

FY2016

Initiatives by the Tokyo Gas Group



April 14th, 2016
Tokyo Gas Co., Ltd.

- The Tokyo Gas Group is pursuing the main policies during the fiscal 2015-17 of its Challenge 2020 Vision consisting of evolution of the total energy business, acceleration of global business development, and construction of a new group formation.
- The Tokyo Gas Group recognizes the fiscal year 2016 as an important year for the beginning of the era of energy mega-competition, given that retail sales of electricity will be fully liberalized and that the gas industry will face final stage for the entire liberalization.
- In the fiscal year 2016, given these surrounding environments, the Tokyo Gas Group will position the following five points and address each of our major challenges:
 - (1) Strengthening the approaches to ensure stable energy supply and security
 - (2) Advancing preparation for the new system in preparation for the full liberalization of the gas retail market in April 2017; promoting the development of new services and rates menu based on the needs of our customers.
 - (3) Expanding low voltage electricity sales to facilitate the start-up of electricity power.
 - (4) Making full-scale participation in the overseas business leveraging the solid overseas bases.
 - (5) Aiming at the realization of "integrated energy company group" to establish and strengthen the group management and systems, including the subsidiaries.

Major initiatives in FY2016: "Evolving the total energy business"

<Gas resources procurement>

- To secure stable and inexpensive LNG supplies, we will further promote the "diversification of procurement," the "diversification of agreements" and the "diversification of LNG network."
- By further strengthening and expanding the cooperation with domestic and foreign LNG players, we will continue to achieve a flexible and price competitive procurement of LNG.

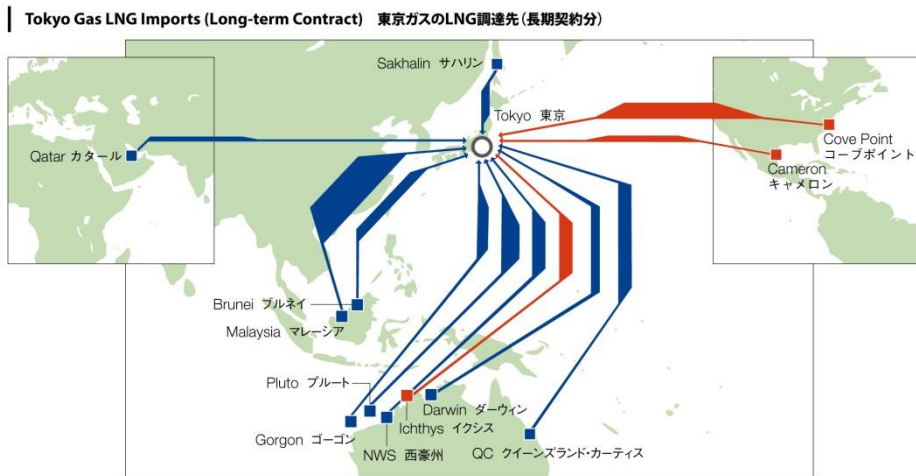
Diversification of procurement

We will commence receiving LNG from the Gorgon LNG project, which will allow us to secure LNG suppliers involved with 12 projects in five countries.

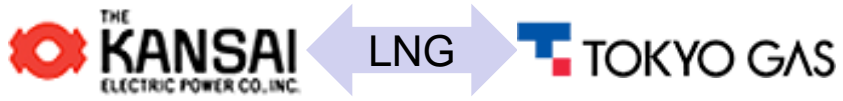
※LNG procurement from America will start after FY2017

Diversification of LNG network

We will enhance LNG trading structure and strengthen the network with international LNG players.



Framework for exchange and flexibility of LNG



Major initiatives in fiscal 2016: "Evolving the total energy business"

<Infrastructure expansion>

- To secure stable gas supplies and as well as to "expand natural gas usage," one of the purposes of the gas system reform, we will proceed with the development and enhancement of the pipeline network and manufacturing infrastructure.

<Restructuring integration of city gas companies in the group>

- For further improvement of services and the realization of energy solution in combination of gas, electricity, and value-added services, we will integrate our city gas companies in the group of the Tokyo metropolitan and the neighboring areas.

