

# TOKYO GAS INTEGRATED REPORT 2021



# Beginning of our challenge to achieve Net-Zero CO<sub>2</sub>

We, the Tokyo Gas Group, are the world's largest city gas operator as well as an energy group that also sells electricity and provides energy solutions in Japan and overseas.

We contribute to reduce CO<sub>2</sub> emissions by 10 million tons by 2030 and become an energy group that is most conscious of people and the earth.



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Feature:  
Challenge to achieve Net-Zero CO<sub>2</sub>

# Feature Challenge to achieve Net-Zero CO<sub>2</sub>

In the management vision, Compass2030, announced in November 2019, the Tokyo Gas Group declared it would take up three challenges, including that of "taking a lead in the effort to achieve Net-Zero CO<sub>2</sub>." Then, in October 2020, more than a year later, the Japanese government declared the goal of realizing a carbon-neutral, decarbonized society by 2050. Six months later, in

April 2021, the government made a further commitment to raise its reduction target for greenhouse gas emissions from 26% to 46% compared to the level in 2013. This is one of many examples of an accelerating move toward decarbonization seen in Japan and overseas.

With the aim of achieving our management vision, we are promoting the effective use of

natural gas, the expansion of renewable energy sources, and the development of core element technologies for decarbonization, as we are committed to taking up the challenge to achieve Net-Zero CO<sub>2</sub> and leading the transition to a decarbonized society.

## Adding depth to business management with a further emphasis on ESG

E

Environment

### Accelerate initiatives to achieve Net-Zero CO<sub>2</sub>

- 1 Reduce CO<sub>2</sub> emissions on a global scale
- 2 Develop and commercialize technologies related to the management of hydrogen and CO<sub>2</sub>

S

Social

### Tackling social issues through value cocreation

- 1 Create sustainable communities
- 2 Provide services that address various urban lifestyle issues

G

Governance

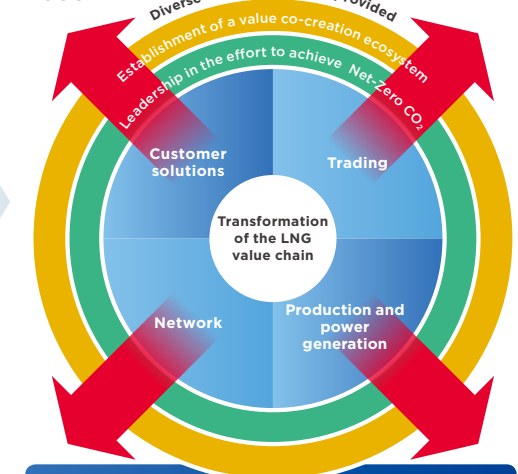
### Carrying out group formation reforms

- 1 Carry out management reforms (Improve management quality and transparency)
- 2 Reform the Group's organizational structure (Improve the earning power of each function of the value chain)

## Acceleration and achievement of the three challenges

- Challenge 1 Leadership in the effort to achieve Net-Zero CO<sub>2</sub>
- Challenge 2 Establishment of a value co-creation ecosystem
- Challenge 3 Transformation of the LNG value chain

2030



Utilization of the strengths of the Tokyo Gas Group in activities both in Japan and in global markets

Feature:  
Challenge to achieve Net-Zero CO<sub>2</sub>

# Tokyo Gas Group's Net-Zero CO<sub>2</sub> vision and its technology development efforts

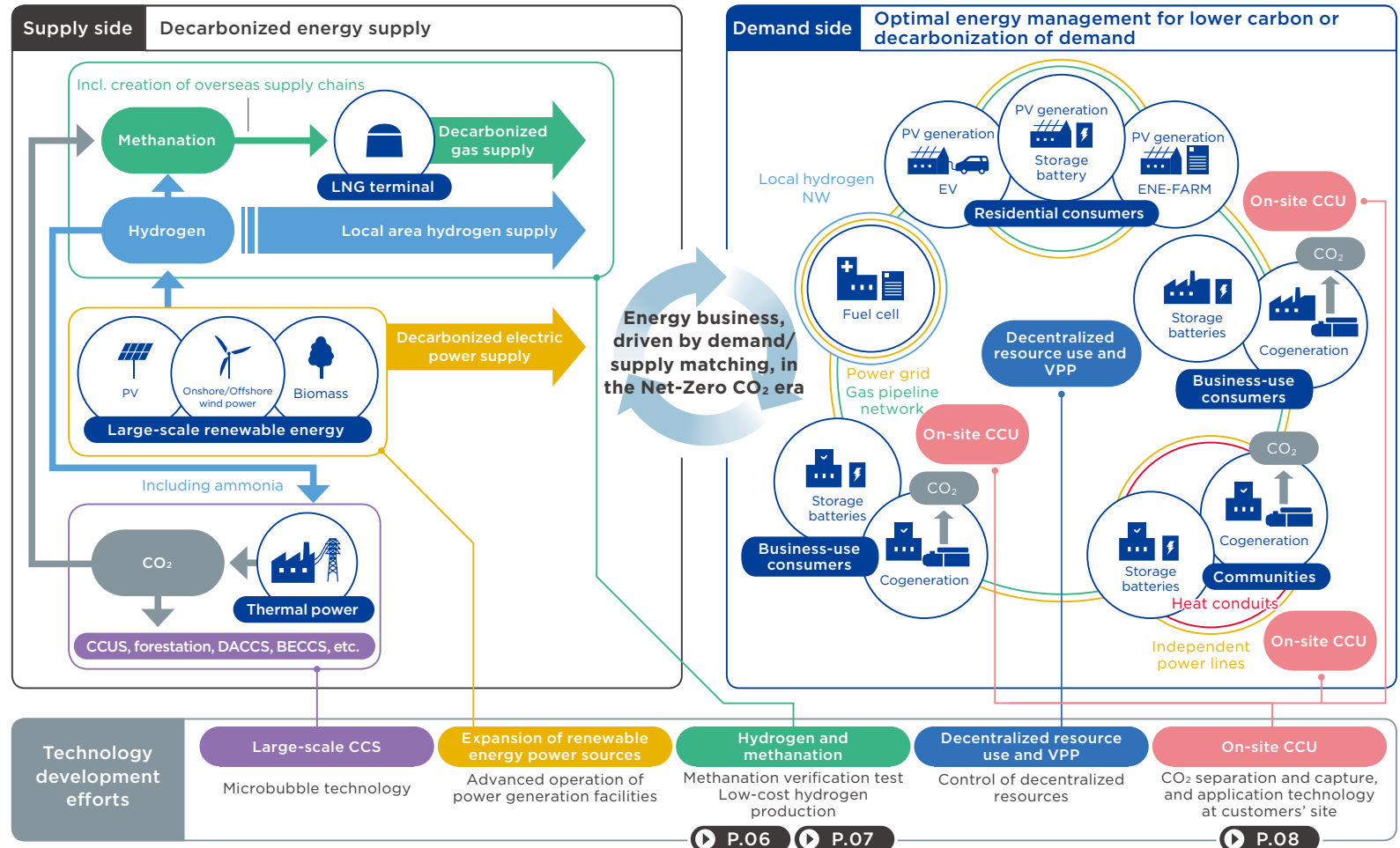
While it is difficult to predict the progress of future technology in detail at present, we believe that the strength of the Tokyo Gas Group is to manage the supply side and the demand side of energy in an integrated manner. By combining the supply of decarbonized energy (via the spread of

decarbonized gas by methanation, local area hydrogen, and large-scale renewable energy use) with the demand side's optimal energy management (via VPP\*<sup>1</sup> using decentralized power sources including PV generation, storage batteries, and EV\*<sup>2</sup>), we aim to realize Net-Zero

CO<sub>2</sub> in a way that is unique to the Tokyo Gas Group.

\*1: Virtual Power Plant (VPP) A mechanism that uses IoT to manage and control decentralized power sources, batteries, etc. as if they were a single power plant.

\*2: Electric Vehicle (EV)



Feature:  
Challenge to achieve Net-Zero CO<sub>2</sub>



Roadmap toward achieving Net-Zero CO<sub>2</sub>

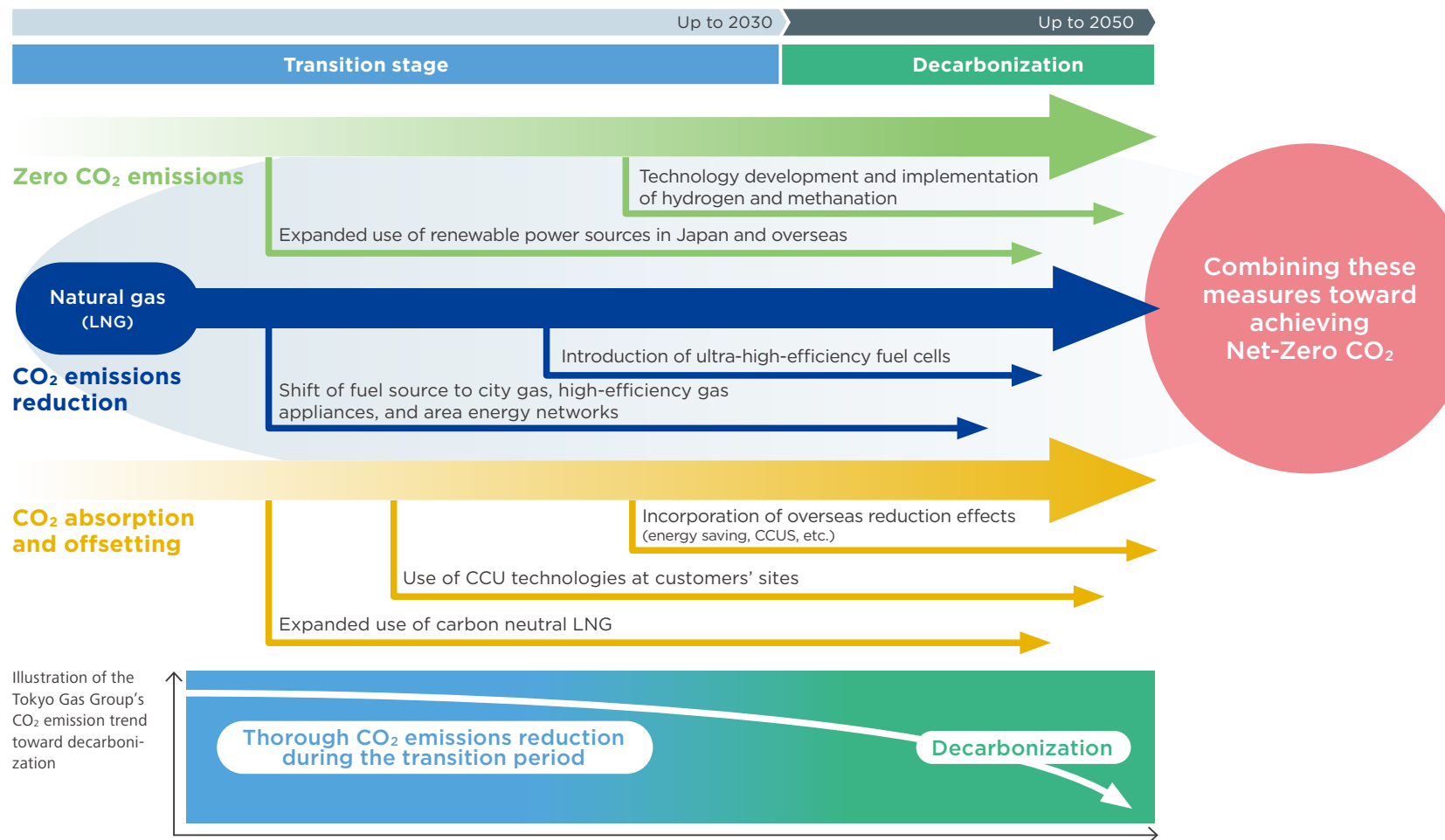
### Specific initiatives toward decarbonization

During the transition stage, steady reduction in CO<sub>2</sub> emissions is important. In addition to “expanded use of renewable energy in Japan and overseas,” we are working on “shifting the energy source for city gas,” as well as “energy saving through the use of natural gas, and advanced use

of energy” as fast-acting measures to reduce CO<sub>2</sub>, and “the use of CCU technologies at customers’ sites” and “carbon neutral LNG initiatives” as decarbonization measures for gaseous energy.

Over the medium- to long-term, in addition to “CO<sub>2</sub> absorption and offsetting by means such as

use of natural gas and CCUS,” we will combine “initiatives on hydrogen and methanation for zero CO<sub>2</sub> emissions,” which will enable effective use of our existing city gas infrastructure, in our efforts to achieve Net-Zero CO<sub>2</sub>.



Feature:  
Challenge to achieve Net-Zero CO<sub>2</sub>

Hydrogen-related technology development

# Joint development of water electrolysis cell stack for low-cost green hydrogen production

## Challenges facing low-cost green hydrogen production by the water electrolysis method that Tokyo Gas is working on

- ① Low-cost electric power procurement
- ② Reducing cost of hydrogen production system
  - ▶ Reducing cost of water electrolysis device
  - ▶ Reducing cost of cell stack (material cost and manufacturing cost)

## Joint development with SCREEN Holdings, utilizing the strengths of Tokyo Gas

Tokyo Gas and SCREEN Holdings Co., Ltd. have agreed to jointly develop a “water electrolysis cell stack” and a “water electrolysis cell stack manufacturing device” with the aim of establishing

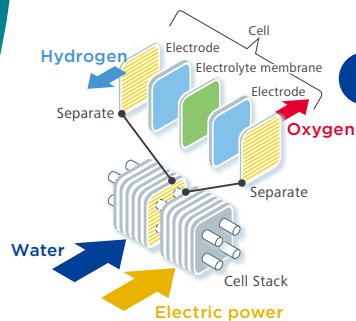
within two years low-cost production technology for a water electrolysis cell stack, which accounts for a large portion of the production cost in a water electrolysis device. Tokyo Gas will use the technologies of material selection and performance/durability evaluation, accumulated in the development of residential fuel cells (ENE-FARM), and work on reducing the material cost. SCREEN will be in charge of developing the water electrolysis cell stack production technology and production equipment that applies continuous production technology using its proprietary roll-to-roll methodology\*1. We will thereby work on drastically reducing the production cost, which had so far been difficult to achieve. Going forward, in conjunction with this development project, the two companies will undertake technological development for the systematization of this water electrolysis device to realize low-cost green

hydrogen production. The goal is to further alleviate hydrogen production cost by quickly achieving\*2 the hydrogen supply cost goal for 2030 of 30 yen/Nm<sup>3</sup>-H<sub>2</sub>, which is being promoted by the government.

