be accomplished through the cooperation of all stakeholders who share common values. We would like to collaborate with all our stakeholders in creating new value.

Enhancement of Business Portfolio Management

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.

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



As we expect further uncertainty in our business environment, which is raising the fluctuations and volatility in energy businesses, we are pursuing the enhancement of business portfolio management to continue developing our business foundations that we have built under the previous medium-term management plan.

Under CVS2023, we are improving our business portfolio management through the introduction of ROIC as a new management indicator for more focus on the balance sheet while accelerating the growth of our entire group business consisting of 7 business units with the aim of further evolving as a group of enterprises.

Medium-Term Management Plan 2023 - Creating Value for a Sustainable Future

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



In the first key strategy of CVS2023, “Co-create value for a sustainable future,” we intend to work together with stakeholders in Japan and abroad to create new value through the fulfillment of the three activities shown in the slide.

In the second key strategy, “Evolve our corporate group,” we will strengthen our management foundation to enable the Daigas Group to flexibly adapt to change and create new value.

As key points in CVS2023, we aim to achieve approximately 5% in ROIC, increase cash flows from operating activities by 50% from the previous three year period, and distributing shareholder returns when we achieve profit growth.

Key Initiatives

I . Co-create value for a sustainable future

SDGs we contribute to

1. Achieving a low carbon/carbon neutral society



2. Establishing lifestyles and businesses adjusted to the new normal



3. Enhancing resilience of customers and society



II . Evolve our corporate group

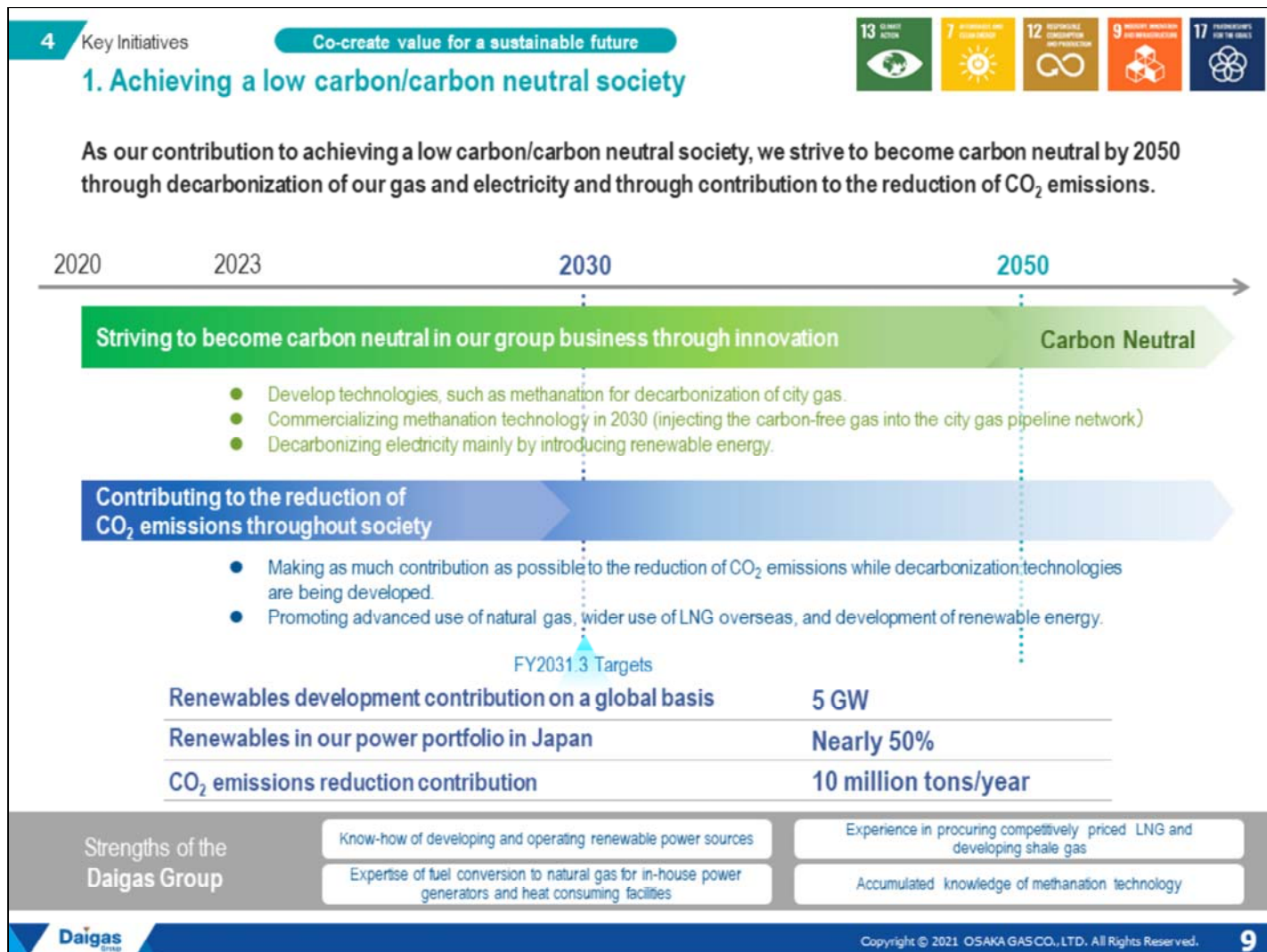
SDGs we contribute to

1. Enhancing Business Portfolio Management

2. Promoting business transformation with DX

3. Maximizing value for each employee





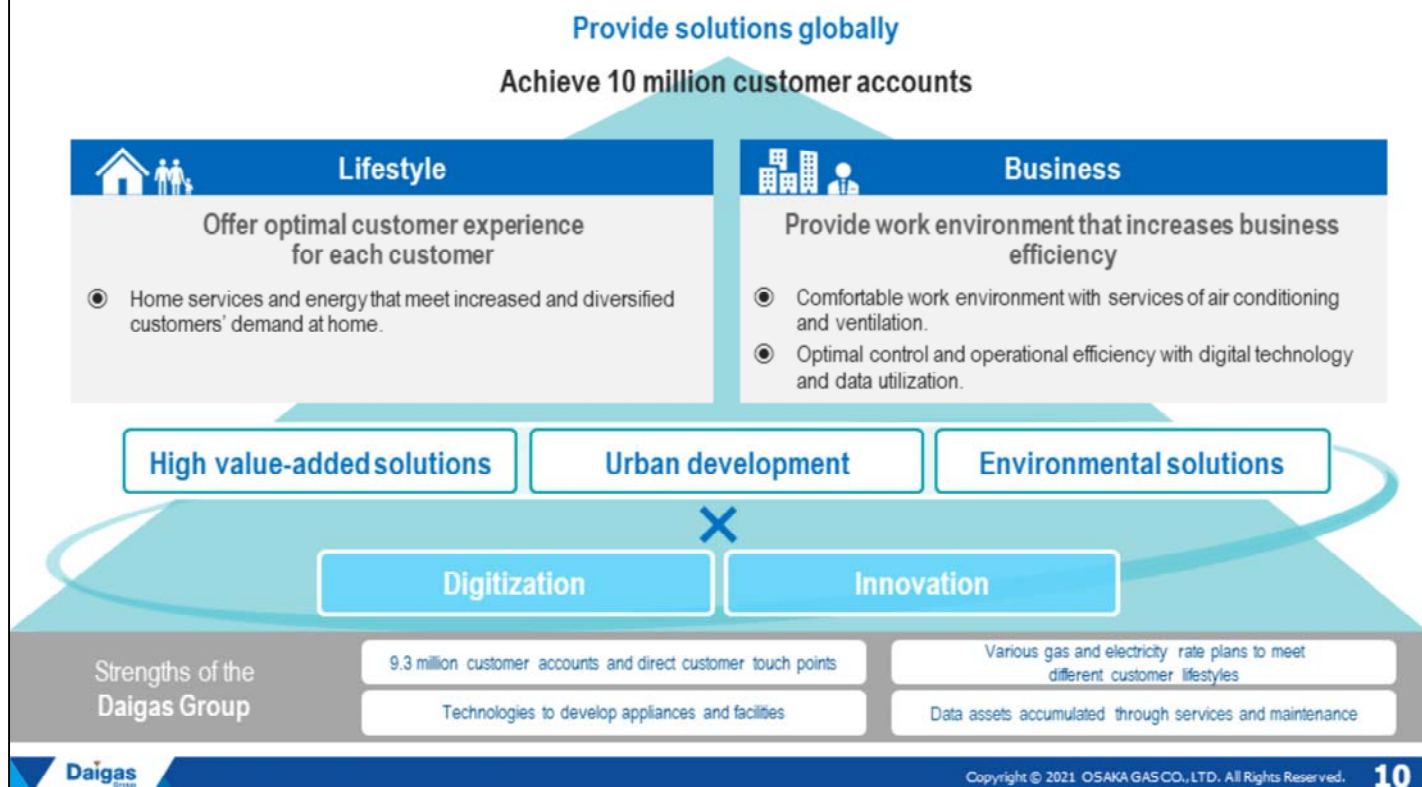
The first approach to creating value for a sustainable future is “Achieving a low carbon/carbon neutral society,” which is a priority. As laid out in our Carbon Neutral Vision 2050 announced on January 25, 2021 prior to CVS2023, we are striving to become carbon neutral by 2050 through decarbonization of our gas and electricity with innovations such as methanation technology and increasing the share of renewables in our power generation portfolio, as well as our continued efforts to promote a wider use of natural gas.

Meanwhile, since decarbonization technology development requires considerable time, we need to reduce as much CO₂ emissions as possible while those technologies are being developed. As milestones for FY2031.3, we have set three numerical targets: 5 GW of renewables development contribution on a global basis, approximately 50% of our power portfolio in Japan consisting of renewables, and 10 million tons per year of CO₂ emissions reduction contribution.



2. Establishing lifestyles and businesses adjusted to the new normal

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



The second approach to creating value for a sustainable future is “Establishing lifestyles and businesses adjusted to the new normal,” which is concerned with our business itself, namely B to C and B to B.

