Enhancing Resilience of Customers and Society



Heightened geopolitical risks, the impact of climate change, and measures against natural disasters have become major challenges for society. As the Daigas Group engages mainly in energy businesses, the Group strives to enhance the safety and stability of energy supply chains to overcome such challenges. We will continue to take measures to prepare for disasters and ensure safety, and contribute to enhancing the resilience of customers and society by facilitating a widespread use of disaster-resistant equipment and energy.

FY2025.3 Results

Number of serious accidents and serious energy supply disruptions caused by the company

Zero

Implemented measures for disaster prevention and aging pipes

Ratio of strengthening of earthquake resistance $^{\star 1}$ 90 %

Number of supply blocks*2

738 blocks

Countermeasures completed for gray cast iron pipes

- *1 Percentage of earthquake resistant pipes
- *2 Number of divided blocks of pipeline networks for the purpose of suspending gas supply only in severely affected areas after earthquakes and other natural disasters

Progress through FY2025.3

Enhancing resilience in energy supply chains

Ensuring the safety of city gas, gas production, and power generation facilities is the Daigas Group's top priority. As a result of working on the enhancement of resilience at each stage from raw material procurement to use of gas by customers, we achieved continued zero accidents and serious energy supply disruptions caused by the company, a target under materiality indicators. In terms of disaster prevention and aging pipes, we are continually working on four types of disaster prevention measures: preventive measures, emergency measures, recovery measures based on knowledge gained from recovery activities following the Great Hanshin-Awaji Earthquake, and tsunami countermeasures based on the damage experienced during the Great East Japan Earthquake.

In the electricity supply chain, we not only enhanced electricity supply by developing and procuring from renewable energy sources but also promoted technological development to ensure a stable supply and collaboration with other companies.

Please see P.34 for specific initiatives.

Progress of Major Earthquake Countermeasures Since the Great Hanshin-Awaji Earthquake

Item	Major earthquake countermeasures	At the time of the Great Hanshin-Awaji Earthquake (January 1995)	Current situation (March 2025)
Strengthening information gathering functions	Addition of seismometers	Installed in 34 locations	• Installed in approximately 3,300 locations
	Introduction of earthquake damage prediction system	_	Introduced at the head office, sub-centers, and five business units of Osaka Gas Network Co., Ltd.
Constructing supply stop system	Subdivision of supply blocks	55 middle blocks	• 89 middle blocks • 738 little blocks
	Introduction of supply cutoff devices	Only super blocks (supply areas divided into eight) were remotely controlled	Remote cut-off devices: Approx. 3,600 locations Seismic automatic cut-off devices: Approx. 3,000 locations
Strengthening emergency communication	Strengthening of wireless systems	_	Redundant wireless networks with the main bases being the head office and sub-centers 6 portable satellite communication devices
Other	Earthquake resistance rate	Percentage of earthquake-resistant pipes: 68%	Percentage of earthquake- resistant pipes: Approx. 90%
	Promotion of the use of polyethylene (PE) pipes	Approx. 1,200 km of PE pipes	In principle, all newly constructed low-pressure pipes are made of PE Approx. 18,600 km of PE pipes
	Backup of important online	_	Establishment of a backup center

Challenges and Future Strategies

Geopolitical risks are on the rise, including both international political instability and changes in international regulations. As the impact of natural disasters may also be significant, we believe that measures to ensure a stable supply of energy are necessary.

Going forward, we will continue to diversify liquefied natural gas (LNG) procurement areas and optimize contract forms. In addition, we will continue to work on disaster prevention measures and training to ensure the safety of our gas and power generation facilities.

Furthermore, as renewable energy continues to expand, fluctuations in electricity demand both day and night are causing supply surpluses and shortages, which pose a challenge to a stable supply. The Group will contribute to stabilizing the supply and demand for electricity by combining distributed power sources that can be used at home, such as solar power generation and "ENE-FARM." In addition, we will also promote energy management that utilizes AI technology to visualize energy usage and realize optimal energy use.

