

**Medium-term Management Plan and Business Plan ending March 2019**

Hiroshima Gas has established a medium-term management plan for the three-year period ending in fiscal year ending March 2021 and a business plan for fiscal year ending March 2019.

**1. Medium-term management plan (FY3/18-FY3/20)**

**(1) Basic Goals**

The Japanese economy continued to recover slowly due in part to economic stimulus measures and monetary easing. Overseas, economies in the United States and other countries are expected to continue to recover. However, there may be an economic downturn in Japan due to the possibility of financial market volatility and geopolitical risk.

In Japan's energy industry, competition continues to be intense. There is also increasing competition among suppliers of different types of energy. In addition, reforms of Japan's gas and electricity systems are resulting in new companies in these two sectors and competition as gas and electric power companies enter each other's markets. Due to these events, Japan's energy market has entered a period of dramatic changes.

In the Japanese government's Basic Energy Plan, which received cabinet approval in April 2014, natural gas is positioned as an important energy source that will have a greater role. Additionally, the Hiroshima Gas Group believes that its mission is to increase the use of gas and utilize energy with even greater efficiency in order to conserve energy, lower CO<sub>2</sub> emissions and diversify energy sources.

In this business climate, Hiroshima Gas announced a vision for 2020 called Action for Dream 2020 at the end of October 2009. Group companies have used a broad range of activities during management plans since then to make this vision a reality.

The goal of the medium-term plan ending March 2021 is sustained growth of the Hiroshima Gas Group. Based on the view that the liberalization of energy markets and other developments are creating many opportunities for the group, the plan aims to increase the use of gas energy and improve the efficiency of the group's operations. In addition, Hiroshima Gas is seeking new business activities that can benefit from changes in the business climate.

**Theme of the FY3/19 Plan**

Build a sound base for the group's next vision and future goals

By viewing the liberalization of the energy market and other changes in the business climate as opportunities, aim for sustained growth of the Hiroshima Gas Group in order to accomplish the goals of the 2020 vision and build a sound foundation for the next vision.

**Goal 1: Conserve energy, cut CO<sub>2</sub> emissions and improve energy security by increasing the use of natural gas and LPG and using energy more efficiently and responsibly.**

- The Hiroshima Gas Group is working on developing new demand for gas across a larger area. This involves increasing and deepening relationships in the current service area as well as creating demand in other locations, mainly those near the service area.
- There will be closer ties between city gas and LPG operations in order to make sales activities more efficient. Other programs aim for improvements in the quantity and quality of contact with customers.
- Establish an infrastructure for increasing the use of natural gas and improving the stability of the supply of natural gas with a medium to long-term time frame.

**Goal 2: Supply customers with more value by seeking more ways to provide services from the customers' perspective and helping support life styles that are more environmentally responsible and safe.**

- Hiroshima Gas wants to offer customers more value and meet a larger share of their energy requirements. This involves becoming a supplier of multiple energy sources, including electricity and heat, increasing the use of renewable energy sources, expanding services by targeting activities associated with the supply of energy, and creating a lineup of rates that can contribute to preserving and increasing the company's market share.
- Hiroshima Gas is aiming for even higher customer satisfaction by adding more services and making more improvements in the quality of services.
- The Hiroshima Gas Group will reliably fulfill its role as a supplier of energy. This will require enhancing the reliability of energy supplies, the security of energy and the quality of customer services. Preparedness for earthquakes, tsunamis and other natural disasters is another priority. Group companies will use numerous effective measures for preparedness that include cooperation with the disaster response agencies of the national and local governments.

**Goal 3. Seek new business opportunities and start new businesses in order to respond properly to the liberalization of Japan's energy market.**

- Study and implement new initiatives involving rates, services and other measures in response to the complete liberalization of the retail energy market as well as new services that reflect the group's "committed to the community" concept.
- To capture synergies across current group operations, Hiroshima Gas will study and launch new business activities that can contribute to growth as a comprehensive energy organization.
- Promote initiatives by increasing joint activities with other companies in the gas and other industries.

**Goal 4. Earn a reputation as a rewarding workplace and responsible corporate citizen by creating an open-minded organization with priority on fairness and transparency.**

- Strengthen group management and corporate governance and upgrade risk preparedness in order to maintain the soundness of business operations.
- Manage operations with fairness and transparency through the use of effective compliance and risk management systems.

- Use human rights awareness programs, stronger lines of communication and other measures to create a pleasant and productive workplace and a highly energetic organization.

**Goal 5. Develop a workforce that is highly skilled and motivated and also capable of taking on the responsibility for achieving future growth.**

- Reform how people do their jobs in order to improve productivity and give people the proper balance between their work and private lives.
- Use training and skill development programs, measures to increase motivation, and other activities to create an energetic workforce and organization.
- Upgrade customer services, create a workforce with specialized skills, and pass on technologies and other knowledge to younger workers

**Goal 6. Improve the Hiroshima Gas Group’s profitability and financial soundness in order to build a powerful corporate structure and sustain growth.**

- Reexamine the group’s business domains and enact structural reforms with the goal of building a base for long-term growth.
- Implement measures to realize the group’s vision by fully utilizing intra-group synergy effect.
- Use the group’s resources efficiently and effectively and pursue a flexible financial strategy.