Due to the COVID-19 pandemic, people's lifestyles and ways of work, as well as business models, have changed dramatically. We need to create and provide new value in line with the lifestyles and businesses of customers, who have been affected by those changes. We are committed to offering improved services best suited to each customer and to meeting customer expectations through new solutions and services by utilizing digital technologies and innovations.

In the meantime, we plan to expand our new approaches to B to C and B to B business globally in order to quickly reach our target of 10 million accounts and maximize profit per account.



3. Enhancing resilience of customers and society

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.

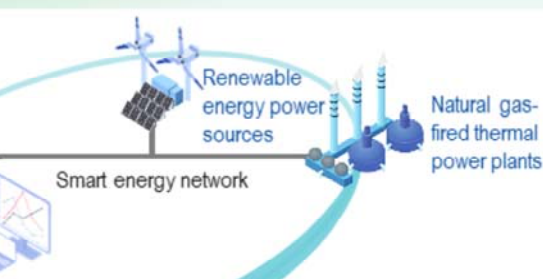
Gas supply chain

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 the COVID-19

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.

The third approach to creating value for a sustainable future is “Enhancing resilience of customers and society,” which we intend to do on a global basis. In light of the lessons learned from the Great East Japan earthquake in 2011 and our experience with the Great Hanshin earthquake in 1995, we must continue enhancing the energy resilience of our customers and society. The resilience enhancement is expected to become increasingly important in resolving issues related to climate change and energy supply stability not only in Japan but also in other countries.

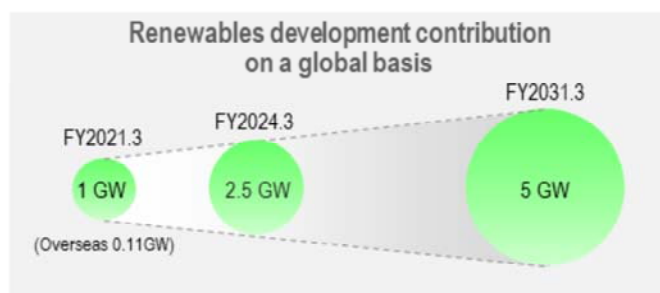
While we strive to further increase stability, safety, and security, we are improving resilience to large scale power outages due to natural disasters, such as the one we experienced when Typhoon Jebi hit Osaka in 2018, while enhancing power grid stability, by building energy networks equipped with fuel cell storage systems and renewables.

We also plan to provide increased stability for customers' daily lives and businesses by utilizing IoT technology to prevent equipment failure and boost our maintenance efficiency.

Our initiatives in detail – I (achieving a carbon neutral society)

Contribution to CO₂ emissions reduction

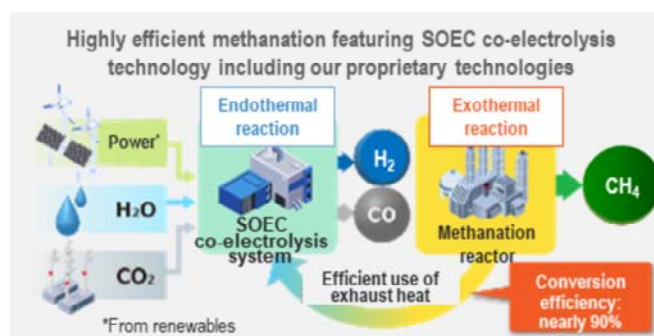
- Greater contribution to renewables development
 - ✓ Develop projects including new power sources such as offshore wind and geothermal power generation. Expand power procurement on an OTC basis.
 - ✓ Meet the needs for renewable energy.



- Contribution to the reduction of CO₂ by offering energy saving proposals and converting fuel from coal to natural gas

Technological development for carbon neutrality

- Innovative methanation technology development and collaboration with various partners
 - ✓ Commercialize methanation in 2030.



Collaboration with various partners

Hydrogen utilization

Biogas

Carbon recycling technology

Carbon neutral fuel

As one of our initiatives in CVS2023, we plan to expand our renewable energy portfolio by developing offshore wind projects while continuing to increase solar, onshore wind, and biomass capacities as we have been building. Through these efforts, we aim to increase our renewable energy capacity, including renewable electricity purchased from our partners such as West Holdings, from the current level of 1 GW to 2.5 GW by FY2024.3, aiming for our further target of 5 GW renewables development contribution by FY2031.3.