Enhancement of the pipeline network

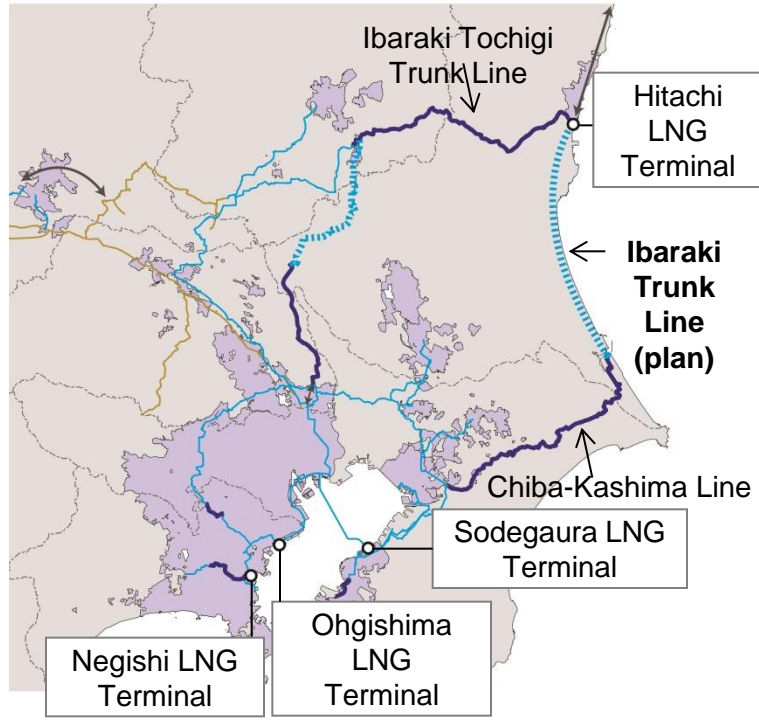
To address the demand outlook appropriately and strengthen the stable supplies through circular pipeline processing, we will commence the construction work of Ibaraki Trunk Line serving as a bridge between Chiba-Kashima Line and Ibaraki-Tochigi Trunk Line/Hitachi LNG Terminal that started operation in fiscal year 2015.

Enhancement of the production infrastructure

We will advance the construction of the additional Vaporizer (completed in December 2018) and additional LNG storage tank (completed in the fiscal year 2020) in Hitachi LNG Terminal and promote the precise design for the additional LNG tank in Sodegaura LNG Terminal (completed in the fiscal year 2023).

Restructuring integration within the group

In May 2016, we will implement the merger of Chiba Gas Co., Ltd., Tsukuba Gakuen Gas Co., Ltd. and Miho Gas Co., Ltd. into Tokyo Gas.



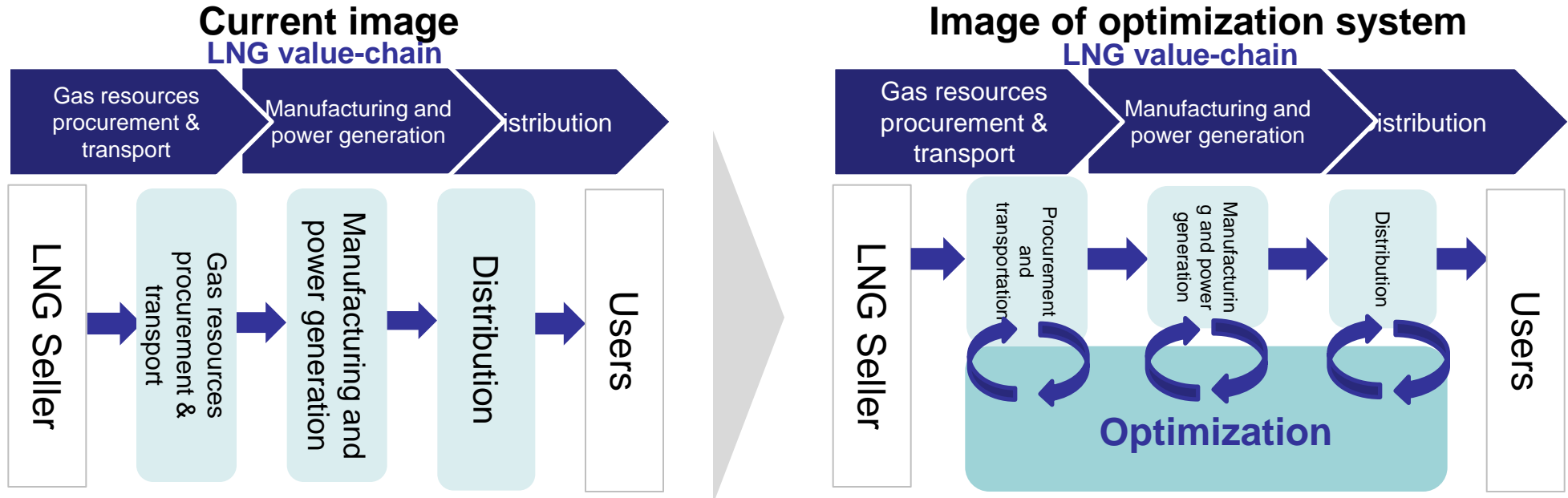
Major initiatives in FY2016: "Evolving the total energy business"

