Business Plan for FY2020.3 of Daigas Group

March 2019

Osaka Gas Co., Ltd.

Flexible Progress and Growth

Flexible Progress and Growth

leveraging change and laying foundation for great leap forward

[Points of activity]

① Accelerate activities leading to the realization of the " Medium-Term Management Plan 2020 "

- As the third year of the " Medium-term Management Plan 2020 ", we will accelerate the expansion of earnings to achieve our goals.

② Promote activities for sustainable growth

- Looking forward to FY2021.3 and beyond, we will promote challenges from a medium- to long-term perspective.

③ Build a flexible and resilient business foundation

Progress as an energy marketer for a new era

In order to be selected by customers, we evolve the customer contact by utilizing digital technology, etc., in addition to providing customers with city gas, electricity, LPG and energy surrounding services.

Achieve 9 million customer accounts

Offer solutions for residential customers

- Offer optimal solutions combining Gas, Electricity, ENE-FARM, IoT compatible gas appliances, Sumikata Service, etc., and evolve services and rate plan options.
- Expand the type of IoT compatible gas appliances (with remote control and fault diagnosis).
- Diversify options under the “Style Plan” rate plan for electricity that meet diverse customer needs, and aim to achieve one million electricity customers as soon as possible.
- Continue to strengthen the spread of ENE-FARM and purchase surplus electricity from ENE-FARM, and also start purchasing surplus electricity from photovoltaic power generation by customers who have completed the FIT period.

<Style Plan>

Style d	✓ A plan where “d POINTs,” a DOCOMO points service, are awarded based on monthly electricity fees NEW
Style E	✓ A plan for customers who wish to use environmentally-friendly electricity NEW
Style S	✓ A plan where customers can use the “Sumikata and Insurance Pack,” offering insurance services for devices and home emergency services, for special pricing NEW
Style P	✓ A plan where customers can use “Amazon Prime,” Amazon’s membership program, for special pricing

Offer solutions for business and industrial customers

- Provide total energy solution by proposing in combination supplying gas, electric power, heat and water, and water treatment and maintenance to customers as a total utility agent.
- Offer new IoT service at manufacturing factories, etc., in addition to expansion of ICT service such as Motto save, HelloOG! and ekul.
- Expand the diffusion of gas air conditioning and cogeneration, responding to social demands such as countermeasures against extreme heat and strengthening business continuity plan.

Development of energy and services in a wide area, construction of a competitive infrastructure

We will build competitive infrastructure as a energy company, and promote the offering of energy & services nationwide.

Progressive Energy Co., Ltd.
Reliance Energy Okinawa Co., Ltd.
(Gas supply, Energy service)

Nagaoka Tansan Co., Ltd.
(Industrial gas)
Planned to start : April 2021

Biwako Blue Energy Co., Ltd.
(Gas retail,
Gas/Water supply safety/service)

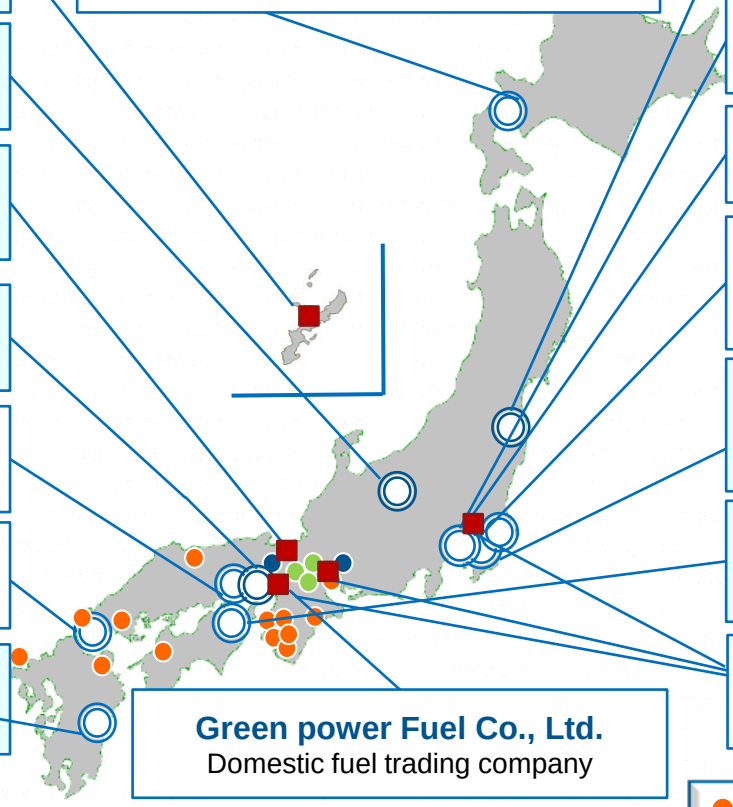
Hirohata Biomass Power Generation(75MW)
Planned to start : August 2023