In the meantime, we continue reducing CO₂ emissions at our customers' sites by promoting fuel conversion from coal to natural gas in their in-house power generation especially in western Japan. We are also developing advanced methanation technologies such as SOEC co-electrolysis for commercial use, which is key to decarbonizing our gas, and we expect to be able to introduce carbon neutral methane into gas pipelines by FY2031.3 on an industry wide basis in Japan.

(Reference) Showcasing our carbon neutral solutions at the Osaka-Kansai Expo 2025

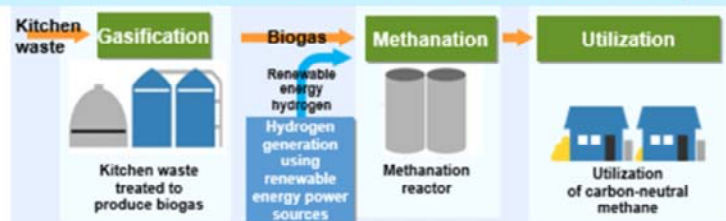
As our contribution to further growth of Osaka and the Kansai region, we will take part in the Expo 2025, an opportunity to showcase our decarbonization solutions. We aim to demonstrate that our technologies can create value and solve issues in building a sustainable future.

As an energy and services company, we plan to exhibit to the world our energy solutions to achieving a carbon neutral society in collaboration with local communities and governments.



Courtesy of Japan Association for the 2025 World Exposition Japan Association for the 2025 World Exposition

Demonstrate our carbon neutral solutions in the Expo's Future Society Showcases



Demonstration of biogas methanation using kitchen waste*

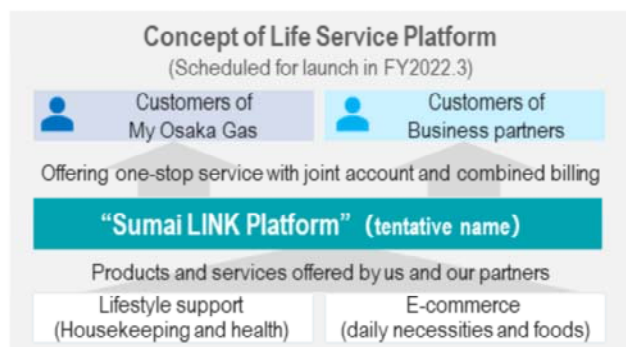
* We submitted a proposal to the Japan Association for the 2025 World Exposition upon the solicitation of PLL proposals in January 2020.

We plan to demonstrate methanation technology for achieving carbon neutrality at the Osaka-Kansai Expo 2025. As a corporate group based in the Kansai region, we will be participating in this project to demonstrate to the world Japan's commitment to achieving carbon neutrality.

Our initiatives in detail – II (DX for solutions in the era of new normal)

Home service platforms

- Offer optimal customer experience for each customer
 - ✓ Build a system that can provide optimal solutions both physically and digitally at optimal timing.



IoT services

- Expand our line of IoT services designed for customers' facilities

ツナガルde機能
Residential gas appliances

D-Fire
IoT solution for plants

Target of IoT-connected gas appliances (Residential)

0.1 million units	Approx. 0.3 million units
FY2021.3 Forecasts	FY2024.3 Forecasts

- Enhance collaboration with startups that own advanced technologies

Promote DX by leveraging the Daigas group's collective strength

- Introduce new services utilizing Real Estate Tech for rental properties
- Promote DX strategy and expand proprietary technology services by utilizing expertise of OGIS*



App for residents
(Palette Cloud, Inc.)



Smart Lock
(Bitkey Inc.)



yonobi Rule-based AI support tools

*Osaka Gas Information System Research Institute Co., Ltd.

As part of our digital transformation in the age of the new normal, we aim to evolve our solutions that we provide to customers by using digital technologies.

Before the coronavirus pandemic, we fully utilized our in-person customer contact network consisting of 200 franchise shops to market our products and services, which was one of our strengths. In the age of the new normal, we also need to strengthen our digital points of contact as well as in-person customer points of contact. Our aim is to establish omnichannel touch points by combining digital and in-person points of contact to offer optimum customer experience, which is to provide customers with the services they need at exactly the time they need them.

In addition, with the Sumai LINK Platforms (tentative name) that we plan to roll out in FY2022.3, we will provide a digital platform that will enable customers of all generations to digitally access a host of services and service providers, for such as optimal-timing push notifications, appliance failure symptom detection, and groceries list creation for delivery services, by utilizing data obtained through smart meters, IoT water heaters and ENE-FARM, home fuel cell appliances.

In the meantime, we have set the installation target of 300,000 units of IoT devices such as ENE-FARM, highly efficient water heaters and gas alarms. To that end, we plan to integrate the propriety technologies provided by OGIS-RI and Palette Cloud, Inc., and enhance the overall capabilities of our group in alliance with partners such as Bitkey Inc. We also intend to offer this know-how to other businesses for an additional increase in our earnings.

Our initiatives in detail – III (lifestyle and businesses solutions in the era of the new normal)

Meeting diversified needs of customers

- Expand customer accounts and enhance value per account
 - ✓ Offer a wider variety of rate plan options and home services to meet increased and diversified customers' demand at home.

Number of customer accounts

9.3 million

FY2021.3
Forecasts

10.0 million

Further target we aim to
achieve in the near future

- Provide total solutions to non-residential customers
 - ✓ Maximize value of ESP (energy service provider) including water treatment, environment and biotechnology in ventilation, air conditioning, and industrial heat.

ESP target

To increase profit by approximately 50%
(FY2021.3→FY2024.3)

Highly functional materials

- Provide high-quality material solutions
 - ✓ Develop new fine material products for the optical electronic materials market.
 - ✓ Expand sales of diverse processed products of high-functional activated carbon.

Steady expansion of the real estate business

- Realize smart urban development by the entire Daigas Group in conjunction with community and real estate development
 - ✓ Build a portfolio with emphasis on housing in the Greater Tokyo Area.
 - ✓ Expand business domains by utilizing owned assets (to logistics, etc.).

Due to the COVID-19 pandemic, we have seen an increase in stay-at-home demand, which is an irreversible trend. If we fail to meet the customer needs in the age of the new normal, we will fall behind our competitors in the market.

In order to offer energy and services better suited to customers' lifestyles in the age of the new normal, we are increasing the range of our rate plans and home services to meet customers' stay-at-home demand, besides our existing Style Plans and With Plans, while expanding into new fields, in order to quickly reach our target of 10 million customer accounts prior to FY2031.3. Before CVS2023, we gained more than 400,000 customer accounts for home services including PC repair services launched last year.

In our ESP (energy service provider) business, which we also aim to expand, we plan to provide one-stop 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 chemical field, Osaka Gas Chemicals continues to develop high value-added products such as activated carbon and Xyladecor, a penetrating-type paint, while building a system for the mass production of OKP, a monomer lens material, as well as for the development of new products.

