Hiroshima Gas Group Fiscal 2019 Medium-term Management Plan and Hiroshima Gas Business Plan

Hiroshima Gas Co., Ltd. has established a three-year (FY3/20-FY3/22) Medium-term Management Plan for the Hiroshima Gas Group and a fiscal 2019 business plan for Hiroshima Gas.

1. Hiroshima Gas Group Medium-term Management Plan (FY3/20-FY3/22)

(1) Basic policies

Major changes are taking place in Japan. Significant changes are occurring in the country's industrial structure because of the aging population and the increasing speed of technological progress involving AI, the IoT and many other fields. In Japan's energy industry, a historic shift is taking place following the complete liberalization of retail electricity sales in April 2016 and retail gas sales in April 2017.

Due to the rapid changes in the business climate for the energy business, the Hiroshima Gas Group realized that we needed to quickly determine a basic direction for our own energy business. This is why we announced the Hiroshima Gas Group 2030 Vision on October 30, 2018.

The Hiroshima Gas Group views liberalization and other changes in the energy market as opportunities and will implement group strategies that are consistent with the Basic Energy Plan of the Japanese government.

Basic policy 1: Contribute to energy conservation and CO₂ emission reductions and expand business operations by strengthening peripheral energy services activities through more growth of the comprehensive energy business

- · Increase the volume of gas sales
- · More alliances and other cooperation with other companies
- Use stronger marketing activities for determining and implementing rates that match customers' needs
- Continuous gas resource procurement with a low cost, stability and flexibility and measures to further enhance this capability
- · Maintain and strengthen a sound manufacturing and supply network
- · Strengthen upstream activities for gas resource procurement and other activities
- · Responses to the complete liberalization of retail gas sales
- Studies to determine the best possible structure for the group
- Strengthen and expand services associated with the supply of energy; earn customer's loyalty and increase lifetime value
- · More and closer ties with other gas companies in the Chugoku and Shikoku region
- Studies concerning more cooperation and sales operations with business alliance partners
- Contribute to energy conservation, lower CO₂ emissions and improved energy security by working with government agencies and others for the growth of the comprehensive energy business
- Use the Singapore Office to perform studies about opportunities for overseas business activities

Basic policy 2: Take actions that lower our environmental impact by conducting business operations that help protect the environment and performing next-generation energy research.

- · Increase the use of renewable energy
- · Increase the use of dispersed energy systems
- · Aim for an energy mix that can achieve zero emissions
- · Build a business foundation that reflects the move away from fossil fuels

Basic policy 3: Create new value and operate more efficiently by utilizing digital technology for the creation of added value

- Use ICT to improve productivity
- · Use digital workspaces to give people new ways to do their jobs
- Use smart devices to make business processes more efficient
- Use digital technologies to upgrade training programs and the transfer of skills to others
- Contribute to creating highly appealing neighborhoods by increasing the use of smart meters and utilizing EMS and other advanced technologies
- Use the IoT and artificial intelligence to increase the quality of customer services

Basic policy 4: Train and utilize a workforce of highly creative people in order to increase the overall strength of the Hiroshima Gas Group

- · Create an environment that facilitates diversity and flexibility for working formats
- Create pleasant workplaces where people are motivated to do their best and enjoy doing their jobs
- · Implement reforms about how people think about their jobs in order to increase productivity
- Create a highly creative workforce capable of delivering services that surpass the expectations of customers
- · Reinforce employee support activities concerning education and career goals
- Give people the training for creating a workforce of professionals with substantial added value
- Foster a feeling of solidarity by strengthening lines of communication that go beyond individual groups and departments
- Establish group functions and stronger ties within the group in order to achieve the best possible performance of the entire Hiroshima Gas Group
- Conduct fair and transparent business activities that reflect compliance (laws and regulations and ethical standards) guidelines
- Increase programs to raise awareness of human rights and strengthen communication activities
- Use group-wide personnel management and exchanges in order to place people in the right assignments as well as to strengthen risk management and collaboration within the group

Basic policy 5: Further advances in energy security by aiming for even better confidence and safety

- Increase safety and security (replacing aging pipelines, regional safety, safety notices, etc.)
- Upgrade disaster preparedness (cooperation with communities, disaster preparedness investments, etc.)
- Strengthen ability to maintain a reliable supply of gas (procurement of gas resources, infrastructure investments)