Himeji Natural Gas Power Generation (1,800 MW)studying

Yamaguchi Ube Power (1,200 MW)
Nishiokinoyama Power Generation
(tentative name) studying

Himuka LNG Co., Ltd.
Planned to start : 2022

Shiribetsu Wind Power Generation
(27MW)
Planned to start : February 2021



Green power Fuel Co., Ltd.
Domestic fuel trading company

Fukushima Gas Power(1,180 MW)
Planned to start : the early 2020s

Ogishima Natural Gas Suppiy
(Gas production / supply)
Planned to start : April 2020

CD Energy Direct Co., Ltd.
(Gas, Electricity, service)

Ichihara Biomass Power Generation(49.9 MW)
Planned to start : October 2020

Sodegaura Biomass Power Generation(75 MW)
Planned to start : July 2022

Tokushima Tsuda Biomass Power Generation(74.8MW)
Planned to start : March 2023

ENEARC Co., Ltd.
(LPG, Electricity, service)

Renewable energy power ● Thermal power
Cogeneration power
◎Planned energy sources, terminals, etc.
■Main base of wide area retail business

Respond to needs such as converting coal-fired power generation, industrial furnaces and ships fuel into natural gas by conducting LNG sales, energy services, LNG banking, etc.

*Marked projects have been decided upon and publicly announced in FY2019.3.
*kW is the total generation capacity

Development as pipeline network business operator

We will change Pipeline Business Unit's name to “Network Company“ and respond to business environment change. We will implement stable supply of gas, improvement of safety and disaster prevention standards by building a resilient pipeline network.

“Network Company“ responds to changes in the business environment

- Change the name of Pipeline Business Unit to “Network Company" for further neutrality and transparency.
- Prepare for business environment change such as legal separation implemented as a more independent organization.

Build a resilient pipeline network for stable supply of gas, improvement of safety and disaster prevention standards

- Make countermeasures for aging and disaster aiming at resilience improvement in large-scale disasters(Governor flood damage countermeasures, etc.).
- Promote facility formation for future supply stability improvement by building Amagasaki – Kumiyama Line, etc.
- Strengthen construction system by “ Work-style reform “ and “ Accelerate recruitment and development of human resources “.
- Promote technology development and utilization for cost reduction.

(Improve accuracy, speed and convenience, and reduce costs)
ex. Link location information with pipeline, etc.



Initiatives for responding to a major disaster and enhancing resilience

We will utilize learning in large-scale disasters, continue to strengthen disaster prevention measures for early recovery.

The earthquake occurred in northern Osaka(June 18, 2018)

Due to the occurrence of the earthquake with the seismic intensity of the northern part of Osaka Prefecture of less than 6, about 110,000 gas supply stopped.

We inconvenienced our customers very much, but we cooperated with new retailers and completed recovery without secondary disasters.

Recovery overview

- Implemented remote shutdown based on standards, and organized recovery system with about 5,100 people scale supported by other gas operators.
- Provided temporary supply by mobile gas equipment and supply of cassette stove / cylinder.
- Developed public relations activities using Facebook, Twitter, and "Restoration Visualization System".

Typhoon Jebi /No. 21 (September 4, 2018)

Responded to damage caused to gas meters and boilers by strong winds and damage to a medium pressure pipeline on the connecting bridge to Kansai International Airport.

