

The Tokyo Gas Group's LNG Value Chain and Key Initiatives Contributing to Sustainable Development

Committed to contributing to the sustainable development of society, we are advancing the LNG value chain while also developing new-generation technologies and leveraging digital technologies.

LNG Procurement

In order to source natural gas to meet demand flexibly and competitively, we work with diverse players in Japan and abroad while diversifying our procurement sources, contract conditions, LNG networks and other factors.

LNG procurement to ensure stable and affordable supply >Page 19

Long-term Contracts

13 projects across **6** countries
(as of the end of May 2018)

LNG procurement volume
14.244 million tons
(fiscal 2017 result)

LNG Transport

The Tokyo Gas Group owns and operates its own fleet of LNG carriers, allowing LNG to be shipped swiftly and flexibly.

Greenhouse Gas Emissions along the LNG Value Chain >Page 26

LNG Carriers Owned and Operated by Tokyo Gas

9 vessels (as of the end of May 2018)

City Gas Production

By receiving LNG and constantly producing city gas, the Group contributes to energy security in the Tokyo metropolitan area. Our LNG

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Storage Capacity at LNG Terminals

3,785 ML
(as of the end of March 2018)

terminals function as mutual backups for each another, ensuring uninterrupted city gas supplies even in the event of a power failure or other incidents.

City Gas Supply

We are further developing our pipeline network and using LNG tanker trucks and coastal tankers to ensure the safe and uninterrupted delivery of city gas. In addition, we are expanding our wholesale distribution of gas to other gas suppliers.

Note: Our pipeline network is shared with gas retailers.

Energy Supply Network in the Tokyo Metropolitan Area >Page 3

Developing Our Natural Gas Infrastructure in Japan >Page 19

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Total Length of Pipelines
63,557 km
(as of the end of March 2018)

Energy Solutions

We develop energy solutions by combining distributed energy systems such as fuel cells and combined heat and power (CHP) systems* that reduce CO₂ emissions, energy consumption and peak load, with the wider use of environmentally friendly gas appliances and renewable sources of energy.

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Switching to Natural Gas and More Advanced Use >Page 27

Diffusion of CHP Systems >Page 27

Development of Infrastructure for Hydrogen Supply >Page 29

Technological Innovations in CHP Systems >Page 29

*Gas engine-based CHP systems generate electricity and recover waste heat generated as a by-product.

Overseas Business Expansion

In addition to sourcing gas from large-scale LNG projects and acquiring participating interests, we are diversifying and expanding our sources and upstream projects overseas through involvement in unconventional gas, such as shale gas, and in small- and medium-scale LNG projects. Also, we provide energy solutions for energy infrastructure in Southeast Asia and North America.

Overseas Business Development

9 Countries

Major Projects

22

(as of the end of March 2018)

Overseas Businesses Serving as the Backbone of Stable Energy Supply >Page 3

Expanding Our Overseas Business >Page 20

Power Generation

We operate high-efficiency combined cycle natural gas-fired power stations utilizing our LNG procurement capabilities and LNG terminals, pipelines and other facilities. In addition, we generate electricity using wind power and other renewable energy resources.

Evolving into a Total Energy Business >Page 19

Power Generation Capacity (Own Stake)

1.60 million kW (as of the end of March 2018)

Power Transmission (by General Power Transmission Utilities)

Note: Power is transmitted via a grid operated by general power transmission utilities.

Number of City Gas Customers

11.678 million

Gas Sales Volume

15,568 million m³

Electric Power Sales Volume

14.66 billion kWh

Number of Electricity Customers

1.13 million
(as of the end of March 2018)

Initiatives Relevant to the Entire LNG Value Chain

- Enhancement and Strengthening of Corporate Governance >Page 41
- Development of Technologies Contributing to Safety and Environmental Friendliness >Pages 22-23, 29
- Respect for Human Rights >Page 35
- Promotion of Compliance >Page 37
- Ensuring of Information Security >Page 37
- Development of Human Resources >Page 39
- Promotion of Employees' Occupational Safety and Health Activities >Page 39