In our real estate business, the Osaka Gas Urban Development group is offering more advanced urban development, which is integrated with real estate development, for various projects such as Umekita in Osaka. 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. The group also aims to enhance the efficiency in the utilization of the group-wide real estate assets by expanding into new fields such as logistics, which has been growing in response to the expansion of

e-commerce businesses due to the COVID-19 pandemic.

Our initiatives in detail –IV (North American business in International Energy Business)

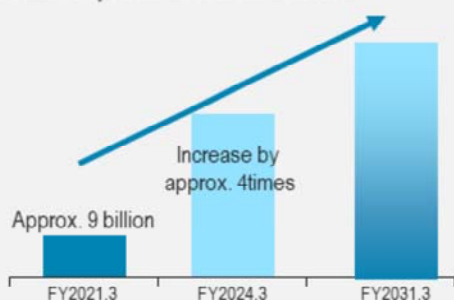
Wider use of natural gas

- Promote advancement in the Freeport LNG project and the shale gas development business (Sabine Oil & Gas Corporation)
- Enhance our capabilities of asset management in the IPP business



Train 1 of liquefaction facilities in Freeport LNG project
(Courtesy of Freeport LNG Development, L.P.)

Forecast for profit* in North America



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

Expansion of renewable energy business

- Expand renewable energy business in USA
 - ✓ Invest in renewable energy development businesses including SolAmerica Energy, LLC., and small-and medium-sized solar power businesses, etc.

Driving business development in North America

- Increase business control functions of OGUSA* as an overseas regional headquarters

*Osaka Gas USA Corporation

In our North American business, we aim to achieve sustainable earnings growth through the stable operations of the Freeport LNG project, the continuous acquisition of quality shale assets for Sabine, and the hands-on management of IPP businesses.

In the renewable energy field in the US, where the Biden administration has announced \$2 trillion climate plan, we have been already engaged in solar power business development by investing in SolAmerica Energy, LLC, a solar project developer. SolAmerica Energy's business model is to generate income from constructing power plants on acquired land, as opposed to expecting a low return from investing in existing assets.

We have designated OGUSA as our regional headquarters in North America, which is responsible for the business development of Freeport LNG, Sabine, IPP projects, and SolAmerica Energy. With OGUSA 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.

Our initiatives in detail – V

(Asia, Trading, decarbonization businesses in International Energy Business)

Business expansion in Asia, a growing market

- Accelerate our business in Asia through our contribution to economic development and low carbonization with **renewable energy and energy infrastructure development**
 - ✓ Develop joint projects through collaboration with various partners.
 - ✓ Expand businesses of LNG terminal, gas supply, energy services, gas-fired thermal power generation, and renewable energy development.



Competitive and flexible LNG procurement and optimization

- Expand the LNG procurement portfolio
- Optimize LNG procurement with our trading arm and fleet

Decarbonization business

- Develop joint projects of CCS^{*1}/CCUS^{*2} and hydrogen in resource-producing countries including Australia and USA
- Establish a business model such as VPP^{*3} in UK
- Meet the needs for carbon neutral LNG supply
- Examine the potential of introducing green ammonia

^{*1} Carbon dioxide Capture and Storage

^{*2} Carbon dioxide Capture, Utilization and Storage

^{*3} Virtual Power Plants

In the rapidly growing Asian markets, we are committed to developing businesses on a medium- to long-term basis in these markets as our key growth areas while being based in Singapore.

In Asian countries, where energy management is under the direct control of the government or state enterprises, we plan to work in partnership with those local companies to participate in energy projects such as major LNG terminals, off-shore LNG terminals, natural gas-fired thermal power plant construction, and renewable energy development. We strive to achieve steady growth in our natural gas sales businesses in Vietnam and Indonesia as well as our energy services business in Thailand while expanding into new areas.

In the decarbonization business field, we continue exploring new potential projects and technologies such as CCS and hydrogen to capture great opportunities presented by the globally accelerating wave of decarbonization businesses. We are working with Igloo Energy Supply Ltd., an electricity retail company in the UK, to acquire the know-how of a new electric power business, which we plan to apply to our energy business in Japan in order to enhance our competitive advantage in the fully deregulated markets.

Our initiatives in detail – VI (energy resilience)

LNG terminals, power plants, and gas supply network

- Boost productivity by building smart factories out of existing LNG terminals
- Enhance both security and productivity with DX and technological development in network operations
- Improve disaster response capabilities with earthquake resistant gas infrastructures and subdivided gas supply area management

Subdivided areas* for earthquake countermeasures

171	688	705
FY2021.3 Forecasts	FY2024.3 Forecasts	FY2031.3 Forecasts

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

Distributed power sources to enhance resilience

- Contribute to grid stabilization through optimal combination of renewable energy and distributed power sources
 - ✓ Develop VPP verification joint project featuring ENE-FARM.
 - ✓ Build a monitoring and controlling network for distributed power sources.



Residential fuel cells ENE-FARM

- Build power supply system for the blackout areas with renewable energy, gas cogeneration power, and micro-grid

To ensure 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, which will provide customers with a sense of security after disaster.

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 1,500 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.

Those are the outline of our three approaches to creating value for a sustainable future to resolve social issues.

Key Initiatives

I . Co-create value for a sustainable future

SDGs we contribute to

1. Achieving a low carbon/carbon neutral society



2. Establishing lifestyles and businesses adjusted to the new normal



3. Enhancing resilience of customers and society



II . Evolve our corporate group

SDGs we contribute to

1. Enhancing Business Portfolio Management

2. Promoting business transformation with DX

3. Maximizing value for each employee



1. Enhancing Business Portfolio Management

We strive to improve our business portfolio management and governance while enhancing profit earning capabilities of each business unit by introducing ROIC.



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 CVS2023, 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.

In light of our recent increase in investment, we have decided to introduce ROIC as a key management indicator in addition to ROE for our enter group and each business unit. We aim to improve ROIC by making change in our balance sheet with an ROIC tree and making effective investment decisions. We also continue using EBITDA as a measure of cash flow.

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.

(Reference) Introduction of ROIC

An indicator of how efficiently we earn profits from assets associated with our business

$$\text{ROIC} = \text{NOPAT}^{*1} / \text{Invested capital}^{*2}$$

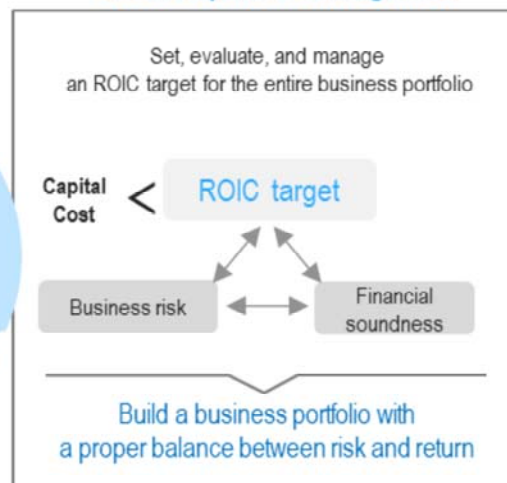
Introduction of common indicators for each business unit and the Daigas group as a whole

Operation of Business Unit

Periodic reviews



Resource allocation
Assets replacement

Business portfolio management

*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.