## Utilization of technology development

Jointly with SCREEN, we will consider diverse possibilities to make use of the development outcome. If lower-cost production for a water electrolysis cell stack is realized, Tokyo Gas may potentially be able to produce low-cost hydrogen by itself, supply hydrogen to local areas, and use it as a material for methanation. Other possibilities may include technology licensing to system makers in Japan and overseas, and systemization and sale by ourselves or in alliance with a manufacturer.

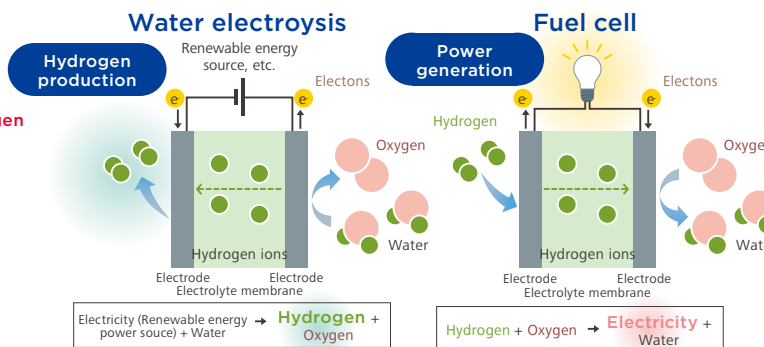
### Concept and basic composition of a water electrolysis cell stack



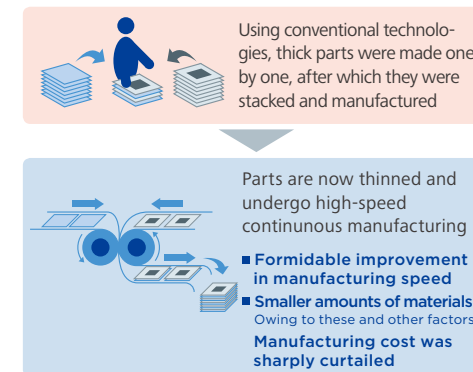
### What is a water electrolysis cell stack?

It comprises of multiple stacks of thin parts (cells) that produce hydrogen and oxygen through water electrolysis (fuel cells have a reverse reaction).

### Summary of water electrolysis system and fuel cell power generation method (left) and fuel cell power generation method (right) (illustration)



### Low-cost production of a water electrolysis cell stack (illustration)



\*1: A low-cost manufacturing process for functional films that consists of the continuous processing of film using a coating and other methods during the rewinding process of a long film substrate wound in a roll. In the current project, this manufacturing process will be used in the manufacturing of water electrolysis cell stacks.  
\*2: To achieve this goal, in addition to alleviating hydrogen production system costs through this development project, the realization of low-priced power procurement is also anticipated mainly through the growth of the renewable energy market.



Feature:  
Challenge to achieve Net-Zero CO<sub>2</sub>

Methanation verification test

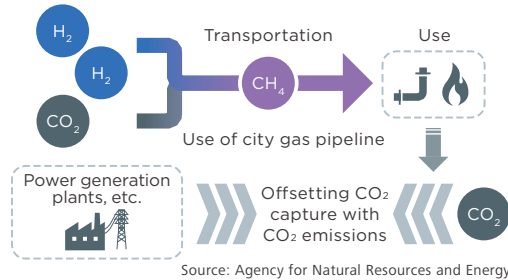
# Tsurumi District Carbon Neutral Collaboration Plan

## Overview of methanation

Methanation refers to the synthesizing of methane (CH<sub>4</sub>): to use CO<sub>2</sub>-free hydrogen produced or procured in Japan or from overseas, make it react with CO<sub>2</sub> emitted from power generation plants and other places, and capture it.

Supply of thermal energy using methanation has been positioned as one of the priorities in Japan's green growth strategy.

## Conceptual diagram of methanation



## Strengths of Tokyo Gas

As methane is the largest component of natural gas, we can use our existing infrastructure, including LNG ships, receiving terminals, pipelines, and the gas appliances of our customers, for the supply of decarbonized gas using synthetic methane. This means that we may not need to make a large investment.

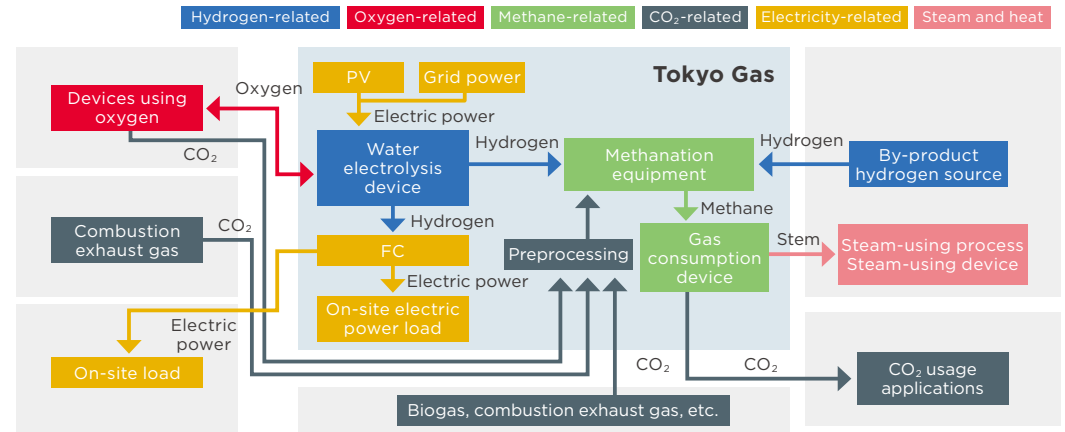
## Challenges involving methanation

The biggest challenge facing the use of methanation is to produce and procure hydrogen at a low price and in large quantities. Other challenges include securing low-cost CO<sub>2</sub> in large quantities, selection of an appropriate site, and larger-scale manufacturing.

## Tsurumi District Carbon Neutral Collaboration Plan and future initiatives

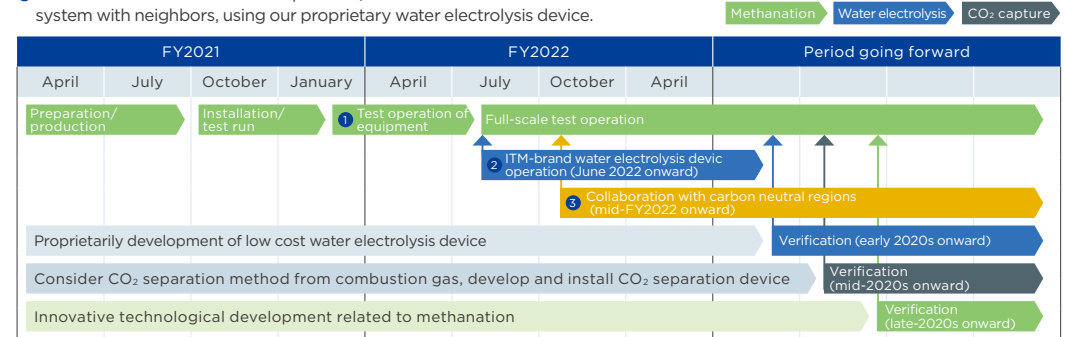
As the first step to use and adopt hydrogen and methanation, we will conduct a methanation verification test, using hydrogen produced from electric power by a water electrolysis device, at the Tokyo Gas site in Tsurumi-ku, Yokohama. We are also considering building a local production for local consumption model in cooperation with companies in Suehiro-cho, Tsurumi-ku and the City of Yokohama. Using the knowledge acquired from the verification test, we aim to potentially conduct a larger-scale verification test at our LNG terminal for commercialization and to create a supply chain.

## Illustration of Tsurumi District Carbon Neutral Collaboration



## Schedule of the verification test

- 1 Start synthesizing of methane during fiscal 2021.
- 2 Start full-scale verification testing after the ITM-brand water electrolysis device starts operation (June 2022).
- 3 After the start of full-scale test operation, consider the introduction of a collaborative system with neighbors, using our proprietary water electrolysis device.





Feature:  
Challenge to achieve Net-Zero CO<sub>2</sub>

### Overview of CCU

Carbon dioxide capture and utilization (CCU) refers to technology for separating out and capturing CO<sub>2</sub>, which has been a focus of Japan's green growth strategy. The Tokyo Gas Group has been working on technology development for on-site CCU, meaning the use of CO<sub>2</sub> in gas emitted from a gas appliance at a customer's site. Major challenges in the practical application of CCU technology include matching with gas appliances and minimizing energy for CO<sub>2</sub> separation, capture, and utilization.

### Strengths of Tokyo Gas

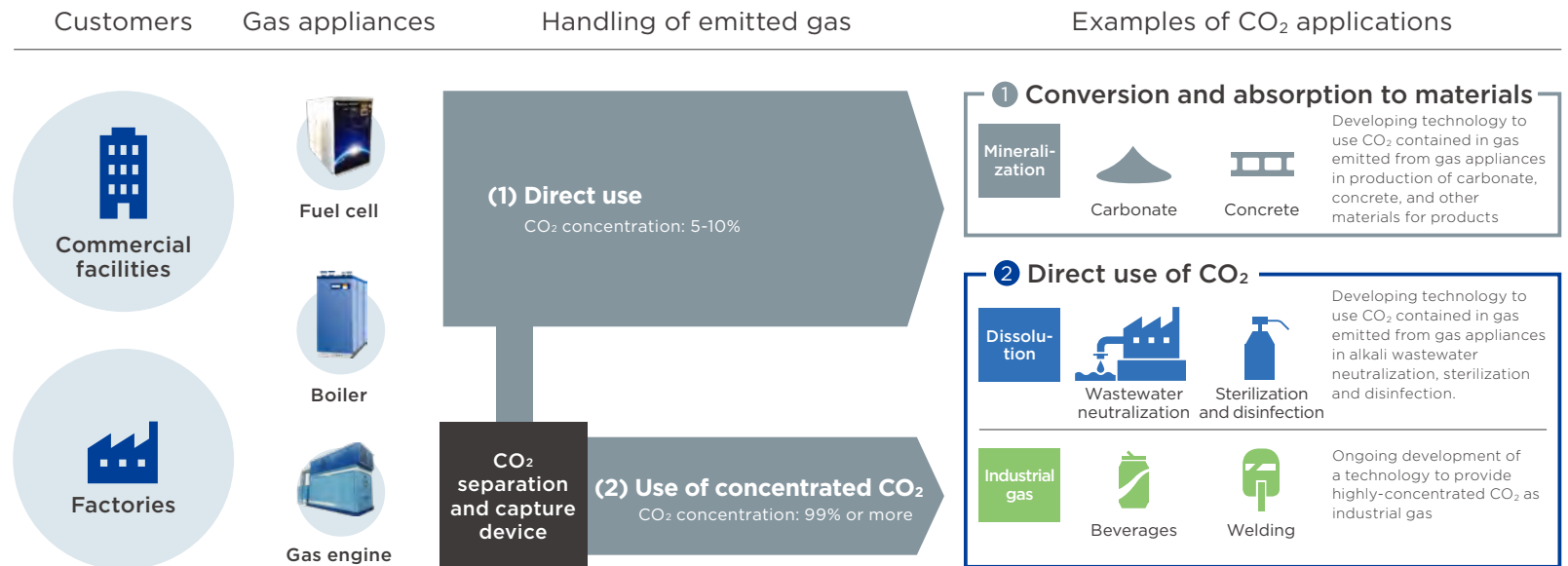
With an emphasis on "Co-creation with customers," the Tokyo Gas Group has been making efforts to design, build, and operate an energy system that meets the needs of customers. We will make use of our accumulated advanced engineering capabilities concerning energy systems and users' know-how in making appropriate CCS system proposals to individual customers.

### Future initiatives

Our "on-site CCU service," which effectively uses emitted gas from gas appliances used at the customers' site, has already attracted a high level of interest from our customers, such as commercial facilities and factories. We will speedily develop technology in cooperation with other companies in Japan and overseas – open innovation. Through these efforts, we intend to differentiate ourselves and enhance our relationship with customers.

CO<sub>2</sub> management technology development

## CCU at customer's site



Feature:  
Challenge to achieve Net-Zero CO<sub>2</sub>

(Published date of press release)

(Published date of press release)

## Renewable energy development

- **Invested in Principle Power, Inc. in the U.S. (May 2020)**  
Invested in Principle Power, which developed and owns proprietary floating system technology. The technology has significant offshore stability and is expected to be widely adopted in floating offshore wind projects around the world. Tokyo Gas will actively engage in the development of floating offshore wind projects in and out of Japan by utilizing the technology.
- **Acquired a large-scale solar power project in the U.S. (July 2020)** [P.37](#)
- **Acquired wood pellet biomass power generation facilities in Takaoka, Toyama Pref. and Ichikawa, Chiba Pref. (Aug. 2020)**  
Acquired Fushiki Manyofuto Biomass Power GK and Ichihara Yawatafuto Biomass Power GK (approximately 126,000 kW).
- **Joined a JV for offshore wind power projects in Japan (Nov. 2020)**  
Joined Chiba Offshore Wind Inc. – a JV established by Shizen Energy and Northland Power Inc. – in 2019. With a target to achieve promising area designation for offshore wind power projects off the coastline of Chiba Prefecture, the development business is being promoted.
- **Launched commercial operation of a mega-solar power plant in Iwakuni, Yamaguchi Pref. Domestic mega-solar power output reached 100,000 kW (July 2021)**

The Iwakuni-Yu Solar Power Plant (output: 23,490kW) started commercial operation in July 2021. The acquisition of the plant contributed to the Tokyo Gas Group's mega-solar power output reaching 100,000 kW.