Heavy Rainfall in West Japan

(Early July 2018)

Enhance monitoring in preparation for occurrence of sediment-related disasters caused by heavy rain and flooding of rivers.

- **Strengthen disaster prevention measures (new establishment / renewal of facilities, system upgrading, training, etc.) that lead to further minimization of damages and impact range and early recovery.**
- **Ensure customers' safety and reduce the number of units for stopping gas supply by reducing the number of units by reviewing the gas supply stop criteria at the time of earthquake.**
- **Expand spread of distributed energy system.**

Progress in the International Energy business

Revenue from some overseas projects will expand. Including those projects, we will strengthen our International Energy business foundation and grow it as a pillar of earnings. Furthermore, we will promote the competitiveness of LNG procurement and profit expansion of trading business.

Middle and Downstream

【Existing businesses】

- Enhance earnings and accumulate expertise through actual operation of IPPs in North America.
  (Michigan Power plant, Towantic Power plant)
- Start commercial operation of Freeport LNG terminal.
- Strengthen gas sales and Energy service in Thailand, Indonesia, and Singapore.

【New businesses】

- Strengthen the engineering business, including taking orders for consulting on LNG terminals.
- Participate in renewable energy projects.

Upstream

- Enhance earnings and accumulate expertise through the East Texas Shale Gas Project (Sabine Oil & Gas Corporation).
- Contribute to profits from full-scale operation from Ichthys LNG Project following Gorgon LNG Project.
- Participate in projects with a possibility of business participation (North America, Australia).

LNG trading

- Contribute to profits from LNG trading through competitive procurement and reclassification of contract, etc.
- Build the foundations for expanding trading.

Initiatives in Life & Business Solutions business

We will continue to expand and strengthen Life & Business Solutions business, leading to sustainable growth of the Daigas Group as a whole. To that end, we will evolve our business through M & A and other synergies and will make it a pillar of our new business.

<Real Estate> OSAKA GAS URBAN DEVELOPMENT OGFA KRP PE PRIME ESTATE	• Osaka Gas Urban will accelerate investment in the leasing and sales businesses, with a view to expanding our businesses in the Tokyo metropolitan area. • Increase orders for construction in the building maintenance business by proposing comprehensive FMS* at OGFA. • Maintain a high occupancy rate and promote steady development of the #10 Building in the research park business. * Facility Management System
<Materials> OSAKA GAS CHEMICALS Jacobi THE CARBON COMPANY Mizusawa Industrial Chemicals	• In fine materials, increase sales of OKP and monomer and display applications (high-functional materials). • In activated carbon, shift to high-profit products for medical use, etc., and strengthen and globalization by R&D functions integration with Jacobi. • In preservatives, in addition to coatings for industrial use, develop and expand sales channels of new applications in cosmetics, coating paint for snow falling ice, etc. • At Mizusawa Industrial Chemicals, enhance manufacturing capabilities for high-profit products and develop new markets such as functional food products.
<IT> OGIS-RI Sakura Information Systems uis Ube Information Systems Agnie Consulting	• Promote innovation of factory system including IoT service, etc., and support business model change by introducing RPA. • Promote collaboration with Agnie Consulting. • Strengthen commodities of Sakura Information Systems and Ube Information Systems.

Management that continues to win confidence of stakeholders (ESG Management)

We will continue to win the confidence of stakeholders through ESG conscious management, aiming for sustainable growth.

We aim to achieve efficient work styles and boost productivity among the Group as a whole.

Environment-conscious management (promote activities to reduce CO2 emissions by 70 million tons*)

(*cumulative reduction amount including contribution to reduction at customer sites and overseas for the period between FY2018.3 and FY2031.3)

- Introduce fuel cells, Co-generation, renewable energy sources, etc. through business activities.
- Enhance the power generation efficiency of ENE FARM, which is the highest in the world, reduce hydrogen manufacturing equipment costs, and develop technology to utilize biomass, such as gas conversion.