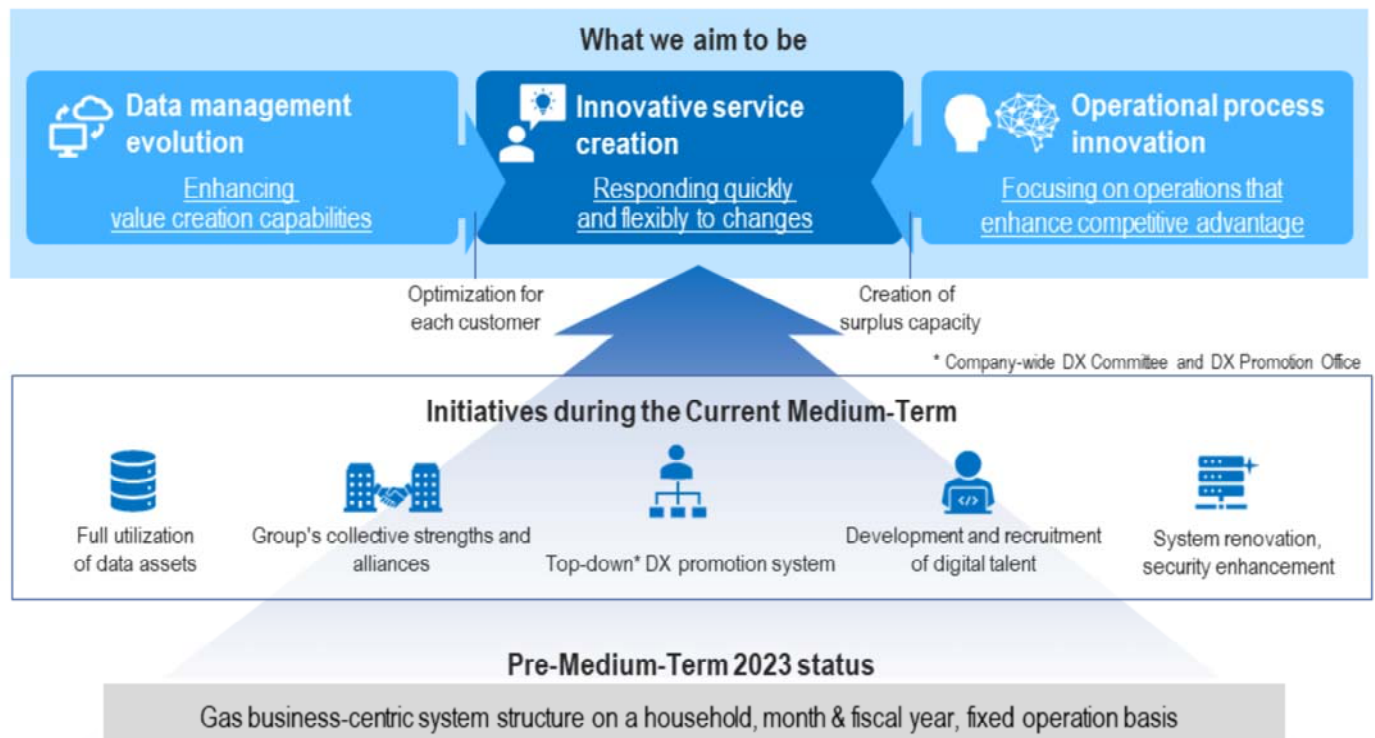
ROIC is an indicator of how efficiently profit is generated by the assets used in business operations. As shown in the diagram, we intend to enhance the earning capabilities of our group's each business unit by improving the speed and efficiency of the cycle of each business unit's operation and portfolio management with the introduction of ROIC as a management indicator for all group businesses.

While targets vary among our business units due to the difference in the nature of business, all the business units and the headquarters aim to achieve their individual ROIC target that exceeds their capital cost while striving to achieve highly effective business portfolio management by periodically reviewing business plans, resource allocation, and asset replacement.

We plan to increase ROIC from the current level of 4% to approximately 7% by FY2031.3 in light of the expected change in profit structure caused by our future growth.

2. Promoting business transformation with DX

We aim to achieve corporate evolution through business reform and innovation by increasing both quality and speed in customer interaction, digitization, and reform of all operations.



We are enhancing our solutions we provide to customers by utilizing digital technologies and boosting productivity by improving and simplifying in-house procedures and systems. To that end, we will launch a DX Promotion Committee and a DX Promotion Office in April 2021 for implementing effective and swift digital transformation under the leadership of top management.

3. Maximizing value for each employee

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 appointment of the right person in the right place and securing close communications

Ensuring safety and promoting health maintenance

In order to maximize value for each employee, we are supporting their flexible ways of work through policies that allow them to choose where they work and how they work and promoting diversity and inclusion through recruitment of diverse talent.

We are also providing a workplace that encourages employees to undertake the challenge of resolving social issues and providing them with a sense of stability at work while quantitatively analyzing the effectiveness through monitoring employee engagement. We aim to enhance the overall capabilities of the entire group by ensuring the health and safety of all group employees and maximizing value for each employee.

Management Indicators of Medium-Term Management Plan 2023

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.

Medium-Term Management Plan 2023
Management Indicators

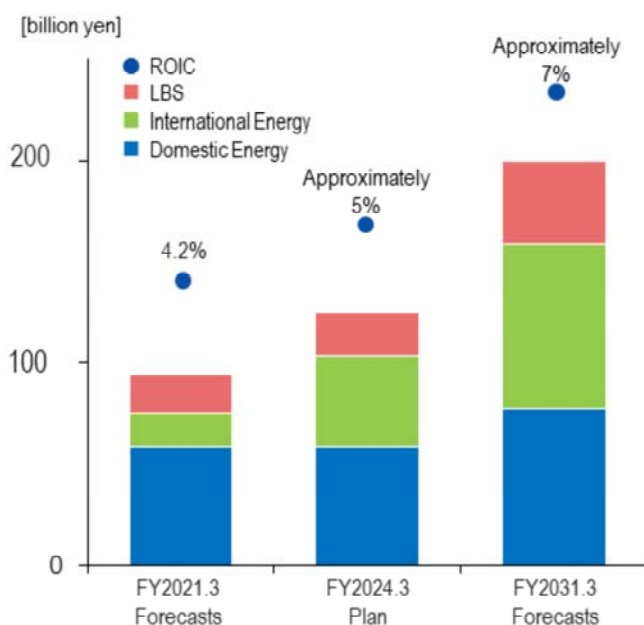
		FY2021.3 Forecasts	FY2024.3 Plan
Profitability indicators	ROIC (Reference) ROE	4.2% (7.0%)	Approximately 5% (Approximately 7.5%)
Shareholder returns	Payout ratio	30.5%	30% or higher*†
Financial soundness indicators	D/E ratio ¹²	0.65	Approximately 0.7
	Shareholders' equity ratio ¹²	50.1%	Around 50%

^{*1} Excluding short-time fluctuation factors that affect profits

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

^{*3} Excluding temporary impact on domestic energy business.
(Time-lag effect of Gas Business and Electricity Business)

Forecasts for ordinary profit by segment^{*3}



Under CVS2023, we aim to meet our ROIC target of approximately 5% in FY2024.3 by enhancing our earning capabilities with a two-pronged approach of promoting the growth of our existing business and achieving the growth through investment by utilizing our existing business strength.