(Published date of press release)

## Technology development of CCU, hydrogen, and methanation

- **Released “suidel” small hydrogen generators with Tokyo Gas Chemical Co., Ltd. and MIURA CO., LTD. (Feb. 2021)**  
Released “suidel” small hydrogen generators, targeting semiconductor, metal, chemical manufacturers as potential customers, in March 2021. Tokyo Gas' technologies for ENE-FARM have been utilized.
- **Tokyo Gas and SCREEN Agree to Jointly Develop a Water Electrolysis Cell Stack for Low-cost Green Hydrogen Production (May 2021)** [P.06](#)
- **World's 1st! Commence Manufacturing of CO<sub>2</sub>-absorbing Concrete that Uses Exhaust Gas Emitted During the Use of City Gas Devices (July 2021)**  
Agreed with KAJIMA CORPORATION to jointly develop technology to use CO<sub>2</sub>-SUICOM®, a CO<sub>2</sub>-absorbing concrete developed mainly by KAJIMA, and to absorb and solidify CO<sub>2</sub> contained in exhaust gas released when using city gas equipment.
- **Plan to launch a methanation verification test within fiscal 2021 (July 2021)** [P.07](#)

## Decarbonized energy supply

- **Launched free solar power system provision service “Zuttomo Solar” (April and Sep. 2020)**  
Launched free solar power system provision in collaboration with housing makers in 2019. The scheme is for a customer to use the electricity generated by the system, sell unused electricity to an electric power company, and sell the revenue to Tokyo Gas, based on a contract exchanged by the customer and Tokyo Gas.
- **Began handling of the effective renewable energy electricity using FIT non-fossil fuel energy certificates (July 2020)**  
Became Japan's first electricity retail operator that handles the effective renewable energy electricity using the FIT non-fossil fuel energy certificates with tracking information.
- **Launched the “Hinatao Solar” energy service for condominiums and buildings (Oct. 2020)**  
A subsidiary of Tokyo Gas, Hinatao Energy Co., Ltd. launched the “Hinatao Solar” energy service. The solar power generation system on the rooftops of our customers' condominiums and buildings is installed at Hinatao's expense with no initial investment by customers.
- **Formed Strategic Alliance with UK-based Octopus Energy (Dec. 2020)** [P.27](#)
- **Concluded power purchase agreement for non-FIT solar power plants with Renewable Japan Co., Ltd. (Feb. 2021)**  
Concluded a power purchase agreement for non-FIT solar power plants with Renewable Japan, with the aim of expanding use of non-FIT renewable energy power sources. Renewable electricity is provided to environment-conscious customers, such as those participating in the RE100 global initiative.
- **Establishment of a Carbon Neutral LNG Buyers Alliance (March 2021)** [P.37](#)  
Exchanged Japan's first contract to supply carbon neutral LNG with Marunouchi Heat Supply Co. in Oct. 2019 and began to supply it to office buildings owned by Mitsubishi Estate Co. As of July 2021, more than 30 corporate customers have adopted carbon neutral LNG.
- **Newly launched “Sasutena Denki,” an electricity rate plan with 100% real renewable energy (June 2021)**  
Created “Sasutena Denki,” a 100% renewable energy electricity rate menu, which added a non-fossil certificate designated as renewable energy, for customers using low-voltage electricity in the Kanto area. Tokyo Gas will plant one tree for each customer contract, contributing to further CO<sub>2</sub> reduction.

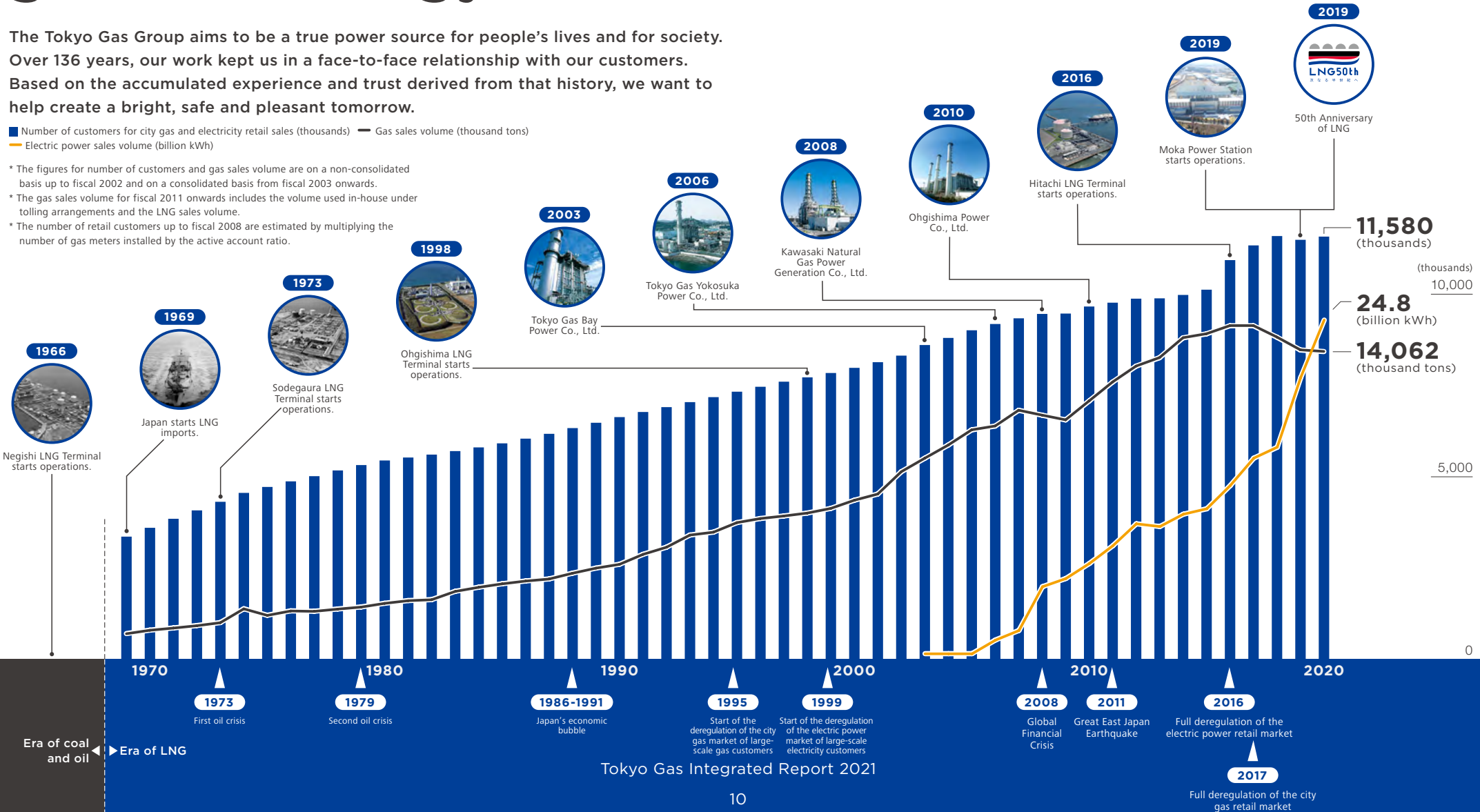
# Progress and highlights of the Medium-term Management Plan

# Tokyo Gas continues to grow as “Energy Frontier”

The Tokyo Gas Group aims to be a true power source for people’s lives and for society. Over 136 years, our work kept us in a face-to-face relationship with our customers. Based on the accumulated experience and trust derived from that history, we want to help create a bright, safe and pleasant tomorrow.

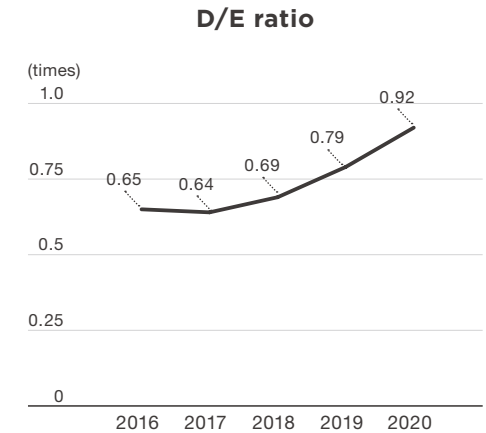
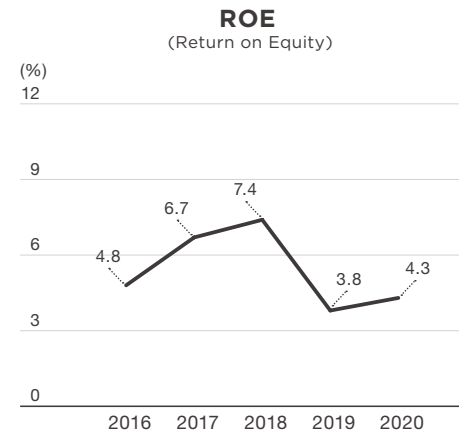
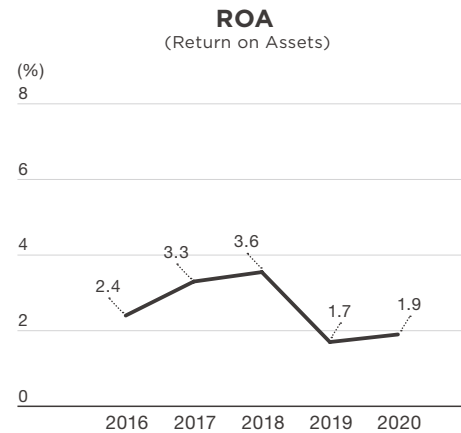
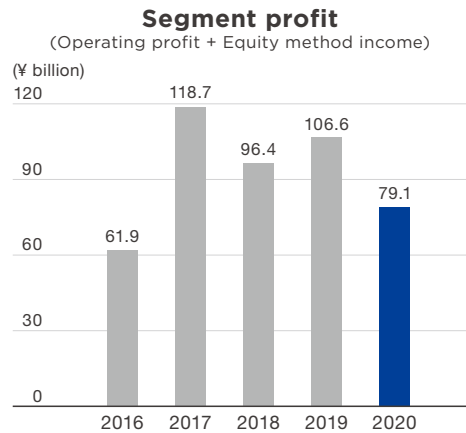
■ Number of customers for city gas and electricity retail sales (thousands) — Gas sales volume (thousand tons)  
 — Electric power sales volume (billion kWh)

- \* The figures for number of customers and gas sales volume are on a non-consolidated basis up to fiscal 2002 and on a consolidated basis from fiscal 2003 onwards.
- \* The gas sales volume for fiscal 2011 onwards includes the volume used in-house under tolling arrangements and the LNG sales volume.
- \* The number of retail customers up to fiscal 2008 are estimated by multiplying the number of gas meters installed by the active account ratio.

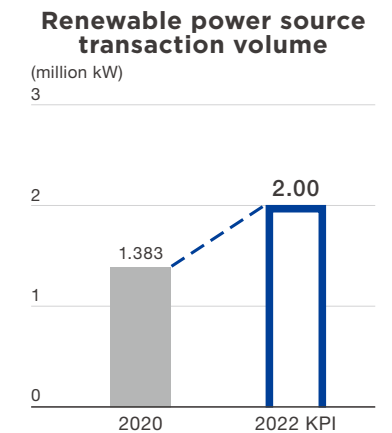
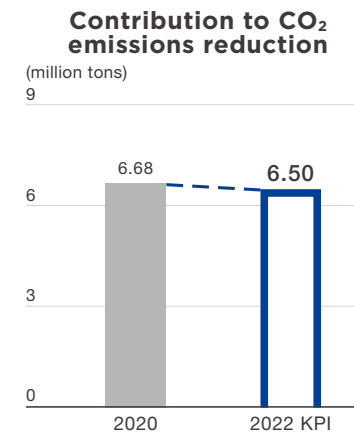
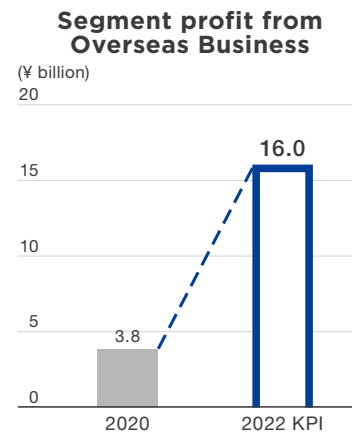
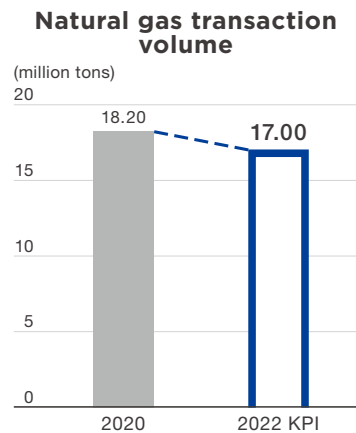
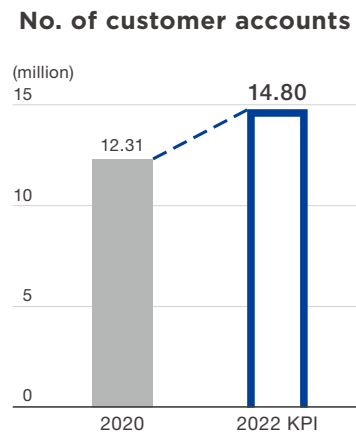


Our performance

# Our performance



## KPI



# Advancing corporate transformation toward Net-Zero CO<sub>2</sub>

## Taking up the Challenge of Net-Zero CO<sub>2</sub>

The novel coronavirus pandemic has shaken the world in an unprecedented way, and has threatened the security and safety that we took for granted. These circumstances have made us, as a major energy business operator, even more aware of our mandate, namely to “never ever stop the energy supply.” We have made every effort to ensure a stable supply of gas and electricity. At this time of a national crisis, Tokyo Gas has served its customers as faithfully and reliably as in the past.

The world is steadily moving toward a more sustainable society, despite being shaken by the COVID-19 pandemic. In particular, the trend toward decarbonization is accelerating, and since Prime Minister Suga declared in October 2020 that Japan aims at becoming carbon neutral, widespread efforts to achieve decarbonization have begun and are gaining momentum. This

trend can be said to be a paradigm shift that will significantly change the economy and society. It is incumbent on Tokyo Gas to be alert to this and act accordingly.

In November 2019, Tokyo Gas announced in its statement of its future management vision, Compass2030, a goal of “taking leadership in the effort to achieve Net-Zero CO<sub>2</sub> emissions” as one of the company’s management issues and has started to take up this challenge.

## Reducing CO<sub>2</sub> emissions during transition to Net-Zero CO<sub>2</sub>

We foresee several stages before reaching Net-Zero CO<sub>2</sub>. We are now in a transition period toward full energy transition and decarbonization, during which an emphasis is assigned to the reduction of CO<sub>2</sub> emissions. This is just a beginning; we know it will be a long haul on the road to decarbonization. That journey will require innovation and large-scale investment extending across diverse areas and over a long

Representative Corporate Executive Officer,  
President and CEO

**UCHIDA Takashi**

time. In the near term, our emphasis is on reduction of CO<sub>2</sub> emissions, and of the amount of CO<sub>2</sub> stored in the atmosphere. Tokyo Gas considers the transition period to last to around 2030, and is working on the following initiatives.

The first is the advanced use of natural gas. For example, we anticipate use of energy in urban redevelopment areas and industrial parks will be advanced by adopting smart energy network technology. We also introduce high-efficiency gas equipment, such as our residential-use fuel cell ENE-FARM and promote replacement of industrial fuels from heavy oil and coal with natural gas. By doing so, our customers will be able to significantly reduce CO<sub>2</sub> emissions.