<Action to full retail deregulation in the gas market>

- Towards the full liberalization of retail sales is to be implemented in April 2017, we will promote to prepare for the new system to attain smooth response.
- We will continuously strive to contribute to the improvement of customer satisfaction and the healthy development of gas services through several measures, including expansion of natural gas usage, stable supplies, achievement of security and quality services.

<Optimization of the LNG value chain>

- Given that the full liberalization of energies is likely to introduce a growing uncertainty of the supply-demand balance in the future, we will continue to develop a system to optimize the LNG value chain (procurement, transportation to production and power generation - sales) in order to realize stable energy supply and profit.



Major initiatives in FY2016: "Evolving the total energy business"

<Energy Solution>

- We will promote the construction of smart energy networks with the aid of the distributed power sources, such as a cogeneration system, aiming at contributing to the urban development with the realization of energy saving and carbon dioxide emissions reduction as well as energy supplies in the event of a disaster.

<Cooperation with other gas companies those are wholesale customers>

- We will continue to deepen and expand cooperation with other gas companies those are wholesale customers so that they will be able to provide users with comprehensive energy service which is a combination of gas/electricity and value-added services.

Smart Energy Network

- At the "Tsunashima Sustainable Smart Town" that will be developed at the site of a former Panasonic factory located at Kohoku-ku, Yokohama, we will promote the commencement of operations and the construction of the town energy center for the introduction of ENE-FARM to the household and the flexible provision of electricity and heat for a variety of facilities, including commercial facilities, etc.
- In the Nihonbashi Muromachi district that will become smart area including the existing urban block for the first time in Japan, we will promote the prepare for technical studies and administrative procedures in cooperation with Mitsui Fudosan Co., Ltd. aiming at the commencement of regional electricity and heat supplies in the beginning of April 2019.



Source: Mitsui Fudosan Co., Ltd.

"A District, first-class urban redevelopment project in Nihonbashimuromachi 3 chome district"

Major initiatives in FY2016: "Evolving the total energy business"

<Increasing power generation capacity>

- We will promote initiatives aiming at expanding renewable power generation capacity for the purpose of global warming prevention while enhancing competitive natural gas-fired power source and base power generation capacity.

<Sales of electric power to high-voltage and extra-high-voltage customers>

- In order to meet diversified needs of our customers, we will expand electric power supplies and sales through Synergia Power Co., Ltd. in addition to ENNET Corporation from April.

Enhancing competitive power generation capacity

In collaboration with the JV partners, we will promote the plans to build coal-fired power plant by Chiba-Sodegaura Energy Co., Ltd. and construct additional natural gas-fired power plant by Kawasaki Natural Gas Power Generation Co., Ltd.

Renewable power

In cooperation with Fukushima Prefecture, we will promote the survey on wind conditions on the wind conditions survey business in (tentative name) for the commercialization of wind power generation business.

Expand Electric Power Sales

We will expand electric power sales for high-voltage and extra-high-voltage customers in mainly northern Kanto region.