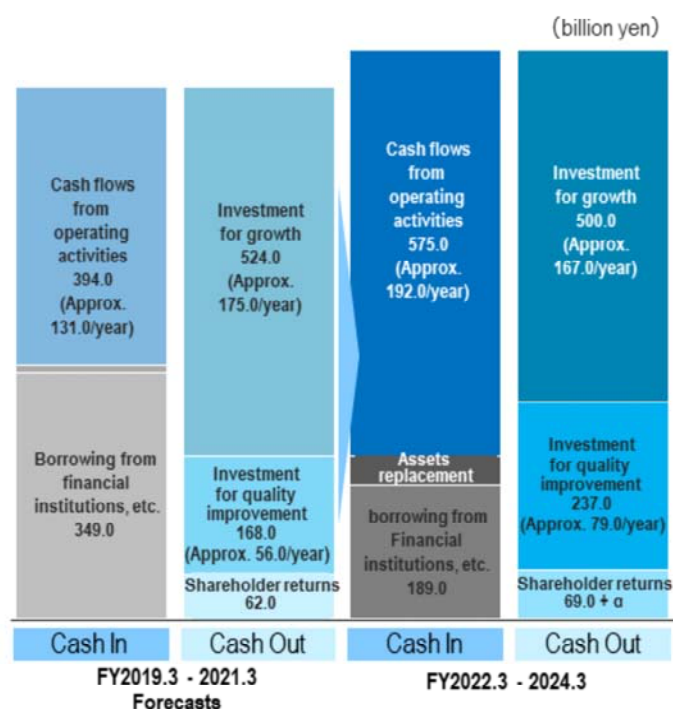
We also aim at approximately 0.7 for D/E ratio and approximately 50% for shareholders' equity ratio.

While maintaining 30% or higher for payout ratio, we are striving to realize the distribution of shareholder returns when we achieve profit growth.

Management Indicators of Medium-Term Management Plan 2023

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 flows in this Medium-Term Management Plan



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)

FY2019.3 - 2021.3 Forecasts	Domestic Energy 158.3	International Energy 250.3	LBS 115.6	524.0
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FY2022.3 - 2024.3	174.0	168.0	158.0	500.0
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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

We aim to achieve proper capital allocation to secure sufficient funds for shareholder returns and investment while maintaining our group's financial soundness.

For our key growth business fields such as decarbonization, North America, renewables, LBS, and Asia, we plan to make investments for business growth in the cumulative amount of 500 billion yen during the coming three years under CVS2023. For renewable energy projects, we plan to invest 120 billion yen. In these investments, we aim to increase our cash flows from operating activities by 50% from the previous three year period while reducing borrowing from financial institutions through the replacement of assets including stocks.

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

Acceleration of ESG Management

We act in accordance with the Daigas Group Charter of Business Conduct* in making contribution to achieving a sustainable society.

*A revision of the Daigas Group CSR Charter, effective April 2021.

Charter of Business Conduct		Value for a sustainable future	Initiatives to create value for a sustainable future	Indicators	Goals	Fiscal Year to be achieved
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
			Enhance customer relationship management	Customer satisfaction rate	90%	FY2024.3
		Enhancing resilience of customers and society	Maintain safety and quality levels	Number of serious accidents	Zero serious accidents	FY2031.3
			Strengthen resilience of energy supply	Build a 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
				Promote advanced utilization of natural gas and environmental products	CO ₂ emissions reduction contribution (compared to FY2017.3)	2.5GW
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 participations in local governments' activities (i.e. community development planning)	14 cases	FY2024.3
IV	Number of joint efforts with local communities			170 times	FY2024.3	
	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	
			Annual average hours of training per employee	Implementation of human resource development and work environment improvement	FY2031.3	
		Promote diversity and inclusion	Percentage of women in1. executives, 2. members newly promoted to the middle management positions, and 3. new recruits for career-track positions	1. 20% or more 2. 30% or more 3. 30% or more	FY2031.3	

We have set the goals as shown in the table with target years to achieve the goals. As the goals for diversity and inclusion, we aim to meet specific numerical targets such as for the percentage of women in executives. We plan to promote our activities and efforts to fulfill our goals by following the Daigas Group Charter of Business Conduct, a revision of the Daigas Group CSR Charter effective April 2021.

Management Indicators for FY2022.3

(billion yen)	FY2021.3 Forecasts	FY2022.3 Plan	Rate of change
Net sales	1,330.0	1,405.0	+5.6%
Operating profit	88.5	80.5	-9.0%
Ordinary profit	100.0	95.0	-5.0%
Profit attributable to owners of parent	71.5	70.5	-1.4%
EBITDA	200.0	200.0	±0%
ROIC	-	4.4%	-
ROE	7.0%	6.6%	-
Dividend forecast	52.5 yen/share	55.0 yen/share	-
The time-lag effect (Gas)	+4.2	-9.8	-
The time-lag effect (Electricity)	+1.7	-2.1	-
Ordinary profit excluding time-lag effect	94.1	106.9	-

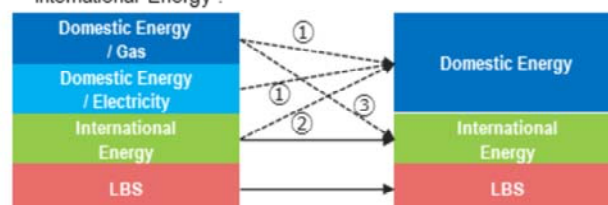
<FY2022.3 financial plan is based on the following assumptions.> (FY2021.3 Forecasts)

Crude oil price (all-Japan CIF price)	60.0 USD/bbl (41.3 USD/bbl)	Exchange rate	105.0 JPY/USD (105.8 JPY/USD)
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(billion yen)	Segment Profit		
	FY2021.3 Forecasts	FY2022.3 Plan	Rate of change
Domestic Energy (Electricity)	68.0 (15.0)	45.5 (15.0)	-33.1%
International Energy	16.5	31.0	+87.9%
LBS	19.0	19.0	±0%

<Key changes>

- ① "Domestic Energy / Gas" and "Domestic Energy / Electricity" will be integrated into the "Domestic Energy"
- ② OGIT* and its subsidiaries, which are included in the "International Energy," will be integrated into "Domestic Energy" because of their all-in-one operation including energy sales, supply and demand management.
- ③ Osaka Gas' operating expenses for International Energy, which is included in "Domestic Energy / Gas," will be integrated into "International Energy".



*Osaka Gas International Transport Inc.

While we expect that the COVID-19 pandemic will continue affecting our lives and businesses in FY2022.3, we plan to close the year with an increased consolidated ordinary profit excluding the time-lag effect on our gas and electricity businesses while forecasting a decrease in consolidated ordinary profit from the previous year. We also plan to achieve 200 billion yen in EBITDA, which is around the level of last year, through the growth in our International Energy business.

With regards to dividends, we have revised the annual dividend forecast for FY2021.3 to 52.5 yen per share and made the forecast of 55.0 yen per share for FY2022.3.