The second initiative is the separation and recovery of CO<sub>2</sub>. Carbon dioxide capture and storage (CCS) and carbon dioxide capture, utilization and storage (CCUS), which separate, collect, and bury deep in the ground or reuse emitted CO<sub>2</sub>, can effectively reduce CO<sub>2</sub> emissions without them being directly dispersed in the air.

The third is the expanded use of carbon neutral LNG (CNL). Inevitably, the process from the extraction of natural gas to its burning generates greenhouse gases, but they will be offset by CO<sub>2</sub> emissions reduction through support of reforestation and other renewable projects. In March 2021, the Tokyo Gas Group established the Carbon Neutral LNG Buyers Alliance with 14 other companies with the aim of advancing toward a sustainable society by this third initiative. Specifically, Tokyo Gas will procure and supply CNL and the Alliance companies will purchase and use it as fuel for office buildings and factories, with the aim of spreading the use of CNL and increasing its utility value.

## What I want to tell you

- By positioning a period to around 2030 a transition period, we are promoting (1) advanced use of natural gas, (2) separation and recovery of CO<sub>2</sub>, and (3) expanded use of carbon neutral LNG (CNL).
- We are also developing the production of hydrogen at an affordable cost by using electricity generated from renewables as well as energy methanation technology for producing synthetic methane by reacting hydrogen with CO<sub>2</sub>. Synthetic methane may potentially help us economically achieve decarbonization through supply using our existing facilities.
- Acquisition of overseas large-scale photovoltaic power generation projects and domestic biomass power generation projects has resulted in increasing our volume of renewable energy power transaction volume to approximately 1.4 million kW. Offshore wind power generation is another area we seek to promote.
- We have moved to a “Company with a Nominating Committee, etc.” and will establish a holding company-type group structure in order to achieve Group growth even in an uncertain environment.
- We are determined to adequately respond to market changes, achieve the Medium-Term Management Plan, and realize our greater vision.
- I would like us to become a corporate group that continues to actively contribute to society by supporting individual growth while emphasizing diversity. While respecting our founder Shibusawa Eiichi's book, Rongo to Soroban, we aim at becoming a new type of a public utility business.

## Strengthening the development of hydrogen technology

The ultimate decarbonization of city gas is zero CO<sub>2</sub> emission when city gas is burned. Hydrogen has our attention as it can be used as an industrial fuel, as a power generation fuel, or as a transportation fuel. However, its use is limited at present due to high production cost and the fact that its production generates CO<sub>2</sub>. As such, we are developing a device that produces hydrogen by electrolysis of water, using electricity generated by sunlight and renewable energy. This is a way we can apply fuel cell technology — that we have developed and applied for years — and

has the prospect of substantially reducing hydrogen prices by manufacturing the cell stack, which is central to the electrolysis process, at an affordable cost. Based on the assumption that electricity generated by renewable energy will be sufficiently inexpensive, we are currently working on the development of such a hydrogen-producing device in an alliance with SCREEN Holdings, Co. We are hoping this will help achieve the government's 2030 hydrogen price target by the mid-2020's.

We are also developing methanation technology for producing synthetic methane by reacting hydrogen with CO<sub>2</sub>. The synthetic methane emits CO<sub>2</sub> when burned, but because it takes in a similar

amount of CO<sub>2</sub> during manufacturing, this carbon recycling results in Net-Zero CO<sub>2</sub>.

The main component of LNG is methane. This means that feasible synthetic methane produced by using inexpensive renewable energy power sources overseas can potentially be conveyed, stored, and provided to customers by using our existing equipment such as LNG liquefaction facilities, shipping facilities, LNG tankers, receiving facilities and pipelines. While huge investment is said to be required for decarbonization, we can foresee that decarbonization may potentially be economically achieved by replacing some city gas with synthetic methane.

We established a Hydrogen & Carbon Management Technology Strategy Dept. in April 2021 to accelerate the development of hydrogen and methanation technologies.

### Expanding the use of renewable energy

Expansion of renewable energy supply is another area of high concern to us. As an electric power company, we own high-efficiency combined cycle natural gas-fired power stations. We plan to expand our renewable energy supply to 5 million kW in sum of Japan and overseas. In 2020, we acquired full ownership of the Aktina Solar Project in Texas, U.S.A. which will have a maximum output of 630,000 kW when development is completed. The Tokyo Gas Group will manage the project from construction to commercial operation. In Japan, we acquired biomass power generation projects in Takaoka City, Toyama Prefecture, and Ichihara City, Chiba Prefecture. These efforts have resulted in increasing our volume of renewable energy power supply handled to approximately 1.4 million kW.

We will also promote offshore wind power generation with a particular focus on the floating type of installation. This focus was decided upon because the floating type system can be located even in deep water and have high potential in littoral locations. In 2020, we invested in Principal Power, Inc. in the U.S.A. and began acquiring its technology. We intend to use that company's technology to develop floating-type

offshore wind power generation projects in both domestic and foreign sea areas.

### Augmented promotion of ESG management

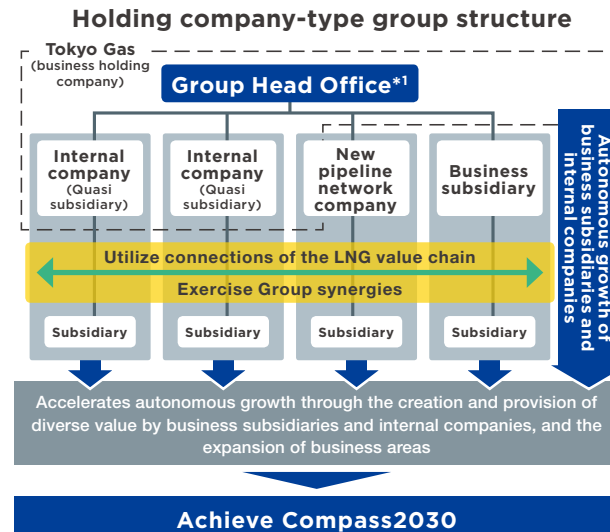
Our initiative on decarbonization is one of the "Three Challenges" of our management vision Compass2030: "Leadership in the effort to achieve Net-Zero CO<sub>2</sub>," "Establishment of a value co-creation ecosystem," and "Transformation of the LNG value chain." It is also identified as one of the key components of ESG management. Acceleration of Net-Zero CO<sub>2</sub> efforts is a priority area for solving not only environment [E] but

also social [S] problems, such as by improving resilience. The "Establishment of a value co-creation ecosystem" is also an effort to create social value together with our stakeholders. Further, from the governance [G] perspective, we will carry out group formation reforms in order to achieve group growth even in an uncertain environment. By doing so, we intend to make the "Transformation of the LNG value chain" effective and ensure the steady growth of the Tokyo Gas Group.

Specifically, all functions, from acceptance of LNG to its transportation and sales, are positioned as profit centers. At the same time

engineering and real estate businesses are being given attention so that they can grow better and at a faster rate. Also important is that we have decided to significantly expand the range of delegation power of the execution, to expedite decision-making, and to reinforce the supervisory function of the Board of Directors. In other words, these changes mean the establishment of a holding company-type group structure and the transition to a "Company with a Nominating Committee, etc."

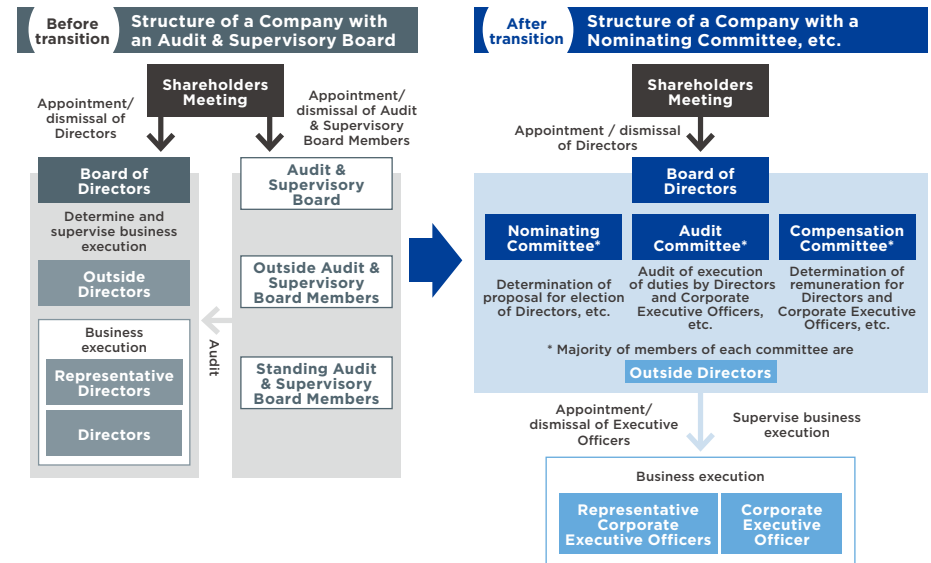
We believe that this will intensify management and provide a governance system that is easy to understand for international investors.



\*1 The group governance system will be developed by clarifying the roles (formulating Group's management strategies, allocating managerial resources, managing risks, etc.) of the Group Head Office

\*2 Complies with conduct control of the Gas Business Act

### Transition to a Company with a Nominating Committee, etc.



## Seeking growth by incorporating a paradigm shift toward decarbonization into our business

The business results for fiscal 2020 – the first year of the fiscal 2020-22 Medium-Term Management Plan, were quite disappointing with a year-on-year decrease in ordinary profit. A

decrease in sales volume due to COVID-19 effects, a significant fluctuation in LNG prices in the spot market, and a surge in prices in the wholesale power trading market during the winter were main culprits. Since volatility in domestic and overseas markets is expected to stay high, we are determined to adequately respond to market changes, achieve our Medium-

Term Management Plan, and realize our greater vision.

Some of our shareholders may ask us “Can you achieve Net-Zero CO<sub>2</sub> and grow at the same time?” Indeed, various players have entered the energy business in connection with decarbonization, and competition in the renewable energy business is becoming severer every day. As I said at the beginning, a paradigm shift toward decarbonization is currently under way, and I believe that only companies that are able to incorporate this paradigm shift into their businesses can grow as energy providers. In order to become one of them, it is necessary to increase investment aimed for Net-Zero CO<sub>2</sub> while maintaining financial soundness. In November 2020, we announced that we are considering a review of our shareholder return policy from the viewpoint of raising source funds through all means available to us. Please give us a little more time to make our decision on this matter.

### Aiming to become a new utility business

In our management vision Compass2030 we make “Three Promises” to our current and future colleagues who are and will be working on the “Three Challenges”. The promises are (1) to “produce work that will have a major impact on society,” (2) to “create a venue for encounters with diversity and friendly competition,” and (3) to “emphasize the self-fulfillment of each person.” I believe the delivery of these promises would lead to steady implementation of the vision.

The Tokyo Gas Group is indeed in a period of reforms. It is up to each and every member of the

Group to overcome the challenges of this period of dramatic changes and open the way to the future. I would like us to become a corporate group that continues to actively contribute to society by supporting individual growth while emphasizing diversity. To that end, we will also work to restructure our corporate philosophy. While respecting our founder Shibusawa Eiichi's book, Rongo to Soroban (The Analects and the Abacus), Tokyo Gas is determined to make a leap forward, toward becoming a new type of a public utility business.

We are ahead of other companies in declaring our position on Net-Zero CO<sub>2</sub> and have begun efforts for decarbonization. We will continue to contribute to the future of the Earth and the future of energy, and will do what is necessary to ensure the company's sustainable growth. I hope that our stakeholders will look forward to the future development of the Tokyo Gas Group and continue to support us for years to come.



# Tokyo Gas will make necessary investments while ensuring a three-way balance of asset efficiency, financial soundness, and shareholder return



Managing Executive Officer and CFO  
**SATO Hirofumi**

## Using my business experience in performing the duties of CFO

Since I joined Tokyo Gas, I have acquired a wide range of work experience in the Residential Services, Energy Solutions, Gas Rates and Schemes, and Electric Power Systems businesses before becoming the Chief Financial Officer. Now being in the top financial position, I believe that my understanding of cash flow and the left side of the balance sheet (the asset side) from the business perspective I have become accustomed to is my great strength, and I intend to make use of it as CFO.

The business results of Tokyo Gas for fiscal 2020 (ended March 31, 2021) were greatly affected by factors that may be one-off, such as the impact of the COVID-19 pandemic, the soaring LNG prices, and prices in the wholesale power trading market. Apart from these, the main differences from the expected amounts in the Medium-Term Management Plan ("Mid-term Plan") were the difference in the anticipated range of oil prices and exchange rates in overseas business and the difference in business profits of the Solutions and other business areas. In the latter case, additional profits through M&A and other activities are anticipated in the Mid-term Plan. We will continue to consider M&A opportunities during the remaining two years of the plan.

At present, the Tokyo Gas Group is implementing a growth strategy through investment, which tends to cause capital efficiency to decline temporarily. In order to

prevent this, we will focus on the profit contribution to be made within a short time in making investments. Up to now, we have "accelerated" investment, but I think we will gradually shift into a cruise speed as we enter a phase of "control" with application of discipline and with an upper limit.

## Continuing growth investment toward 2030 and further investment aimed at Net-Zero CO<sub>2</sub>

We plan to make investments worth 1 trillion yen within the three-year in the Mid-term Plan. Investment in the first year amounted to approximately 330 billion yen, which is roughly in line with the plan. We are expecting the shale business in North America to generate operating income of several billion yen per year within the Mid-Term plan period. The photovoltaic power generation business also in North America is poised to gradually increase profits from the moment when financing costs drop. The domestic biomass business is expected to contribute to operating profit relatively early. Since it is a business involving a renewable energy source in Japan, a synergy with existing businesses is anticipated. We have also invested in gas distribution companies in Asia, and overall, we believe that we have made balanced investments in various growth areas. We will inform you of progress and outcome of these investments going forward.

In order to achieve our target profit level of 200 billion yen as stated in Compass2030, we must continue investment in new areas and at

the same time make gas, electricity, and other existing businesses generate profits and support the company. In the past few years, the effects of liberalization and the deterioration in the market environment have led to a significant downturn in the return of our existing businesses, and we intend to enhance the efficiency and profitability of these businesses, and to improve ROA and ROE.

In the meantime, we will put more efforts in investment toward decarbonization, which however would not necessarily result in an early return. It would be a long way off for the investment in offshore wind power and hydrogen-related fields to be profitable and drive growth.