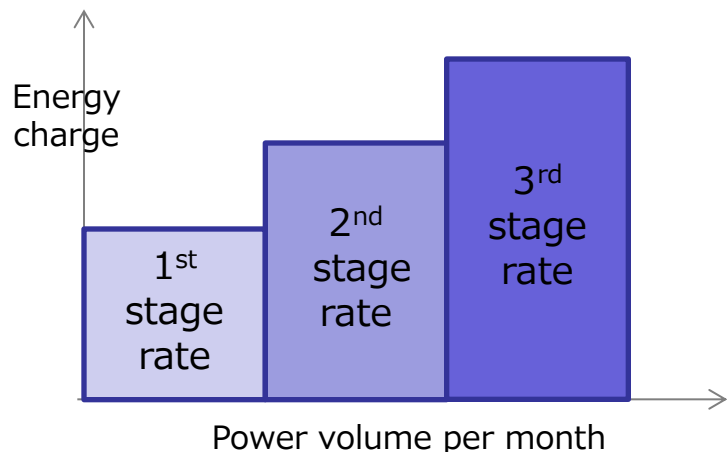
Major initiatives in FY2016: "Evolving the total energy business"

<Sales of electric power to low-voltage customers>

- Aiming at improving customers' living and enterprise values, we will expand the sales of "Zuttomo Plan" delivering "benefits," "reassurance" and "easy and convenience."
- We make valuable tariff menu for wide range of customers compatible with saving energy and preventing global warming.
- We expand sales through cooperation with not only recipients of whole sale city gas but various partners such as LPG distributors.

Achieve both valuable tariff and saving energy for customers

We will achieve both valuable tariff and saving energy through increasing charge system (3 stages rate)



Services for Saving Energy

We will offer services for saving energy such as at-a-glance usage tracking and delivery on an overused news mail through "myTOKYOGAS" members' site.

Expand alliance partners

- We will expand to cooperate with recipients of whole sale city gas and LPG distributors in selling electricity for retail customers in outside of our gas supply area.
- We will expand alliance partners of internet providers for triple discount menu (gas, electricity and internet charge discount)

Major initiatives in FY2016: "Evolving the total energy business"

< Growth and Raising Business >

- Aiming at realizing the "integrated energy company group," we will formulate and implement the growth strategy in engineering solutions, liquid gas and real estate businesses.

Engineering solutions business

- Based on our successful integration of engineering and energy solutions capabilities into Tokyo Gas Engineering Solutions, Inc. that had formerly been isolated in the group, we will provide one-stop solution in the broad field of the LNG value chain to meet the needs of domestic and overseas customers.



Liquid Gas business

- In April 2016, we established Tokyo Gas Liquid Holdings Co., Ltd., which will strengthen and develop liquefied gas business, such as LPG sales and industrial gas production and sales.
- For LPG sales business, we will promote the integration of filling stations and distribution centers and the rationalization and expansion based on scale economies through alliances with and acquisition of LPG operators. In addition, we will achieve the group-wide growth by the provision of electric power and value-added services to LPG users.

Real estate business

- In addition to the development of large-scale sites, such as Tamachi Station East Exit and Toyosu Wharf districts, we will also promote the commercialization for the small-scale properties owned by the Tokyo Gas Group.

<Acceleration of global business development>

- Leveraging our network and information pipes of overseas bases that have been enhanced through enhancement of the structure and personnel increase, we will actively participate in new projects in North America and Southeast Asia.

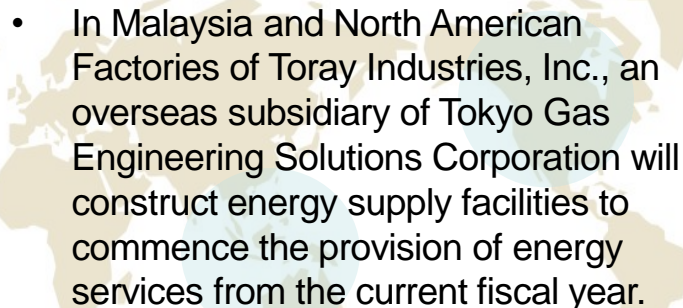
<New group formation>

- Aiming at realizing the "integrated energy company group," we will further evolve the gas business and achieve a certain result in developing and strengthening the group's management and systems to boost the growth strategy of the business serving as a profit center.