**(2) Gas supply and demand plan (Units: 45MJ, million cubic meters)**

During the current medium-term plan, Hiroshima Gas expects the number of residential accounts to be 410,000 in the fiscal year ending in March 2021. The plan for gas sales volume, including wholesale operations, is for average annual growth of about 7.0% to 622 million cubic meters in the fiscal year ending in March 2021. 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.

		FY3/18 (est.)	FY3/19	FY3/20	FY3/21	3-year average growth rate	
Number of customer accounts (end of each FY)		410,000	410,000	410,000	410,000	0.0%	
Sales volume (million m <sup>3</sup> )	Residential	102	102	102	103	0.3%	
	Business	Commercial	45	46	46	46	0.7%
		Industrial	259	317	331	346	9.2%
		Others	38	39	39	39	0.9%
	Total (excluding wholesale)		445	505	520	535	6.0%
	Wholesale and other		54	75	81	86	14.4%
Grand total		500	581	602	622	7.0%	

### (3) Plan for capital expenditures

Hiroshima Gas will make well-planned and efficient investments in its production and supply infrastructure. To ensure a reliable supply of gas for customers, investments will be made for enlarging, upgrading and replacing production and distribution facilities and other projects involving production and distribution with a medium to long-term time frame.

(billion yen)

	FY3/18 (est.)	FY3/19	FY3/20	FY3/21	3-year total (FY3/19- FY3/21)
Production infrastructure	0.6	1.2	0.3	0.1	1.7
Supply infrastructure	4.5	5.7	7.0	6.2	19.1
Service and maintenance facilities and other facilities	1.8	0.8	0.6	0.1	1.7
Total	7.0	7.9	8.1	6.6	22.6

### (4) More activities for safety and security

Hiroshima Gas will continue to implement safety measures in order to prevent accidents involving gas so that customers can use gas with confidence. In addition, there will be efficient and effective measures involving the aging of production and distribution facilities and programs to prevent and be prepared for disasters.

#### 1) More measures for the safety of gas production and distribution

Replace aging galvanized steel main and distribution gas lines.

Examine the framework for safety, including the use of disaster response buildings.

#### 2) More safety measures where gas is used

To prevent accidents at locations where gas is used, Hiroshima Gas will increase activities involving legally mandated inspections and raising awareness of safety measures.

In addition, there will be activities for improving air intake and ventilation equipment and replacing appliances and other items with models that have a higher level of safety.

Conduct more activities to prevent carbon monoxide accidents at commercial kitchens.

#### 3) Execute all safety inspections and examinations and improve the efficiency of these activities.

Perform all legally mandated inspections and upgrade patrols for checking main pipelines.

Perform effective inspections and examinations of equipment while maintaining the required level of safety.

#### 4) Studies concerning preparedness for earthquakes and other disasters and implementation of necessary measures

Use central disaster response buildings to establish disaster preparedness bases in the event of an earthquake or other disaster and to create an infrastructure that can quickly restore services.

Reduce the size of the earthquake emergency gas supply cut-off districts in the Hiroshima Gas service area.

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

Hiroshima Gas is responding to the complete liberalization of retail 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 April 2017, Hiroshima Gas started offering new services for customers (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.

In addition, to capture synergies with current business operations, Hiroshima Gas will continue to examine opportunities in the electric power business, including power generation, with the goal of becoming a comprehensive energy organization.

## 2. Business Plan for Fiscal Year Ending March 2019

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

In fiscal year ending March 2019, Hiroshima Gas expects the number of customers to be 410,000 and gas sales to be 581 million cubic meters, including wholesale sales.

		FY3/18 (est.)	FY3/19 (plan)	Year-on-year change	
Number of customer accounts (end of each FY)		410	410	0.0%	
Sales volume (million m <sup>3</sup> )	Residential	102	102	0.0%	
	Business	Commercial	45	46	2.2%
		Industrial	259	317	22.4%
		Others	38	39	2.6%
	Total (excluding wholesale)		445	505	13.5%
	Wholesale and other		54	75	38.9%
Grand total		500	581	16.2%	

### 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 (FY3/19)

Hot water and heating units	3,582
Heaters	3,285
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, CO<sub>2</sub> 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 ¥7.9 billion in FY3/19.

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 FY3/19	Notes
Production infrastructure	1.2	Hatsukaichi LNG Terminal boiler and other projects
Supply infrastructure	5.7	Primary gas lines (Hiroshima Bay primary line)
Service and maintenance facilities and other facilities	0.8	Upgrades and replacements of buildings and equipment and other projects
Total	7.9	

### (3) Initiatives to strengthen comprehensive energy operations

The environmental impact assessment for a biomass power generation plant in the Kaita area was completed in January 2017. The following month, notification of certification as a feed-in-tariff (FIT) electricity rate facility was received. In October 2017, Hiroshima Gas and The Chugoku Electric Power Co., Inc. established Kaita Biomass Power Co., Ltd. Construction of the power plant will begin in December 2018 and operations are 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. As a result, Hiroshima Gas expects that the plant will increase the use of renewable energy while making a contribution to the economy of the Kaita region.