In order to make further investment aimed at Net-Zero CO<sub>2</sub>, in addition to the growth investment toward 2030, the balance between asset efficiency and financial soundness will be crucially important. Regarding financial soundness, some of our invested businesses involve various risks in threatening returns, and having sufficient capital is important from the viewpoint of risk management. Moreover, a certain amount of equity capital will be indispensable to continue investment over a long period of time. We hope that our investors will understand this.

### Making use of sustainability finance

In 2020, we issued the first green bond in the gas industry. We received a lot of inquiries from investors, and I felt that this type of bond had a strong advantage in terms of conditions for the issuer. As the concept of transition to achieve the

sustainable development becomes increasingly important toward 2030, I believe we need to raise funds by such means as transition bonds. However, transition financing is in its early days in Japan, and investors tend to have diverse opinions and expectations. We will calmly judge the benefits, taking into account the fact that the use of the transition bonds shall be necessarily limited.

### Reviewing cash allocation, while being mindful of financial soundness

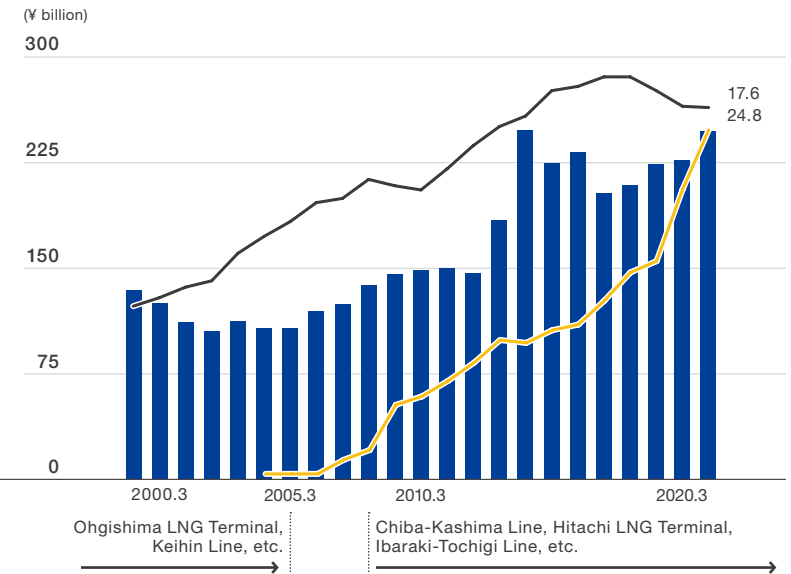
When we began the current shareholder return policy of committing to a total payout ratio of 60% to shareholders, the improved capital efficiency was a challenge and the acquisition and retirement of treasury stock was indispensable. In addition, until now, we had been able to leverage our investments. However, as I stated earlier, we need to be mindful of financial soundness. Moreover, we are now at a point for fundamentally reviewing cash allocation so as to accelerate efforts toward Net-Zero CO<sub>2</sub>. We thereby announced last fall that we will review our shareholder return policy. As we have not yet reached a final conclusion, I have to ask you to wait a little longer for official announcement to be made.

We will continue listening to the opinions of our stakeholders, adhere to our basic financial policies, and work toward improving corporate value. I appreciate for your understanding and support.

### Capital expenditures and sales volume of gas and electricity

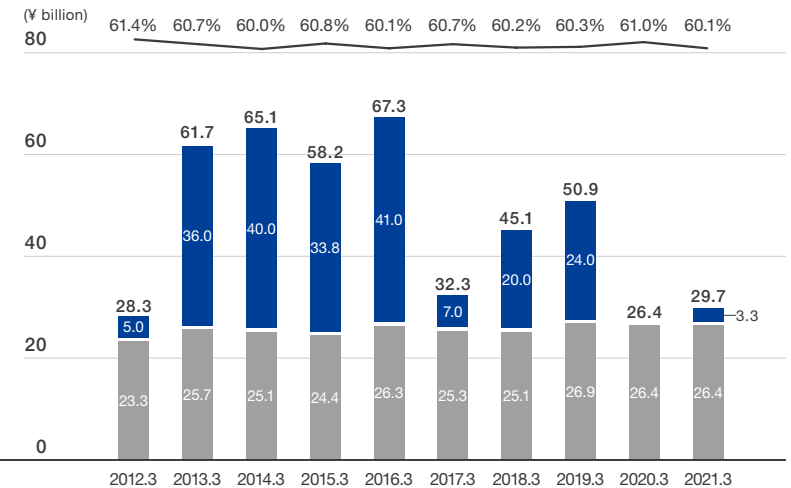
■ Capital expenditures (LH)  
 — Gas sales volume (billion m<sup>3</sup>)  
 — Electricity power sales volume (billion kWh)

\*1 Non-consolidated basis up to fiscal 1998; consolidated basis from fiscal 1999  
 \*2 Gas sales volumes from fiscal 2011 onwards are the combined volume from sales and in-house use (including LNG sales volume and city gas volume used in-house under tolling arrangement).



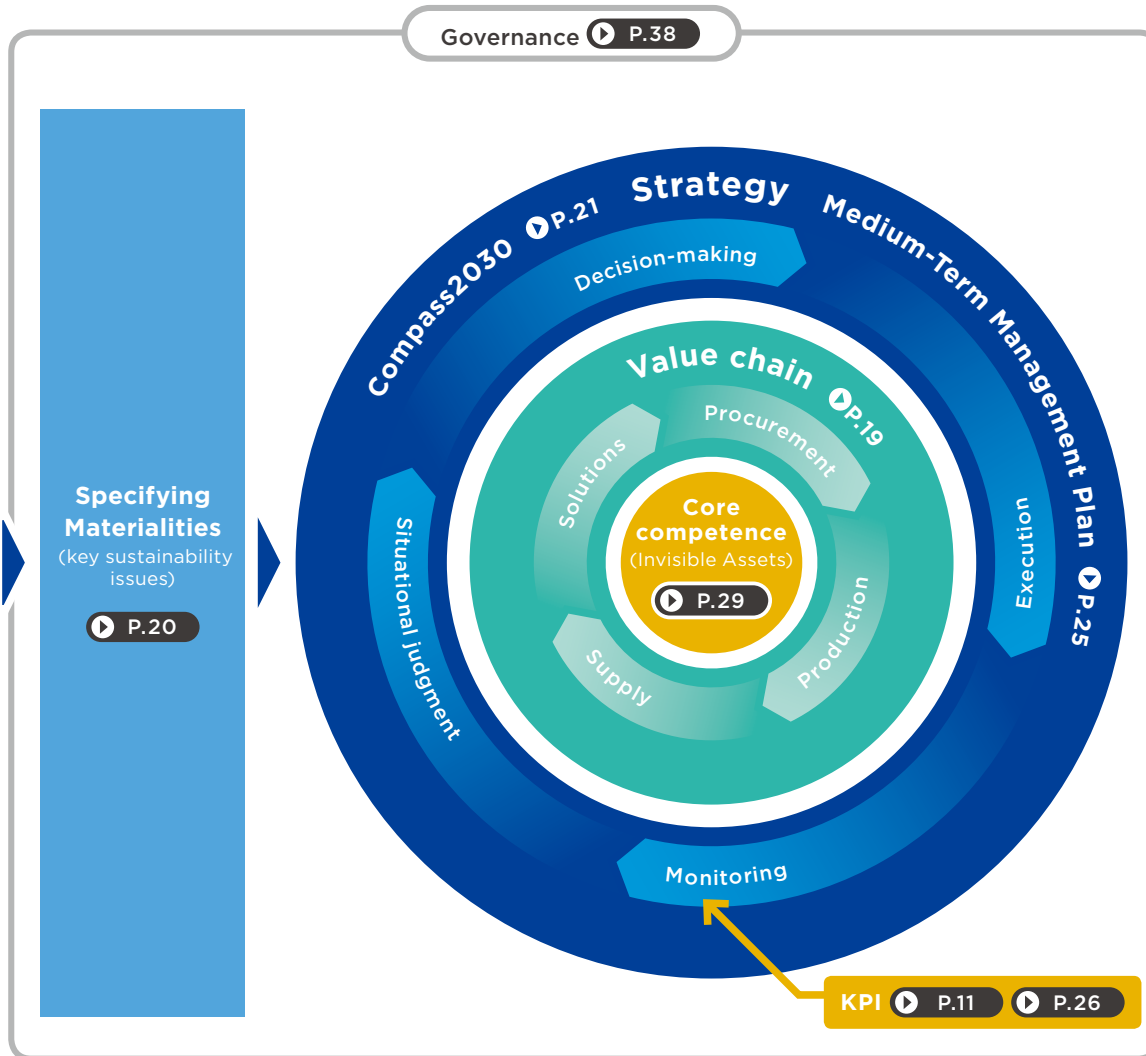
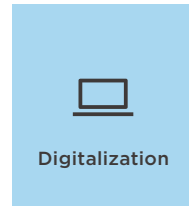
### Shareholder return

■ Share repurchases  
 ■ Dividends  
 — Total payout ratio



# The Value Creation Process

## Changes in the external environment



## Output by segment Fiscal 2020 results

	Gas
Segment sales	¥1,146.7 billion
Segment profit	¥88.4 billion
	Electricity
Segment sales	¥395.9 billion
Segment profit	¥8.6 billion
	Overseas
Segment sales	¥45.9 billion
Segment profit	¥3.8 billion
	Energy-related
Segment sales	¥339.4 billion
Segment profit	¥17.0 billion
	Real estate
Segment sales	¥48.4 billion
Segment profit	¥7.5 billion
	Other
Segment sales	¥110.4 billion
Segment profit	¥3.8 billion

## Outcome Fiscal 2020 results

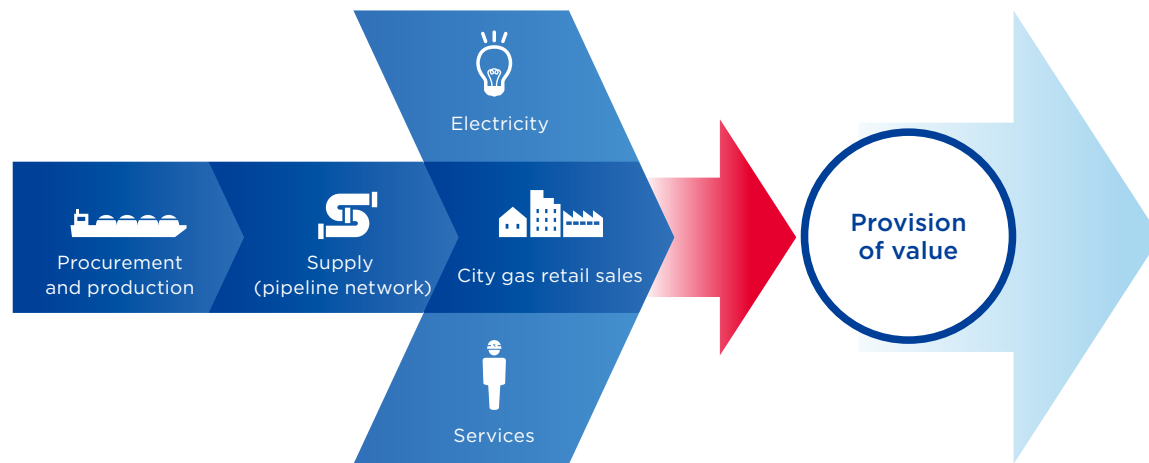
	Fiscal 2020 results	Mid-Term Plan targets for Fiscal 2022
<b>Creation of safe living of customers</b>		
<b>Reduction in energy cost</b>		
<b>Contribution to the global environment</b>		
<b>Creation of comfortable living of customers</b>		
<b>Contribution to CO<sub>2</sub> emissions reduction</b>	6.68 million tons	6.5 million tons
<b>Renewable power source transaction volume</b>	1.383 million kW	2.0 million kW
<b>Number of customer accounts</b>	12.31 million	14.8 million
<b>Natural gas transaction volume</b>	18.2 million tons	17.0 million tons
<b>Operating profit + Equity method income</b>	¥79.1 billion	¥140.0 billion

Transformation of the LNG value chain

# Transformation of the LNG value chain

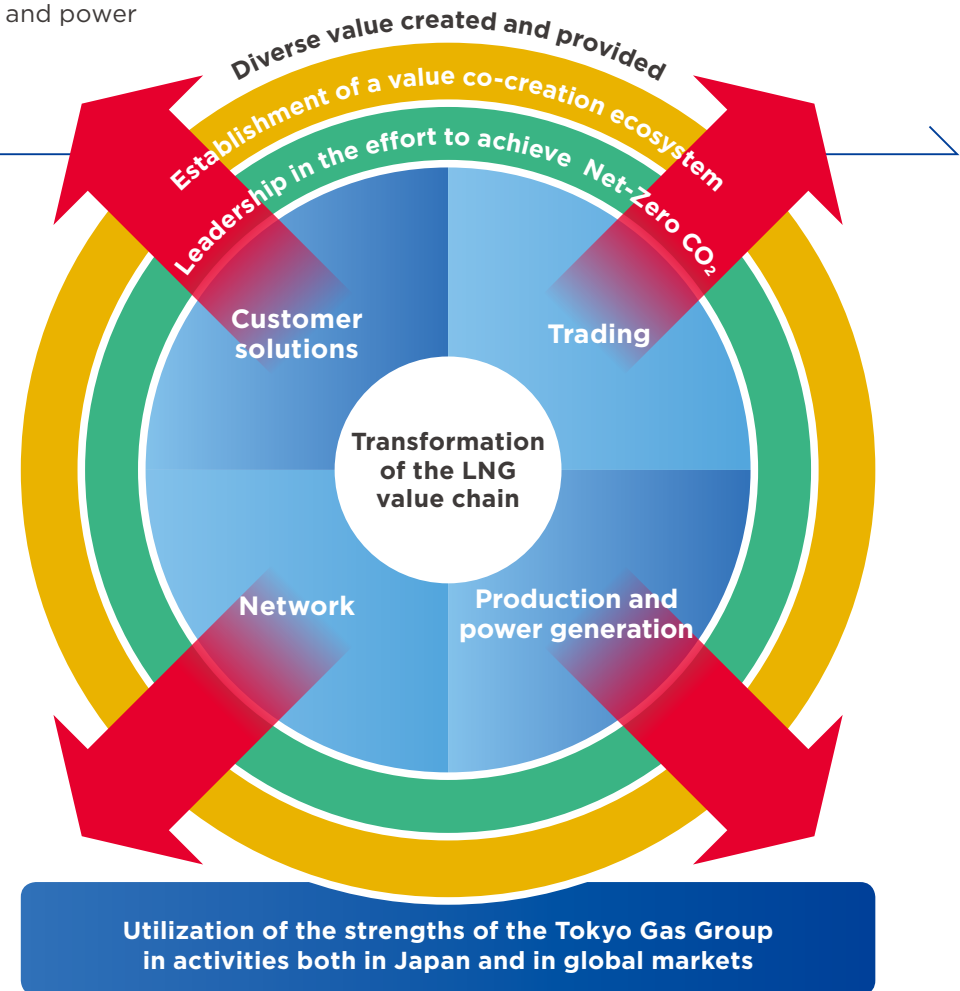
In addition to delivering value in city gas retail sales to customers, we intend to expand the customer base for whom value is created and provided in each function of the LNG value chain. This will be realized by crystallizing the business and expertise that have been accumulated in each function of trading, production and power generation, networks, and customer solutions, and by exploring new domains.