Basic policy 6: Be a group that uses CSR activities in order to grow and advance with the communities we serve

- Conduct activities that contribute to regional vitality and advancement as a company dedicated supplying energy closely tied to localities
- Conduct environmental activities in accordance with the Basic Environmental Philosophy and the Environmental Action Guidelines (lower environmental impact, help customers

conserve energy and reduce CO₂ emissions, work with community partners for environmental education activities, and other measures)

- · Perform activities that utilize new frameworks
- · Verify the benefits of CSR activities

Basic policy 7: Strengthen the management of the Hiroshima Gas Group to make the group more resilient and aim for sustained progress

- Reexamine the business portfolio and allocate corporate resources properly in order to become more profitable and use capital more efficiently
- · Reconstruct group functions
- Strengthen organizational functions and operate more efficiently in order to become more profitable

Basic policy 8: Manage business operations in a manner that earns the trust of the public

- Disclose information internally and externally in a timely and proper manner (develop and strengthen investor relation activities)
- Constantly work on internal controls in order to ensure that business activities and financial reports comply with laws and are conducted properly
- Retain a constant commitment to proper group management and sound corporate governance

(2) Gas supply and demand plan

City gas

The plan for gas sales volume, including wholesale operations, is for average annual growth of 2.5% to 635 million cubic meters in the fiscal year ending in March 2022. Hiroshima Gas expects to reach the Action for Dream 2020 vision's 600 million cubic meter sales volume target in the fiscal year ending in March 2020.

LPG

The plan for gas sales volume, including wholesale operations, is for average annual growth of 4.9% to 93 thousand tons in the fiscal year ending in March 2022.

	Unit	FY3/19 (est.)	FY3/20	FY3/21	FY3/22	3-year avg. growth rate
City gas (including wholesale)	million m³	588	606	627	635	2.5%
LPG	1,000 tons	89	90	92	93	4.9%

^{*}City gas (45MJ)

(3) Plan for capital expenditures

In the city gas business, there will be well planned and efficient expenditures for strengthening, improving and replacing gas production and supply facilities from a medium to long-term standpoint. The purpose is to maintain a stable supply infrastructure for the anticipated growth of the gas sales volume.

In the LPG business, there will be expenditures to replace aging pipelines in community gas housing projects with polyethylene pipes and other highly earthquake-resistant pipes. Other expenditures will be made for the safety and security of customers, such as for preventing gas cylinders at customers' homes from falling over.

	FY3/19 (est.)	FY3/20	FY3/21	FY3/22	Total (FY3/20- FY3/22)
Hiroshima	¥7.5 billion	¥7.8 billion	¥7.6 billion	¥10.2	¥25.6
Gas Group	+1.5 billion			billion	billion

(4) More activities for safety and security

The Hiroshima Gas Group is committed to taking actions for achieving even better energy security so that people can use gas with even greater confidence and safety.

- 1) An environment that allows people to conduct their daily activities with confidence Hiroshima Gas is dedicated to providing energy and services that customers can use with confidence. Hiroshima Gas will maintain a reliable supply of energy (gas resource procurement, infrastructure activities, etc.), maintain a high level of disaster preparedness, enhance safety and security measures, and take other actions.
- 2) Confidence regarding energy services Hiroshima Gas wants all customers to have no worries at all regarding the use of the energy and services provided by the Hiroshima Gas Group. This is why safety measures of all types will be a priority as the group takes actions for the growth of its comprehensive energy business.
- ☐ A higher level of safety (replacing aging pipelines, regional safety, safety notices, etc.)
 - · Activities based on national government guidelines and the gas safety advancement plan of The Japan Gas Association
 - · Achieve the goals of Gas Vision 2030
 - · Maintain and enhance the current high level of safety
 - Strengthen training programs (use unified group activities for the training of safety personnel and upgrade activities for accident prevention, earthquake readiness and other measures)
- ☐ Step up disaster preparedness measures (joint activities with communities, purchase of disaster prevention and response equipment, and other measures)
 - Activities for responding to an earthquake
 - · Activities for responding to a tsunami or flood
 - · Activities for responding to a disaster
- ☐ More measures for a reliable supply of gas (gas resource procurement, infrastructure investments)
 - · Activities for maintaining a reliable supply of gas
 - Measures to meet growing demand for gas
 - Build a stronger distribution framework for LPG

(5) Activities involving the liberalization of Japan's energy market

Hiroshima Gas is responding to the complete liberalization retail of gas sales in Japan by studying and implementing measures involving gas rates, services and other aspects of operations in order to meet new needs of customers and remain the first choice of customers.