<2020 Tokyo Olympic and Paralympic Games>

- As an official partner of the 2020 Tokyo Olympic and Paralympic Games (gas and gas public services), we will cooperate with Tokyo Metropolitan Government and other related local governments and administrative authorities, etc., contribute to the success in of the tournament and the demonstration of attractiveness in Tokyo and play a social contribution by promoting sports for the disabled as a public enterprise.

Overseas operations

- 
- In Malaysia and North American Factories of Toray Industries, Inc., an overseas subsidiary of Tokyo Gas Engineering Solutions Corporation will construct energy supply facilities to commence the provision of energy services from the current fiscal year.

New group formation

We will set up a professional organization to proceed with the following initiatives:

- Appropriately cope with operational and market risks that could increase through changes in internal and external environments and an growing uncertainty, including the full liberalization and the development of the business structure.
- Amid intensifying competition due to the liberalization, constructively examine business reforms of the entire group using ICT in order to promote the business efficiency and productivity improvement.
- Toward the realization of sustainable growth, positively examine the creation of new values and new business model to be delivered to our customers.

FY2016 plan/FY2015 forecast

(thousand)

	FY2016	FY2015	Change
Number of Gas customers	11,391	11,096	295
Number of Electricity customers ^{※1}	400	–	400

	FY2016	FY2015
LNG volume ^{※2} (million t)	13.99	14.08
Gas sales volume(billion m3)	15.2	15.6
Electricity Sales volume ^{※3} (billion kWh)	12.8	10.9

(billion yen)

Capital investment plan (non-consolidated)		177.0	183.0
business Gas	Production facilities	24.7	38.1
	Supply facilities	100.2	105.5
	Business facilities	50.0	38.3
	Incidental business facilities	2.0	1.1

※1 the number of applications to recipients of whole sale city gas is excluded

※2 handling amount of LNG in Tokyo Gas Group

※3 total sales volume for retail customers and wholesale

<Reference>

FY2015 Initiatives

(1) City Gas Business

<Gas resources procurement : Further diversification and flexible cooperation>

- In April, we began to receive LNG from Australia's Queensland Curtis LNG project.
- In August, we signed the "Agreement on strategic mutual cooperation" with Taiwan's CPC Corporation, an oil and gas company in Taiwan.
- In March, we signed a basic agreement on LNG sale and purchase from the Cameron LNG project in the United States.

<Infrastructure: Popularization and stable supplies of natural gas>

- In October, we completed the construction work of Saito Line, and began the supply of gas.
- In January, we commence the use of Onahama Satellite Terminal and started supply of natural gas pipeline for the first time in Fukushima Prefecture.
- In March, we started using the Hitachi LNG Terminal and Ibaraki-Tochigi Trunk Line, and improved the stability of the entire supply infrastructure in cooperation with the three existing terminals and the existing high-pressure pipeline network in the Tokyo Bay.

<Restructuring integration: Lowering of rates and improvement of customer services>

- For the merger of Chiba Gas Co., Ltd., Tsukuba Gakuen Gas Co., Ltd. and Miho Gas Co., Ltd. into Tokyo Gas, we signed an agreement on the integration in September, and completed the approval and notification procedures required for the integration by March.

(1) City Gas Business

<Energy Solution: Proposals in line with customer needs and promotion of a smart city project>

- In October, we began solicitation for the sales of services "ENESINFO" to optimally controls the operations of the air conditioning system "Smart Multi" for business use that is a combination of gas and electricity.
- We began sales activities for "Senju Hydrogen Station" in January and "Urawa Hydrogen Station" in February.
- In February, in collaboration with Panasonic Corporation, was jointly developed "ENE-FARM," a new product of household fuel cell for apartments.

(2) Electric power business

<Sales of electric power to low-voltage customers : Delivering "benefits," "reassurance," and "easy and convenience" >

- In November, we entered into a business alliance agreement with 5 gas companies those are wholesale customers regarding the sales of low-pressure power for household and commercial customers.
- In December, aiming at improving customers' lives and business values, we determined the total energy service plan named 'Zuttomo Plan' and entered into a business alliance agreement with several companies regarding the provision of value-added services.
- In February, we entered into a business alliance agreement with 10 gas companies those are wholesale customers and 27 LP gas companies regarding the sales of the low-pressure power for household and commercial customers.