Conventionally



In our conventional business model of selling the value-added LNG to retail customers (final function) by enhancing value of LNG through each function, we have worked on how to enhance that value.

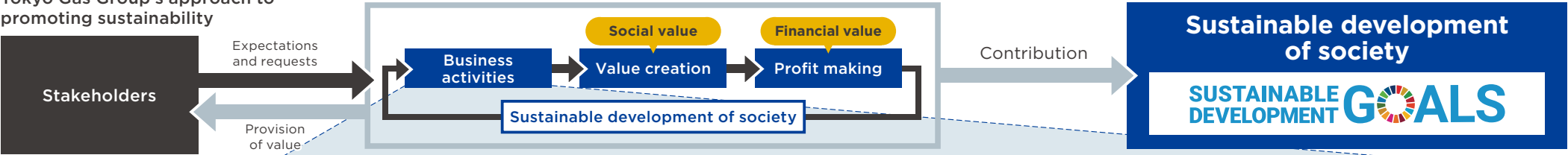
2030



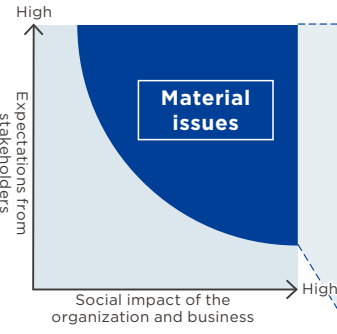
# Promoting sustainability and contributing to the realization of the SDGs

The Tokyo Gas Group’s approach to promoting sustainability is to create social and financial value by solving social issues through our business activities, and to carry out an enduring corporate management in order to contribute to the sustainable development of society. Taking this approach, we are working on materiality (key sustainability issues) through our business activities, with the aim of broadly contributing to the realization of the SDGs.

## Tokyo Gas Group’s approach to promoting sustainability



## Specifying Materialities



With reference to the guidelines, issues to be considered are evaluated by two axes: “Expectations from stakeholders” and “Social impact of the organization and business,” and then specified as materiality (key sustainability issues).

## Relationship between materiality (priority issues in terms of sustainability) and the SDGs

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Leadership in the effort to achieve Net-Zero CO <sub>2</sub> as a leading company dealing in natural gas	Climate change							●		●		●		●				●
	Access to energy							●		●		●		●				●
	Safety and disaster preparedness							●		●		●		●				●
Sound relationships with society	Creation of customer value			●	●	●	●	●		●		●	●	●				●
	Resource efficiency and recycling society						●						●		●			●
	Establishment of relationships with communities	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●
Actions as a responsible company	Diversity				●	●			●		●							●
	Satisfaction through work and labor productivity				●				●		●							●
	Supply chain management					●			●		●		●	●	●	●	●	●
	Information security										●							●
	Governance and compliance					●					●						●	●

\*The relationships portrayed above are subject to revision, as needed, according to changes in the Tokyo Gas Group’s initiatives.

## Examples of initiatives

### Establishment of highly-resilient infrastructure

The gas supply network of Tokyo Gas is very resilient to disruptive floods and power outages. In fiscal 2019, when Typhoon No. 15 and No. 19 broadly hit our supply area with ferocious rain and wind, our supply network was not severely damaged. Subsequently, in fiscal 2020, we formulated a plan concerning wind and flood damage in the business continuity plan (BCP).



### Launch of rental management support service “Mamo ROOM”

“Mamo ROOM” is a service to install sensors in doors for bathrooms and other places in rental housing for the elderly and to notify the rental management company and the resident’s family members when doors have not been opened or closed for a certain period. This contributes to safer living for single elderly people.



### House cleaning service

The high-quality cleaning service provided by staff who have passed a training program conducted by Tokyo Gas is intended to alleviate customers’ cleaning tasks and help create freer time. In Japan, where the housework burden is still mainly borne by women, awareness and assessment of housework through this housework support service will help to contribute to gender equality.



# Tokyo Gas Group Management Vision Compass2030

## Providing energy and solutions for future lifestyles, society and the earth

On November 27, 2019, we announced a new management vision called "Compass2030", in which we presented what we aim to be in a decade from now, as a leading domestic company dealing in natural gas (a fossil fuel).

### VISION

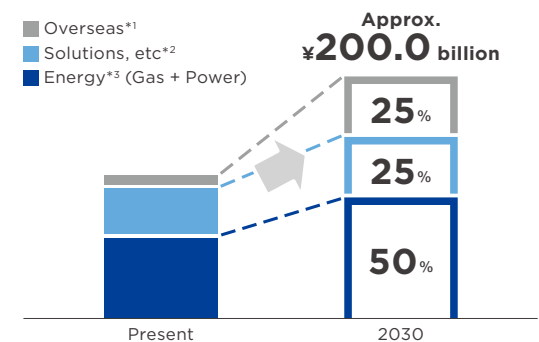
- What we aim to be in 2030 -

Our goal will be a business group which continues to create value together with our customers, business partners and society as a whole while becoming a leader in future energy systems.

#### Management guidelines and key figures

	FY2020 results	2030
Profit level	¥79.1 billion	Approx. <b>¥200.0 billion</b>
Contribution to CO <sub>2</sub> emissions reduction (base year: FY2013)	-6.68 million tons	<b>-10.00 million tons</b>
Renewable power source transaction volume (FY-end)	1.383 million kW	<b>5.00 million kW</b>
No. of customer accounts (FY-end)	12.31 million	<b>20.00 million</b>
Natural gas transaction volume (FY)	18.20 million tons	<b>20.00 million tons</b>

#### Company portfolio in 2030: Profit level



\*1 Overseas: All overseas businesses \*2 Solutions, etc.: Ongoing service agreements, engineering, real estate, etc. \*3 Energy: Domestic gas and power business



**Q** What do you mean by “a business group which continues to create value”?

**A** We envision a business group that establishes a “value co-creation” ecosystem and provides a variety of solutions.

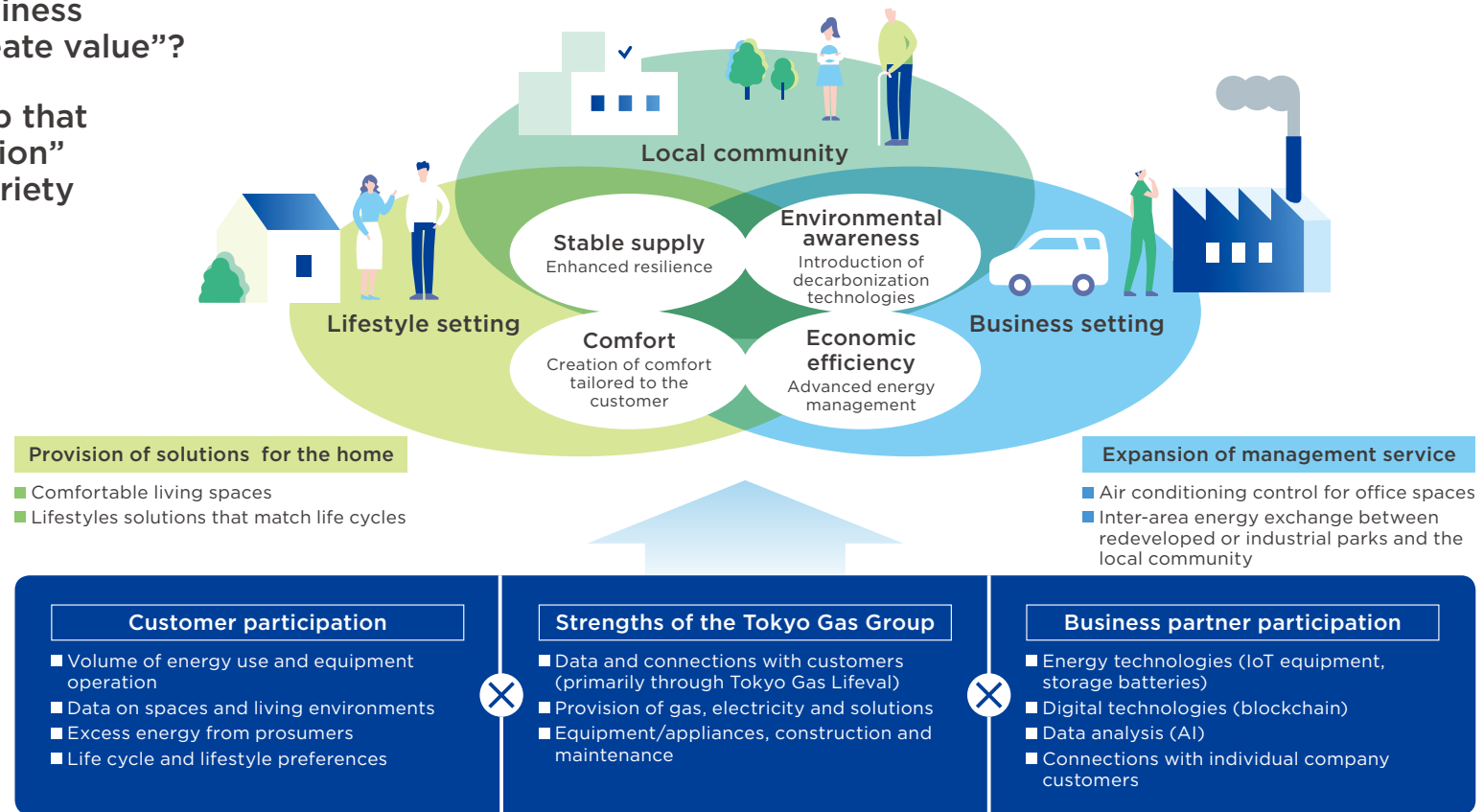
We will strive to establish a value co-creation ecosystem by leveraging the strengths of our group, such as Tokyo Gas Lifeval, which functions as our last mile\*2, and by promoting business partner participation via alliances with companies in different industries and other firms, and cooperation with local governments.

Moreover, by having customers participate in the ecosystem, we will flexibly combine diverse products, technologies and services, and provide a variety of solutions that resolve various issues in areas ranging from individual lifestyles to the local community.

\*1 Ecosystem: Business environment in which many companies combine their technologies, expertise, and knowledge in their specific areas of strength in order to create new value.

\*2 Last mile: Site operations that require human intermediation in the final process of the value chain.

**A value co-creation ecosystem\*1**



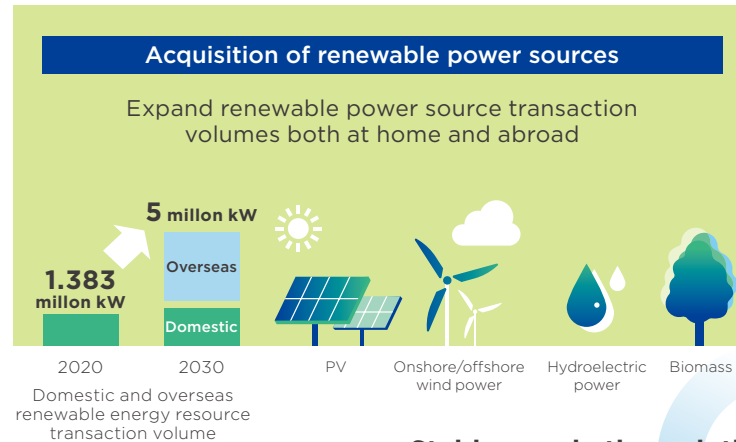


**Q** How do you plan to “lead the future energy systems”?

**Coordination of renewable energies and natural gas**

**A** We will coordinate renewable energies and natural gas.

We will expand the transaction volume of renewable energy sources in Japan and abroad. We are also developing a new business to use PV\*1, storage batteries, and other decentralized power sources for residential customers. Further we are promoting Virtual power plant (VPP\*3). Fluctuation in the generation volume of renewable energy, which is susceptible to the weather, is complemented by easily-controllable natural gas-fired power generation. By using digital technology and combining decentralized power sources with large-scale power sources, which include renewable energies and natural gas-fired power plants, we intend to achieve a stable and inexpensive supply of energy.



**New businesses utilizing decentralized power sources**

Promote new decentralized businesses utilizing PV\*1, storage batteries, EV\*2, etc. as well as VPP\*3

**SolarAdvance**

**Stable supply through the combination of renewable energies and natural gas, using digital technology**

**Effective use of natural gas**

Adjustment of fluctuating renewable energy output using gas-fired power generation and gas cogeneration systems

Gas-fired power plant Gas cogeneration systems ENE-FARM

\*1 PV: Photovoltaic power, \*2 EV: Electric vehicles, \*3 VPP: Virtual power plant. A mechanism that uses IoT to manage and control decentralized power sources, batteries, etc. as if they were a single power plant.





**Q** How do you “continue to create value”?



**A** We plan to continue to create value by taking the following four measures

**1**

**Transformation of the LNG value chain to maximize each of its functions**

We intend to create various types of value in each of the functions—from trading to production and power generation, networks, and customer solutions—so as to expand our customer base.

**2**

**Solving problems in daily life and businesses**

We will develop solutions via cooperating with business partners at an accelerated rate so as to confront customers’ needs and resolve their problems. We will also establish a digital infrastructure for value co-creation and combine a range of data and AI predictions, so as to instantly provide solutions tailored to individual customers’ needs.

**3**

**Leading the transition to a decarbonized society**

The Tokyo Gas Group is promoting effective use of natural gas, expansion of renewable energy sources, and development of core element technologies for decarbonization, as we are taking up the challenge to achieve Net-Zero CO<sub>2</sub> emissions, including customer emissions, in our overall business activities.

**4**

**Overseas expansion**

We will develop LNG infrastructure, invest in shale gas and other resource development, and renewable energy businesses, and expand LNG transaction and LNG trading by making use of our related asset holdings. By taking these actions, we aim to triple overseas profits.