In 2017, Hiroshima Gas started offering three new services for customers: the Web member service, point service and lifestyle services. By providing these services, Hiroshima Gas is determined to meet customers' expectations and build even stronger relationships rooted in trust in order to remain the company that customers choose over others.

To add more flexibility to rate plans, Hiroshima Gas started the Learning and Long Life Plan in July 2018 that rates created specifically for nursery schools, schools and senior care facilities.

For more improvements in services, studies are continuing to determine ways to make more upgrades to the service menu with the goal of making more contributions to the vitality of the communities served by the Hiroshima Gas Group.

In addition, to capture synergies with current business operations, Hiroshima Gas will perform studies involving renewable energy and other business activities that can help protect the environment and conduct research in the field of next-generation energy. The goal is to become a comprehensive energy organization.

2. Business Plan for Fiscal Year Ending March 2020

(1) Gas Supply and Demand Plan (Units: 45MJ, million cubic meters)

In fiscal year ending March 2020, Hiroshima Gas expects the number of customers to be 411,000 and gas sales to be 606 million cubic meters, including wholesale sales.

			FY3/19 (est.)	FY3/20 (plan)	Year-on-year change
Number of customer accounts (end of each FY)		411	411	0.0%	
Sales	Residential		99	102	2.9%
volume	Business	Commercial	44	46	4.3%
(million		Industrial	326	338	3.6%
m ³)		Others	37	38	2.6%
	Total (excluding wholesale)		507	526	3.6%
	Wholesale and other		80	80	0.0%
	Grand total		588	606	3.0%

Residential

Hiroshima Gas plans to maintain the present volume of gas sales or achieve growth by using a number of measures. One is activities to increase sales of household products that use gas, such as hot water and heating units and heaters. Another goal is increasing the use of residential plans with discounted rates. In addition, there are efficient joint sales activities for city gas and LPG.

For people who have newly constructed or remodeled residences, Hiroshima Gas is offering many ways to make homes more environmentally responsible and energy efficient. The goal is to increase the use of a number of products, including the Ene Farm fuel cell for apartment buildings and other residential applications.

To improve customer satisfaction, gas equipment repair services will be upgraded and customer visits to strengthen relationships will continue. By using these activities, Hiroshima Gas plans to create more opportunities to interact with customers and upgrade services.

Another initiative is more sales activities in Higashi Hiroshima and other areas where gas is not yet used or the utilization rate is low. Hiroshima Gas will study opportunities in these areas and take actions to expand its service area.

Goal for sales of residential gas products (FY3/20)

Hot water and heating units	3,701	
Heaters	3,869	
Ene Farm	615	

Business

Hiroshima Gas plans to increase the use of natural gas, which is environmentally responsible and ideal for powering dispersed sources of electricity. To attract new users of natural gas, there will be more sales activities that include new rate plans for commercial customers, ideas for energy conservation, CO₂ emission reduction and other ways to meet customers' needs. Activities also include identifying new sources of demand for gas to enlarge the service area. These activities will target areas with low gas usage as well as areas where Hiroshima Gas does not currently supply gas.

(2) Plan for capital expenditures

Hiroshima Gas plans to make capital expenditures totaling ¥7.0 billion in FY3/20.

Investments will continue in primary gas lines in order to increase the use of natural gas and improve the reliability of the gas supply. There will also be more replacements of aging main and distribution pipelines.

(billion yen)

	Plan for FY3/20	Notes
Production infrastructure	0.6	Hatsukaichi LNG Terminal boiler and
		other projects
Supply infrastructure	5.4	Primary gas lines (Hiroshima Bay primary line)
Service and maintenance facilities and other facilities	0.9	Upgrades and replacements of equipment and other projects
Total	7.0	

(3) Businesses that protect the environment and next-generation energy research

Construction of the Kaita Biomass power plant started on December 10, 2018. Work is proceeding safely and as planned with operations scheduled to start in March 2021. This plant will use a variety of biomass resources, including unused wood originating in Hiroshima prefecture, wood biomass materials from overseas and other materials. Hiroshima Gas expects that this plant will increase the use of renewable energy while making a contribution to the economy of the Kaita region.