Society-conscious management

- Identify risks in Japan and overseas, promote efforts such as human rights and appropriate labor practices.
- Remain a healthy and sound corporate group by continuing work-style reforms.
  - →Promote grater efficiency through digitization such as RPA (data compilation and system entry, etc.) and revise existing operations.
  - →Expand working from home and utilize external satellite and co-working space.

Governance enhancement

MEMBER OF Dow Jones Sustainability Indices In Collaboration with RobecoSAM

- PDCA activities and information disclosure based on changes in the business environment and indexes established jointly with stakeholders.
  - →Continue to be highly rated by domestic and international investors and evaluating institutions, etc.
  - ※Selected for inclusion in the Dow Jones Sustainability World Index for the second consecutive year, and selected for inclusion in the Asia Pacific Index for the tenth consecutive year (2018)
- Enforce fair business practices and Enhance information security.

Promoting innovation

We will continue to create services that exceed customer expectations by promoting innovation including progress of services, promoting digitization, efforts of technology development.

Services that exceed customer expectations

Progress of services

- **Progress of ICT / IoT service**
  - (Residential)Expand IoT compatible gas equipment, consider digital use in reception and storage.
  - (Commercial and Industrial)Expand ekul and contents of HelloOG!. Start and demonstrate factory IoT service.
  - (All)Develop new services using data analytics and digital technologies such as AI.
- **Create new business**
  - Participate in venture funds and new business idea creation program by young employees.

Promoting digitization

- **Revamp business process**
  - Introduce RPA in routine work and digitization of forms.
- **Enhance digital infrastructure**
  - Develop digital human resources and infrastructure.
  - Improve efficiency of existing IT system.

Technology development

- **Technical demonstration / R & D**
  - Develop advanced power business model (VPP, DR etc) and demonstrate technologically.
  - Develop new materials, etc. technologically.

Financial Plan for FY2020.3

In FY2020.3, we planned for consolidated net sales of 1,426 billion yen and ordinary profit of 81 billion yen. It is expected to increase by 19.5 billion yen from FY2019.3 Plan.

	Consolidated			Non-consolidated		
	FY2019.3 forecasts (billion yen)	FY2020.3 plan (billion yen)	Rate of change(%)	FY2019.3 forecasts (billion yen)	FY2020.3 plan (billion yen)	Rate of change(%)
Net sales	1,381	1,426	+3.3	1,111.5	1,138.0	+2.4
Operating profit	63.0	91.0	+44.4	27.0	53.0	+96.3
Ordinary profit	61.5	81.0	+31.7	38.0	56.5	+48.7
Profit attributable to owners of parent*	30.5	55.0	+80.3	27.0	43.0	+59.3
ROA	1.6	2.6	---	---	---	---
ROE	3.1	5.4	---	---	---	---
EBITDA	158.5	180.0	+13.6	---	---	---

<FY 2020.3 earnings plans are based on following assumptions.> Crude oil price (all-Japan CIF price): 65 dollars per barrel, Exchange rate: 110 yen per dollar

*"Profit" for Non-consolidated results

	FY2019.3 forecasts	FY2020.3 plan	Rate of change(%)
Gas sales volume (Non-consolidated)	7,890 million m^3	7,560 million m^3	−4.2
Consolidated electricity sales volume (Domestic)	11,671GWh	12,148GWh	+4.1

Investment Plan for FY2020.3

In FY2020.3, we planned of 246 billion yen for quality improvement investment of 66 billion yen and growth investment of 180 billion yen.

(billion yen)

	FY2019.3 forecasts (billion yen)	FY2020.3 plan (billion yen)
Investment for quality improvement	46.0	66.0
Growth Investment	150.0	180.0
Domestic Energy	59.0	50.0
International Energy	61.0	87.0
Life & Business Solutions	30.0	43.0
Total	196.0	246.0
(included number) Capital Expenditure	90.0	145.0



Daigas Group

Notes regarding forecasts

This document contains forecasts, plans, strategies, etc. related to the future performance, which are based on the judgment of the Group obtained from currently available information.

Please note that actual performance may substantially differ from these forecasts due to various factors.

These factors include trends in the Japanese economy, rapid fluctuations in exchange rates or crude oil prices, and abnormality in weather.