# Tokyo Gas Group FY2020 - 2022 Medium-Term Management Plan

This Medium-Term Management Plan has been established to enable us to work to make steady progress and to reinforce the foundations of our business for future growth and expansion in the three-year period starting in FY2020, despite the recent difficult circumstances.

## Overview of the Medium-Term Management Plan

In preparation for future growth and expansion, we will establish the following as key strategies:

- ① Evolution of customer solutions
- ② Expansion of LNG business
- ③ Acceleration of overseas business
- ④ Shaping of Net-Zero CO<sub>2</sub>

We will strive to

- ① Implement cost structure reform
- ② Continue the digital transformation (DX)\*
- ③ Build a flexible organization towards changes

in order to change the revenue and expenditure structure, create resources for future growth and also strengthen our business foundation.

\* DX: Digital transformation. The use of data and digital technologies to transform products, services and business models based on customer and societal needs, and also transform work operations themselves as well as organizations, processes, and corporate culture and climate.

## Key Strategies

### Key Strategy 4

### Shaping of Net-Zero CO<sub>2</sub>

Offer solutions that optimize natural gas and renewable energies, and seek new technologies that hold promise for the future.

From the Tokyo metropolitan area to other parts of Japan and to other countries

### Key Strategy 1 Evolution of customer solutions

Provide energy and services based on a business model that fuses digital and physical operations.

### Key Strategy 2 Expansion of LNG business

Use assets to provide LNG with increased value as a product to utility and other customers both at home and abroad.

### Key Strategy 3 Acceleration of overseas business

Utilize accumulated strengths and achievements to provide customers in other parts of Asia and elsewhere with solutions aimed at achieving effective use of natural gas.

## 3 challenges of Compass2030

### Challenge 1

Leadership in the effort to achieve Net-Zero CO<sub>2</sub>

### Challenge 2

Establishment of a value co-creation ecosystem

### Challenge 3

Transformation of the LNG value chain

## Strengthening of business foundation

### Strengthening of business foundation 1

Implementation of cost structure reform

### Strengthening of business foundation 2

Continuation of DX\*

### Strengthening of business foundation 3

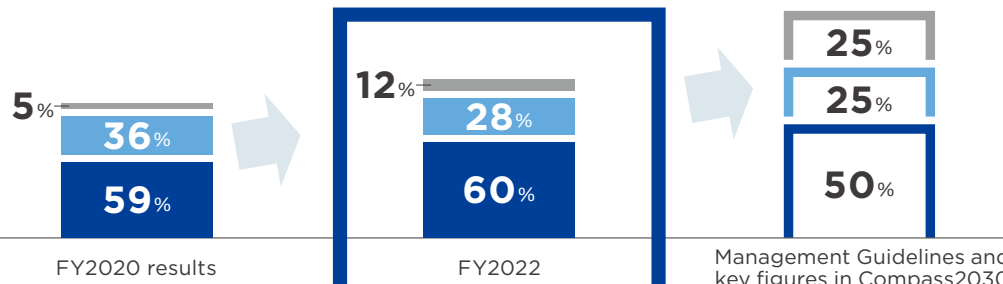
Establishment of a flexible organization towards changes

## Key figures

We will achieve operating profits + equity method income of JPY 140.0 billion in FY2022 through a balance between cost structure reform (primarily in the gas business), the expansion of electricity, solutions, etc., and investment in growth.

### Project portfolio composition: Operating profit + Equity method income

- Overseas\*1
- Solutions, etc.\*2
- Energy\*3 (Gas + Power)



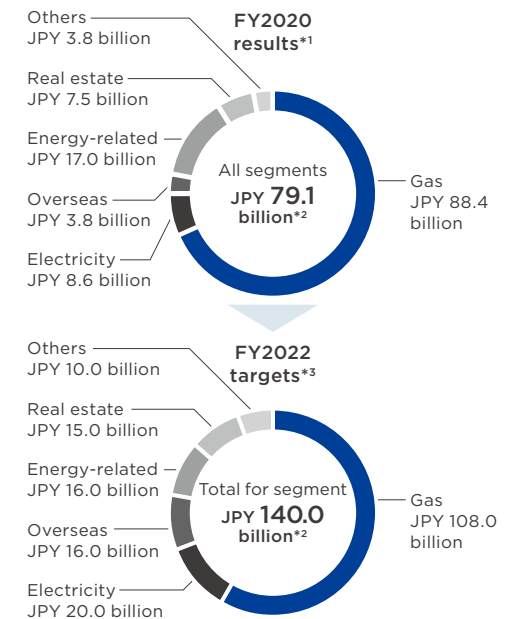
KGI	FY2020 results	FY2022
<b>Operating profit + Equity method income</b>	JPY 79.1 billion	<b>JPY 140.0 billion</b>
<b>Financial indicators</b>		
ROA	1.9%	Approx. 4%
ROE	4.3%	Approx. 8%
D/E ratio	0.92	Approx. 0.9

KPI	FY2020 results	FY2022	Management Guidelines and key figures in Compass2030
No. of customer accounts (as of the end of FY)	12.31 million	14.80 million	20.00 million
Natural gas transaction volume	18.20 million tons	17.00 million tons	20.00 million tons
Segment profit from Overseas Business	JPY 3.8 billion	JPY 16.0 billion	-
Contribution to CO <sub>2</sub> emissions reduction (as compared to FY2013 levels)	-6.68 million tons	-6.50 million tons	-10.00 million tons
Renewable power source transaction volume (as of the end of FY)	1,383 million kW	2.00 million kW	5.00 million kW
Cost structure reform (compared to FY2019)	-JPY 12.0 billion	-JPY 30.0 billion	-

\*1 Overseas: All overseas business \*2 Solutions, etc.: Energy-related, real estate, other

\*3 Energy: Gas and electricity business in Japan

### Supplementary reference Profit planning by segment



Segment	Main activities
<b>Gas</b>	Factor in increased depreciation costs and intensified competition while carrying out drastic cost structure reform and boosting LNG sales (trading).
<b>Electricity</b>	Achieve a balance between reducing marketing costs and increasing the number of accounts.
<b>Overseas</b>	Growth of upstream, midstream and downstream projects, primarily in North America.
<b>Energy-related</b>	Promote cost structure reform including making services for profit.
<b>Real estate</b>	Take into account the full-fledged start of the Tamachi Project
<b>Others</b>	Promote cost structure reform and create profitability of M&A.

1. Frame in FY2020: Oil price \$43.35/bbl, Exchange rate ¥106.1/¥

2. Including consolidation adjustment

3. Anticipated frame for FY2022: Oil price \$60/bbl, Exchange rate ¥110/¥

Update

Key Strategy 1

Evolution of customer solutions

Key Strategy 2

Expansion of LNG business

Provide solutions for problems in customers' daily lives

Improve value of services provided manually

We have expanded the range of services to plumbing, in which customers often experience problems, in addition to gas equipment. We plan to expand services to housekeeping and housework support.



Launched optional services for electricity equipment and plumbing in the "Special Support For Gas Appliances" program (Oct. 2020)

Improve convenience by leveraging digital tools

We will improve customer satisfaction by accumulating and analyzing customer data to improve work quality, reduce customers' hassle and save time.

Specific examples Trials in FY2020

- For requests of repairs, we analyze and forecast the necessary work from the information received to improve the completion rate in one visit.
- We obtain and aggregate the results of service users' recommendation assessment (scale of 1 to 11) on a timely basis and utilize them to improve workers' skills and service specifications.

Diversify energy services and expand service areas

Formed Strategic Alliance with UK-based Octopus Energy

Tokyo Gas agreed to invest in Octopus Energy Group Limited, a rapidly growing company in the U.K. market, and to establish a joint venture company in Japan.

We plan to realize a value of new customer experience by leveraging Octopus Energy's digital technology and customer service know-how, and providing electricity rate and service menu tailored to needs of each customer. A new business model will be created with customers, regardless of areas from fall 2021.



Diversify energy services and expand service areas

We will offer services that facilitate introduction of renewable energy to a broad range of customers, including factory, detached house, condominium and building customers through a third-party ownership model\* for solar power generation.



Launched Hinatao Solar, a service for condominiums and buildings (Oct. 2020).

\*The Tokyo Gas Group installs solar power generation equipment on the roof of customers' buildings or in their premises and supplies the generated electricity to those customers

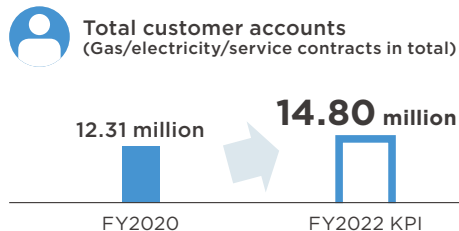
Established a new LNG trading company

Tokyo Gas established TG Global Trading Co., Ltd., a wholly owned subsidiary engaged in the trading of LNG. The company aims to expand the LNG trading business by maximizing and optimizing assets (storage tanks, LNG vessels and LNG sales and purchase agreements) owned by the Tokyo Gas Group.



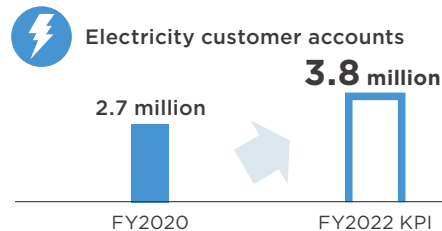
TG Global Trading

KPI for 2022

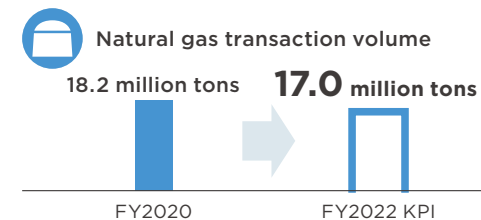


Reason for setting this KPI

This KPI has been set as an indicator to measure the effects of our efforts to maximize our customer base at an early stage in order to ensure stable profit in the gas/electricity/service business.



KPI for 2022



Reason for setting this KPI

This KPI has been set as an indicator to quantify the expansion of business with LNG as a commodity, including LNG trading and the overseas LNG business, in addition to domestic gas sales.

Key Strategy 3

Acceleration of overseas business

Key Strategy 4

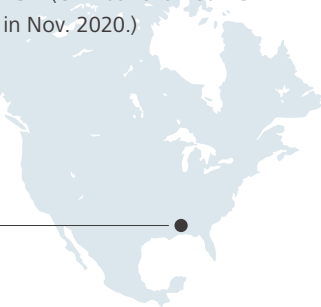
Shaping of Net-Zero CO<sub>2</sub>

Strengthening of business foundation 1

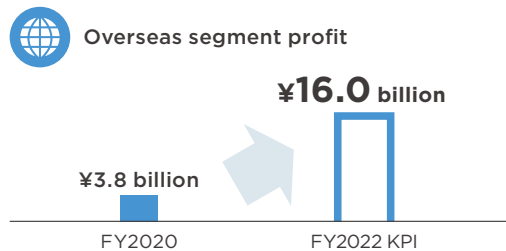
Implementation of cost structure reform

Acquired tight sand assets in the U.S.A. and a majority interest in Castleton Resources LLC (CR) (July 2020)

CR, an upstream gas company in Texas in which Tokyo Gas America Ltd. has a stake, has decided to acquire gas assets in Louisiana. Tokyo Gas took a majority interest in CR. (CR was renamed TG Natural Resources in Nov. 2020.)



KPI for 2022



Reason for setting this KPI

This KPI has been set as an indicator to measure the growth of our overseas business, which drives future profit, toward its target.

Expanded use of renewable energy power sources

We have obtained renewable energy power sources at a speed that outpaces our plan through large investments in solar power generation in the U.S.A. and wood pellet biomass power generation in Japan.

To promote the development of floating offshore wind power in Japan and abroad, we are obtaining the necessary technologies, such as by leveraging the floating system technology developed and owned by Principle Power, Inc. of the U.S.A. (invested in May 2020).

We will aim to further acquire power sources and roll out business while assessing energy policies and economic trends.



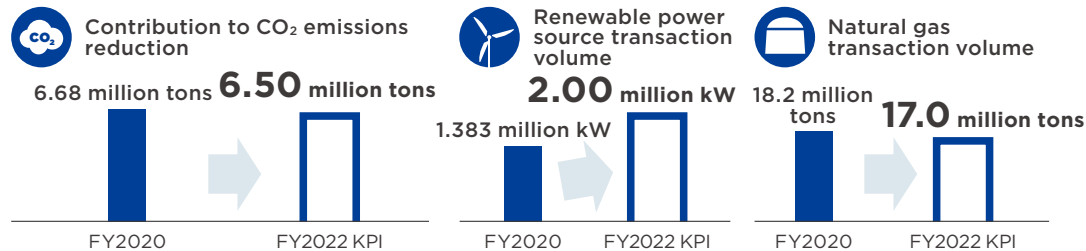
Photo courtesy of Principle Power. Artist: DOCK90

Feature

Progress and highlights of the Medium-term Management Plan



KPI for 2022



\* As compared to FY2013 levels, including contribution at customer site

\* Domestic and international, including purchases

\* Including overseas business

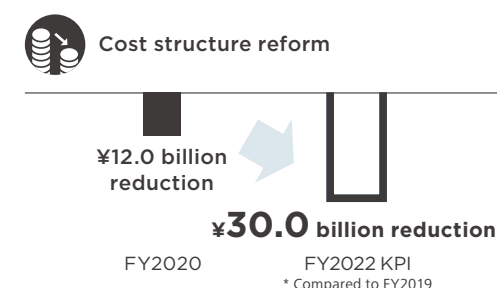
Reason for setting this KPI

This KPI has been set as an indicator to continuously measure outcomes from CO<sub>2</sub> emissions reduction contributions, including those from customers, through expanded effective use of natural gas, increases in the scale of use of renewable energy, etc.

Reason for setting this KPI

This KPI has been set as an indicator to quantify the increased use of renewable energy power sources and business expansion.