Management Indicators for FY2022.3

(billion yen)	FY2021.3 Forecasts	FY2022.3 Plan
Investment for quality improvement	66.0	69.0
Investment for growth	190.0	190.0
Domestic Energy	85.0	70.0
International Energy	50.0	64.0
LBS	55.0	56.0
Total investment	256.0	259.0

Capital expenditures (included in the total)	203.0	196.0
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	FY2021.3 Forecasts	FY2022.3 Plan
Shareholders' equity ratio*	50.1%	49.3%
D/E ratio*	0.65	0.66

*Calculated with 50% of issued hybrid bonds as equity

(million m ³)	FY2021.3 Forecasts	FY2022.3 Plan	Rate of change
Gas sales volume (Non-consolidated)	6,917	6,956	+0.6%
Residential	1,817	1,695	-6.7%
Non-residential	5,100	5,261	+3.2%
Gas sales volume (Consolidated)	6,953	6,987	+0.5%

(GWh)	FY2021.3 Forecasts	FY2022.3 Plan	Rate of change
Electricity sales volume	16,567	18,024	+8.8%

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

Crude oil price +1 USD/bbl	-0.66 billion yen
Exchange rate +1 JPY/USD (depreciation of the yen)	-0.46 billion yen

In FY2022.3, we aim to enhance our investment for business growth and asset replacement while maintaining the financial soundness targets set out in CVS2023.

We are committed to evolving as a corporate group by undertaking new challenges in various fields globally and contributing to achieving a sustainable society.

This concludes the presentation of our Medium-Term Management Plan 2023. Thank you.

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.

Domestic Energy Business (residential sector)

We aim to improve the quality of the optimal customer experience that we offer, by utilizing IoT and other digital technologies to meet customers' increasingly diversified needs and preferences.

Low carbon/carbon neutral society

- Promote a wider use of ENE-FARM, renewables such as solar power, and storage batteries at customer sites.
- Contribute to a wider use of renewable energy through VPP operation including ENE-FARM output adjustment.
- Offer efficient energy-saving tips through IoT utilization.



Utilization of digital technologies

- Offer products and services that meet the needs of each customer at an optimal timing by utilizing digital technologies as well as conventional face-to-face contact points.
- Launch a new service of home service platforms, as well as advanced and diversified services of My Osaka Gas and "Tsunagarude" series.
- Renovate existing systems for speedier proposals of optimal solutions for customers and for drastic review of operations.
- Improve the maintenance accuracy based on data analysis of failure diagnosis and prediction.

ツナガルde給湯器



Enhancement of existing services

- Expand rate plan options in light of increased demand at home and diversified lifestyles and preferences.
- Increase options such as Sumikata plus, in order to meet the customers' home needs.
- Offer a wider variety of services for the rental housing market by utilizing management apps, smart locks, and other real estate tech.
- Expand service options in a wider area such as the greater Tokyo area, and increase customer accounts through M&A.



Domestic Energy Business (non-residential sectors)

We provide work environment for customers that increases business efficiency by utilizing a variety of energy solutions and IoT services to meet the changing needs of our customers and society.

Low carbon/carbon neutral society

- Offer fuel conversion to natural gas for large-scale in-house power generation in a wider area.
- Promote renewable energy-based solutions such as solar power and biogas that contribute to achieving a carbon neutral society.
- Achieve VPP operation and enhance resilience with co-generation systems.



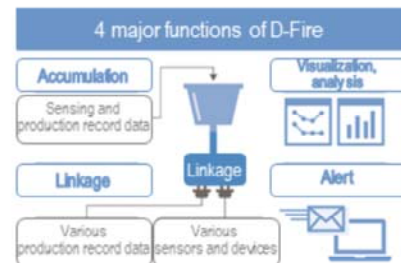
Utilization of digital technologies

- Offer improved productivity and optimization of customers' entire plants by introducing D-Fire.
- Improve the advantages of energy services such as automated energy-saving control and O&M.



Enhancement of existing services

- Develop businesses in a wider area through further expansion of partnership and alliances.
- Expand rate plan options to meet customers' needs.
- Offer a wider variety of services in the ESP with low carbon/decarbonized products, water treatment, and chemicals, etc.
- Create new value for customers' businesses in the greater Tokyo area through CD Energy Direct Co., Ltd.



Domestic Energy Business (gas production and engineering)

We strive to contribute to achieving the business development and comfortable lifestyles of customers through our activities for a sustainable and low carbon/carbon neutral society in our stable gas production.

Continuation of stable gas production

- Implement various measures for stable operation of LNG terminals.
- Improve anti-seismic measures that contribute to ensuring safety and continuation of gas supply in case of large-scale earthquakes.



Senboku LNG Terminal II

Improvement of productivity at LNG terminals

- Enhance the operational efficiency of gas production by developing smart factories.
- Enhance the operational efficiency of maintenance by using drones and AI.



Central Control Room (Senboku LNG Terminal II)
*It operates Senboku LNG Terminal I and II in an all-in-one way.

Expansion of industrial gas business

- Develop the carbonic acid business in a wider area.
- Expand the businesses in Vietnam and other Asian countries.



Nagaoka Carbonic Co., Ltd.
liquefied carbon dioxide and dry ice production plants

Expansion of engineering business

- Build new core businesses by investing in LNG terminals mainly in Asia and shifting to environmental engineering (HYSERVE, biogas, etc.) that contribute to achieving a low carbon/carbon neutral society.
- Move up a gear to increase orders of LNG terminal consulting services and to tap new markets.



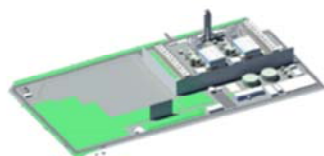
Biogas Upgrading System (Thailand)

Domestic Energy Business (natural gas-fired power plants and renewables)

We plan to build a business model of an electricity value chain with renewables and VPP in order to contribute to increasing 5GW of renewables by FY2031.3.

Power source development and electricity procurement

- Expand power source development and ownership as well as power procurement in order to achieve 5GW of renewables development contribution on a global basis in FY2031.3.
- Build a price competitive and environmentally friendly power portfolio by developing thermal power and renewable energy power sources.
- Balance biomass, solar and wind power in our renewables portfolio in light of the characteristics of each power source.
- Ensure on-schedule construction of facilities and system building for O&M and personnel training, for the Himeji natural gas-fired thermal power plant scheduled for COD in January 2026.



Rendering of Himeji natural gas-fired thermal power generation

Supply-demand management, electricity trading, and service development

- Enhance optimization proposals (securing non-FIT renewable energy sources, forecasting power generation, and supplying renewable energy) in line with customers' needs for renewable energy.
- Develop new business models featuring demand response and VPPs such as storage batteries and EVs, and expand VPP resources.



Hirogawa Myojin-yama wind power plant

Domestic Energy Business (gas pipeline network)

We strive to enhance the stability and safety of gas supply while offering gas and new services to meet demand in a wider area in order to become the most trusted utility company by society and customers.