(2) Electric power business

<Power: Expansion of competitive power generation capacity>

- In January, Chiba-Sodegaura Energy Co., Ltd. (contributors: Idemitsu Kosan Co., Ltd. 33%; Kyushu Electric Power Co., Inc. 33%; Tokyo Gas Co., Ltd. 33%) submitted the Scoping Document in Environmental Impact Assessment regarding the construction plan of the coal-fired power plant to the Ministry of Economy, Trade and Industry and the local governments concerned.
- In February, Ohgishima Power Co., Ltd. (contributors: Showa Shell Sekiyu K.K. 25%; Tokyo Gas Co., Ltd. 75%), commenced the operation of the Ohgishima Power Station Unit 3 as scheduled. As a result, the power of the Tokyo Gas Group has expanded to about 1.6 million kW.
- In February, in collaboration with the Fukushima Prefecture, we jointly submitted the Scoping Document in Environmental Impact Assessment regarding the Fukushima coastal wind power generation initiative (tentative name) to the Ministry of Economy, Trade and Industry and local governments concerned.
- In March, Kawasaki Natural Gas Power Generation Co., Ltd. (contributors: JX Energy Corporation 51%; Tokyo Gas Co., Ltd. 49%) submitted the Scoping Document in Environmental Impact Assessment regarding the expansion plan of the Kawasaki Natural Gas Power Plant Units 3 and 4 to the Ministry of Economy, Trade and Industry and the local governments concerned.

<Sales of electric power to high-voltage and extra-high-voltage customers: Reduction of energy costs>

- In October, Synergia Power Co., Ltd., a joint venture between Tokyo Gas Co., Ltd. and Tohoku Electric Power Company, Incorporated was established.

(3) Engineering solutions business

- Based on our successful integration of engineering capabilities into Tokyo Gas Engineering Solutions, Inc. that had formerly been isolated in the group, we improved the provision of one-stop solution in the broad field of the LNG value chain "receipt, manufacturing - supply and power generation - energy solutions" in the LNG value chain" to meet the needs o customers.

(4) Real estate business

- In October, in collaboration with Mitsui Fudosan Co., Ltd. and Mitsubishi Estate Co., Ltd., we commenced the "TGMM Shibaura Project" (tentative name) constructing offices, commercial facilities, and hotels on the site owned by Tokyo Gas next to the Tamachi Station East Exit.



Exterior image of "TGMM Shibaura Project" (tentative name)

<Overseas business: Expansion of business bases and business development in North America/Southeast Asia>

- In April, Tokyo Gas Jakarta Office opened in Indonesia and Tokyo Gas Hanoi Office opened in Vietnam.
- In May, Tokyo Gas Asia Pte. Ltd. opened in Singapore.
- In September, Tokyo Gas Bangkok Office opened in Thailand.
- In December, we entered into a basic agreement with Toray Group with regard to the provision of energy services to a factory that will be newly opened by Toray Industries, Inc. This project will be the first energy services business in North America by the Tokyo Gas Group.
- In March, in order to concentrate management resources on business development in Southeast Asia and North America, we withdrew from the Brazilian energy service business.

<Business structure>

- In January, we established Tokyo Gas Liquid Holdings Co., Ltd., a holding company controlling liquid gas business, and determined to transfer the equity shares of Tokyo Gas Energy Co., Ltd., Tokyo Gas Chemicals Co., Ltd., Japan Super Freeze Co., Ltd. and others to Tokyo Gas Liquid Holdings Co., Ltd.
- In February, we entered into transfer agreement on stock of Gastar Co., Ltd. with LIXIL Corporation and Rinnai Corporation, for the purpose of transferring the management rights of Gastar Co., Ltd. to Rinnai corporation.

<2020 Tokyo Olympic and Paralympic Games>

- In July, we entered into the agreement on official partner (gas and gas public services) of the 2020 Tokyo Olympic and Paralympic Games with the Tokyo Organizing Committee of the Olympic and Paralympic Games regarding the program responsible for the tournament management thereof.



TOKYO GAS GROUP