Enhancing Resilience of Customers and Society

With the aim of enhancing the resilience of its energy supply chain, the Daigas Group is working to ensure stable procurement and optimize procurement and sales by leveraging its trading and transportation know-how and collaborating across the value chain.

We are also working on disaster prevention measures, such as improving security and stable supply through technological development and raising employee safety awareness.

Diversification of LNG Suppliers

We are working on the stable procurement, development, and supply of natural gas, an energy source that will play an important role during the transition period. In FY2025.3, we signed a sales and purchase agreement with ADNOC, the national oil company of the Emirate of Abu Dhabi in the UAE, for LNG produced at the Ruwais LNG Project, thereby diversifying our procurement sources.

Launch of LNG Bunkering Service

Heavy fuel oil is primarily used for marine fuel, and the International Maritime Organization (IMO) has set a goal of zero GHG emissions by around 2050. Osaka Gas became the first city gas company to start a Shore-to-Ship*1 LNG bunkering Service in April 2025, aiming low carbonization of marine fuel. In addition, we plan to start a Ship-to-Ship*2 LNG bunkering Service in the Osaka Bay and Setouchi area in FY2027.3. This will enable LNG fuel supply in a variety of ways, contributing to a stable and flexible LNG fuel supply. In the future, we aim to decarbonize marine fuel by replacing LNG with e-methane as marine fuel,

- *1 Transferring LNG fuel from an on-shore facilities, such as an LNG terminal, to an LNG-fueled vessel moored at a wharf or jetty.
- *2 Transferring LNG fuel from an LNG bunkering vessel to an LNG-fueled vessel moored at a wharf or at anchor.

Disaster Prevention Measures

We are working to improve security and safety of supply through various measures and technological developments in each process from energy production to consumption. We also provide regular training to employees to improve their safety awareness.

Please see P.33 for the progress of major earthquake prevention measures since the Great Hanshin-Awaji Earthquake.

Energy Resources & International

LNG & Engineering

Network

Energy Solution



Procurement - Trading

Courtesy of Freeport LNG Development, L.P.



Renewable

Regasification Power generation



Gas holders

Gas distribution Power transmission*

Area governors

Supply blocks

Coastal area blocks

(pressure regulators)



Development and sales Development and sales

Diversification of LNG suppliers

Reduce procurement risks by mainly signing long-term contracts and diversifying suppliers

Earthquake countermeasures at LNG terminals

Use advanced earthquake-proof technologies for LNG tanks at LNG terminals. Install dikes to prevent leaked LNG from spilling out of the premises

LNG terminals

LNG tanks

Secondary disaster countermeasures

Customer

factories

Suspend gas supply in severely affected areas by supply blocks, when an earthquake or another disaster occurs

Medium-pressure

trunk lines

Plan to have 746 blocks in 2030 (currently 738 blocks)

Receive alerts on gas leakage, etc. around the

Central Control Office

Measures to protect

governors from floods

Secondary disaster countermeasures

Automatically suspend gas when detecting a tremor equivalent to five or higher on the Japanese seismic scale (Plan to complete the installation of smart meters which have communication features and can be operated remotely by the first half of 2030s)

Gas producing countries

LNG tankers

10 tankers owned by the Group

Stable transportation of LNG

Reduce transportation costs by using our own tankers. Respond in an agile and flexible manner

trunk lines Stable supply of power

Roll out demand response services, and adjust supply-demand balance by utilizing remote AI control

High-pressure

Reception of alerts

Gas meters Customer residences, restaurants, etc.

Low-pressure trunk lines

Fuel cells (ENE-FARM)

Disaster countermeasures for gas pipelines

Replace aged gas pipes, etc. with highly durable and earthquake-proof polyethylene (PE) pipes

*Supply electricity through the power grids operated by other companies such as Kansai Transmission and Distribution, Inc.