Enhancement of stability/safety and productivity of gas supply operation

- Increase the robustness and economic efficiency of our gas supply facilities through the maintenance of the mains such as Amagasaki–Kumiyama Line, and the systematic measures for aging facilities.
- Strengthen disaster prevention measures for early recovery from natural disasters such as earthquakes while preventing secondary disasters.
- Enhance both safety and productivity through DX and technological development.
 - ✓ Introduce automation, remote control, and frequent operation of construction work, maintenance management, and inspection by utilizing pipeline absolute coordinates and smart meters.



Amagasaki–Kumiyama Line
(Construction status)



Smart Construction

Wider use of natural gas

- Contribute to achieving a low carbon/carbon neutral society by promoting a wider use of gas through pipeline development in unconnected areas.
- Contribute to regional development through joint efforts with local governments, such as promoting education on disaster prevention and food, as well as to community revitalization in collaboration with local communities.

Enhancement of business foundations

- Strengthen business management for legal separation of our network business schedule for FY2023.3.
- Provide new services in Japan and overseas that improve safety and productivity in the infrastructure business by utilizing know-how and technology accumulated in the network business in Japan.

International Energy Business (including LNG trading)

We are committed to reducing carbon emissions throughout our natural gas value chain, expanding our renewable energy business, and developing decarbonization business in order to provide cleaner energy and enhanced lifestyles to customers around the world.

Upstream business (resource development)

- Achieve a sustainable development through profitability enhancement and continuous investment in our shale gas development business in USA (Sabine Oil & Gas Corporation).
- Maintain stable operation of our upstream businesses in Australia (Ichthys LNG Project and Gorgon LNG Project).
- Examine opportunities of participating in decarbonization businesses (CCS/CCUS and hydrogen) through alliances in resource producing countries.



Sabine Oil & Gas Corporation
(Shale gas well drilling site)

LNG Trading

- Achieve stable procurement of competitive LNG for our domestic gas and power businesses.
- Expand and optimize our trading business through our trading arm in Singapore (OGEST^{*1}) and shipping company (OGIT^{*2}).
- Examine carbon neutral LNG procurement possibilities.

^{*1} Osaka Gas Energy Supply and Trading Plc. Ltd ^{*2} Osaka Gas International Transport Inc.



Train 1 of liquefaction equipment
in Freeport LNG project
(Courtesy of Freeport LNG Development, L.P.)

Freeport LNG project in USA (natural gas liquefaction terminal)

- Achieve continued stable operation of the natural gas liquefaction terminal
- Maintain our enhanced energy security by stably operating Freeport LNG as one of our diversified LNG sources.

International Energy Business

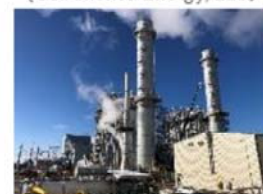
We are committed to reducing carbon emissions throughout our natural gas value chain, expanding our renewable energy business, and developing decarbonization business in order to provide cleaner energy and enhanced lifestyles to customers around the world.

Power generation

- Expand our solar power development businesses in USA and Thailand and contribute to development of renewables on a global basis through expansion of our overseas subsidiaries.
- Achieve flexible and steady operation of high-efficiency natural gas-fired thermal power plants that contribute to stabilizing demand-supply balance required in markets with increasing renewables.
- Build new demand-side balancing businesses.
- Examine new business opportunities such as hydrogen.



Solar power plant in USA
(SolAmerica Energy, LLC)



Fairview natural gas-fired
thermal power plant in USA



City gas supply in Phu My 3
Specialized Industrial Park in Vietnam

Energy infrastructure development and gas sales

- Apply our know-how accumulated in the gas business in Japan to business development in Asian countries, which are rapidly growing natural gas markets, in order to contribute to their economic development, energy saving, and low carbonization.
- Develop energy infrastructure in Asian countries in partnership with the state-owned and local private companies in each country.

Life & Business Solutions (LBS) Business

We aim to contribute to achieving an environmentally friendly, safe, convenient, and comfortable society by utilizing our technologies and high-quality solutions in each business field.

Real Estate Business



- Acquire/develop high-grade properties and develop large-scale projects such as the Umekita 2nd Project.
- Expand business domains by leveraging owned assets.
- Improve real estate earnings from the Kyoto Research Park area and expand the businesses to a wider area.
- Increase orders for external construction and facilities management by strengthening activities of FMS* at OGFA.

*Facility Management Service



SCENES Tsukaguchi

IT Solutions Business

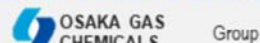


- Drive the Daigas Group's DX.
- Maintain, enhance and expand the business for manufacturing and finance, and expand the high-value-added businesses by utilizing proprietary technologies such as AI and cloud data analysis.
- Enhance functions of existing solutions such as integrated certification management, system linkage and file transfers, and create new solutions.
- Complete developing systems for legal separation of our network business.



Image recognition solution utilizing AI

Materials Solutions Business



- Expand profitability and business scale by shifting to high-value-added products in the activated carbon business and increasing capital expenditures in Jacobi Group.
- Develop new products in the fine materials business for the growth of the optical electronic materials market.
- Boost market share by increasing promotions in the preservatives business.
- Expand sales in materials fields such as resin compounds in carbon fiber materials business.
- Increase efforts to expand global sales of Mizusawa Industrial Chemicals's mainstay products such as Silton.



Activated Carbon



Fluoren derivatives

Technological Development

We intend to accelerate technological development and create businesses in new growth fields in order to enhance our strengths in energy business field and to contribute to achieving a carbon neutral society.

Responding to intensified competition in energy markets

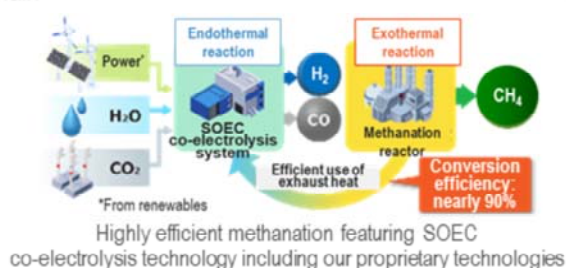
- **Introduce advanced use of energy**
 - Develop higher-efficiency and downsized SOFC (ENE-FARM).
 - Enhance storage battery technologies.
 - Achieve supply-demand management and operation service development for the launch of new electricity markets.
- **Strengthen business foundations**
 - Improve efficiency and reduce costs across the entire value chain with AI and IoT.



Storage batteries

Contributing to achieving a low carbon/carbon neutral society

- **Short-term initiatives**
 - Increase sales of hydrogen producing equipment (HYSERVE).
 - Expand biogas upgrading business targeting Southeast Asia.
- **Medium- to long-term initiatives**
 - Develop carbon neutral technologies such as high-efficiency methanation and new hydrogen production.
 - Examine green ammonia introduction possibilities.



Creating new businesses in growth fields

- **Initiatives in the health sector**
 - Develop manufacturing technology and promote sales of ketone bodies (3HB) as raw materials of health foods.
 - Develop multi-purpose gas sensors that contribute to health and safety.
- **Initiatives in the environmental field**
 - Promote manufacturing and sales of cellulose fiber, a new plant-derived materials.
 - Promote manufacturing and sales of radiant coolant that can be cooled at zero energy.



Ketone bodies (3HB)



Radiant coolant (film)