KPI for 2022



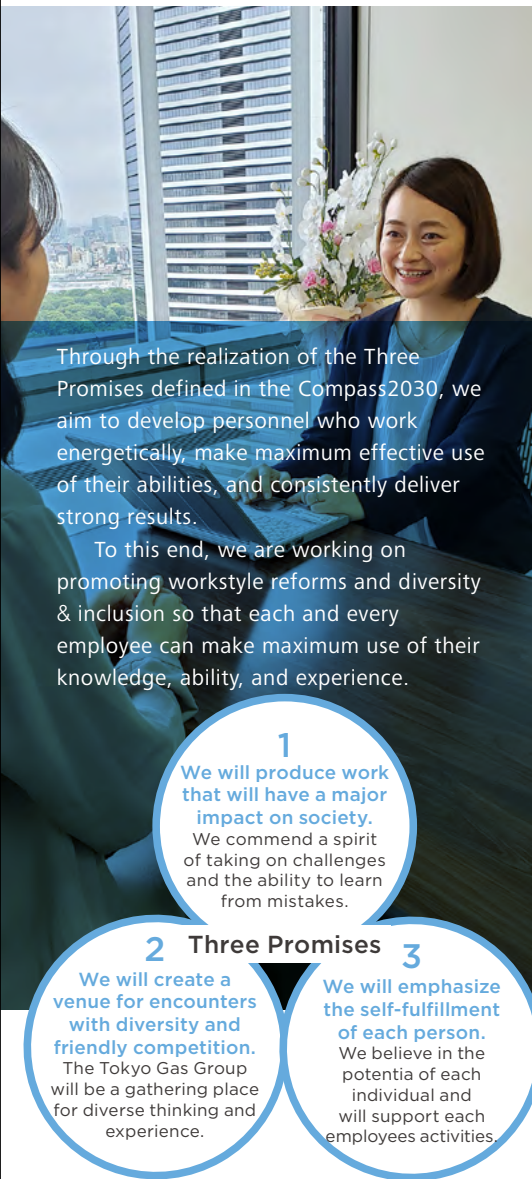
Reason for setting this KPI

This KPI has been set as an indicator to measure the effects of our efforts to drastically review operations and their structure and create resources for growth to be allocated to immediate profit contribution and key strategies.

# INVISIBLE ASSETS



# Personnel Strategy



Through the realization of the Three Promises defined in the Compass2030, we aim to develop personnel who work energetically, make maximum effective use of their abilities, and consistently deliver strong results.

To this end, we are working on promoting workstyle reforms and diversity & inclusion so that each and every employee can make maximum use of their knowledge, ability, and experience.

1

**We will produce work that will have a major impact on society.**

We commend a spirit of taking on challenges and the ability to learn from mistakes.

2 Three Promises 3

**We will create a venue for encounters with diversity and friendly competition.**

The Tokyo Gas Group will be a gathering place for diverse thinking and experience.

**We will emphasize the self-fulfillment of each person.**

We believe in the potential of each individual and will support each employee's activities.

## Personnel hiring and development

In order to continue to create value with customers, business partners, and society while becoming a leader in the future energy system, we strive to hire and foster personnel who can flexibly cope with the changing business environment and play a core role in diverse fields.

## Workstyle reform (Improving productivity and achieving a healthy work-life balance)

In order to enable each and every one of our employees to work energetically and make maximum effective use of their abilities, we are working proactively to rectify and reduce long working hours, and to implement workstyle reforms with awareness of "the value of time," which we regard as important issues for management involvement.

## Promoting diversity & inclusion (Promoting active roles for diverse personnel)

The Tokyo Gas Group has established a basic policy to promote diversity & inclusion with the aim of becoming a corporate group in which each and every Group employee can make maximum effective use of their knowledge, skills and experience, and play an active role. Based on the "Diversity Top Management Commitment," we are promoting diverse workstyles and empowerment of diverse personnel, including women's empowerment, more employment of disabled people, and support for the career development of employees in their 50s and over.

### Hiring personnel with high levels of expertise

In addition to hiring new graduates for specific job types (in humanities, sciences and the professional domain), we also engage in flexible hiring of students excelled in certain fields as well as experienced and highly-specialized mid-career personnel.

### Strategic shift to growth domains

In addition to our gas business, we also prioritize assignment of personnel to strategically-important fields such as our overseas, electric power, trading and other business operations. In this way, we are promoting growth and expansion in a diverse range of fields.

### Developing business leaders

We train business leaders who will lead the Tokyo Gas Group in the future, with a training program that focuses primarily on development through a wide range of on-the-job training (OJT) experiences gained by means of transfers and rotations, combined with additional off-the-job education and training (OFF-JT).

Hiring, fostering and placing of personnel who realize "Compass2030"

### Specific initiatives

Collaborative work space of a new office of the Digital Innovation Division



#### Promoting workstyles with awareness of the value of time

- Each workplace to set a day that everyone leaves office on time, etc.

#### Environmental improvement to allow diverse personnel to display their full potential

- Introducing a "Work Anywhere" program which eliminates restrictions on working location (work at home, mobile work)
- Improving satellite shared offices
- Improving the office environment toward further improvement in productivity
- Working to create workplaces that enable innovation to occur
- Work in a Free-form Animated Manner (online video conferencing, office reforms, etc.)
- Promoting automation / mechanization using ICT, and more sophisticated use of data (utilizing RPA, audio AI, etc.)

### External Evaluation

Selected as a Nadeshiko Brand



Granted Kurumin certification



Selected as a Health & Productivity Stock



### Targets and results

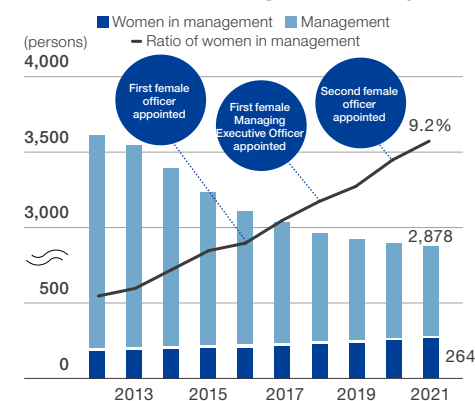
#### Targets in promoting women's empowerment FY2020 results

11% or more for the ratio of women in management by fiscal 2025	8.7%
100% utilization rate for a system that helps both male and female workers balance careers and taking care of children	93.5%

### Specific initiatives

<b>Promoting employment of people with disabilities</b>	<ul style="list-style-type: none"> <li>■ Employment rate of 2.54%, exceeding the mandatory rate (as of June 2021)</li> <li>■ Established a liaison committee to promote employment of disabled people as a group</li> <li>■ Working to create safe and comfortable working environments</li> </ul>
<b>Career development support for employees in their 50s and over</b>	<ul style="list-style-type: none"> <li>■ Established the "Grand Career System" to support career development for employees in their 50s and over, through training sessions and interviews with career consultants, etc.</li> </ul>

### Ratio of women in management at Tokyo Gas



# Lifeval—the last mile operator of Tokyo Gas



Maintenance Group,  
Izumi Outlet  
Yokohama Totsuka  
Tokyo Gas Lifeval  
Tokyo Gas Ecomo Co., Ltd.

**ABE Masaru**

Our bonds and relationships of trust with our customers, developed over the past 136 years, are our greatest strength.

Tokyo Gas Lifeval acts as the face of Tokyo Gas in each community. We precisely meet customers' needs and serve as a one-stop provider of products and services that help improve the quality of life, in order to build close ties with individual customers.

## Speedy response to customers and various efforts made in direct contact with them

I am in charge of repairing gas appliances in an area of around 150,000 households in Izumi-ku, Totsuka-ku, and Sakae-ku in the city of Yokohama and I visit 5-10 customers per day. When a customer requests a repair, I try my best to visit the customer as soon as possible and promptly complete the repair, so as not to cause inconvenience to the customer's life. I also have to tailor my visit to the lifestyle of the customer who will be present for the repair and efficiently and safely complete the repair. In order to accomplish this, I make continuous efforts to obtain knowledge and know-how needed for the repair, and to prepare in advance and bring all parts which may possibly be needed, depending on the type of repair.

## Communication aimed at obtaining new business opportunities

I am in my twelfth year with the company. When I was assigned to repairs, I had little specialized knowledge of repairs. I have therefore absorbed knowledge and knowhow from my seniors and steadily accumulated experience. I have also accompanied my sales

associates and learned how to communicate well with customers. I now can make proper greetings and explanations to customers by myself, depending on their situation. I try to speak slowly and clearly to elderly customers, while I explain repair details concisely and accurately with fewer words to customers who are busy. To every customer, I make sure to say after the repair, "Please feel free to let me know if you have any problems related to your residence, other than gas appliances." This has led to consulting about customers' plumbing problems and receiving a designated order for renovations in many cases. I will continue to make various improvements so that I can receive new requests.

## As the last mile operator of Tokyo Gas, we are committed to helping support customers' lives

Our job is to closely ascertain the needs of customers through direct contact with them and provide solutions that are actually necessary. This cannot be possible unless we establish bonds and relationships of trust with customers. In addition to conducting thorough and reliable repairs, I try to remember the customer's name and the conversation I had in the past and to show up at their residence

when I am in the neighborhood. Such small encounters, when they accumulate, enhance relationships of trust with customers, capture their needs in a timely manner, and lead to new business opportunities. I am determined to continue to enhance my technical skills, cherish the contacts with customers, and help them to create a safe, reliable, and pleasant lifestyle.



## Bonds with customers\*1

Community-based	Outlets	<b>156 outlets</b>
	Employees	<b>13,000</b>
Direct contacts	Repairs, etc.*2 and periodic safety inspections*3	<b>5.2 million contacts</b>

\*1 Including Enesta and Enefit

\*2 Repairs, etc. include opening/closing of gas fixtures.

\*3 FY2020 results



# LNG infrastructure engineering capability



## Accumulated “user know-how” regarding LNG engineering

Since 1969, when we first imported LNG in Asia, Tokyo Gas Engineering Solutions Corporation (TGES) has been engaged in the LNG value chain from upstream to downstream. The company is accumulating “user know-how”, thanks to its technologies, knowledge, and experience, obtained from design, construction, and consulting services for close to one half of the LNG terminals in Japan (20+), including LNG receiving terminals owned by Tokyo Gas (Sodegaura, Negishi, Ohgishima and Hitachi), and their operation and maintenance (O&M).

## World top-class LNG engineering capability

We have accumulated “user know-how” regarding LNG facilities—from tanks and other main facilities to peripheral ones of LNG terminals— as we became an expert on various and numerous LNG facilities in Japan and overseas and mastered “what works” and “what does not work” through abundant design experience and O&M practice over many years. We thus provide numerous engineering solutions to improve reliability, reduce risks, and raise efficiency and achieve labor saving in O&M from the customer’s viewpoint. With regard to

The Tokyo Gas Group plans to leverage its LNG infrastructure engineering capacity, cultivated in the LNG value chain from upstream to downstream for a half century, and aims at overseas business expansion mainly in Asia, where demand for natural gas is increasing.

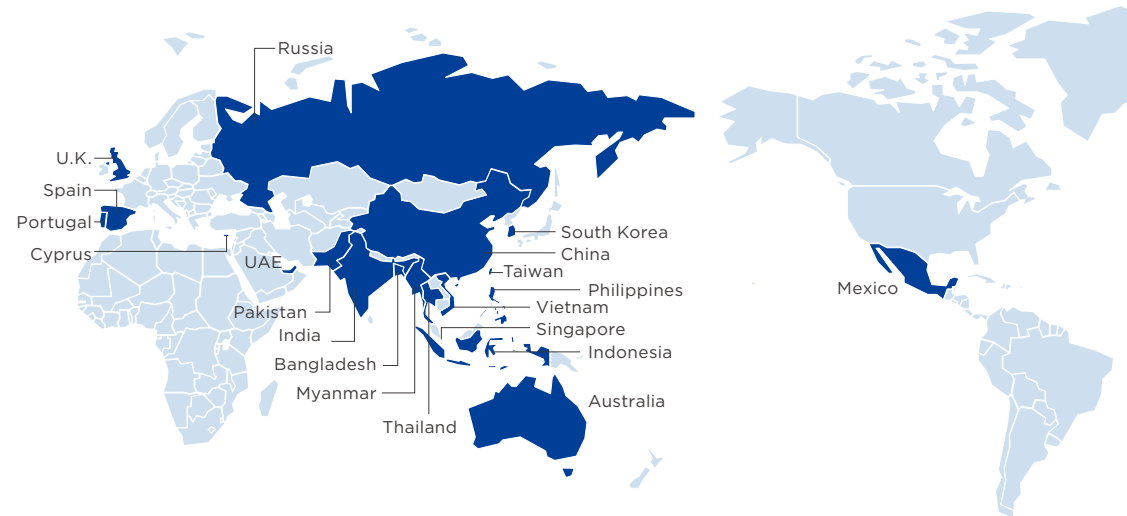
pipelines for the stable, safe supply of gas, we are also experienced in a wide range of engineering services, from feasibility studies and planning to design, construction, and O&M.

## Overseas achievements

Being accredited for advanced LNG technologies cultivated in Japan and our abundant experience, we have been engaged in LNG engineering services overseas since the late 1970s. Our list of achievements includes more than 20 LNG

terminals and over 100 projects in 20 countries and regions. We are further advancing our engineering capability and know-how by utilizing our network of engineers and engineering companies in various countries, which was established through overseas projects. Such a business growth spiral has helped us to receive a large-scale consulting service project that required about 60 personnel and to acquire an entire management order for construction of a large LNG terminal in recent years.

## TGES’ Overseas Project Achievements



# Safe and stable energy supply infrastructure



## Measures to help customers use gas with ease of mind

### Earthquake-resistant production and supply facilities

We adopted structural designs with superior anti-seismic properties for LNG terminals, and introduced materials that are resilient to ground deformation to our pipeline network. As a result, our city gas production and supply facilities are highly resistant to seismic activity, even in the case of major earthquakes, such as the Great Hanshin-Awaji (Kobe) Earthquake, or the Great East Japan Earthquake.

### Development of a disaster-readiness system

We have developed a disaster-readiness system, which subdivides our low-pressure pipeline network into approximately 300 blocks and remotely stops the supply of gas, in block units, depending on the extent of the damage. This enables minimization of the impact of supply stoppages and prevention of secondary damage.

Moreover, in order to resume gas supply to areas without damage on the day of the earthquake, we have adopted a remote operating system to resume gas supply to such designated areas. This system has been in place since fiscal 2014.

In order to help our customers use gas with ease of mind, we are working on various safety measures. They include earthquake-resistant measures for production and supply facilities, development of a disaster-readiness system for a large earthquake, and safety inspection of customers' gas equipment.

In order to fulfill our public duty as an integrated energy company, we intend to further enhance the resilience of our natural gas infrastructure in the Tokyo metropolitan area, which is the center of politics, the economy, and industries.

### Monitoring and control of production and supply facilities, and safety inspection of gas facilities

The Supply Command Center performs 24/7 monitoring and control of the status of operation of city gas production and supply facilities. When the Safety Command Center receives gas leak reports from customers, personnel at Gaslight 24 will immediately visit the reporting customer to take swift action even on holidays or at night.

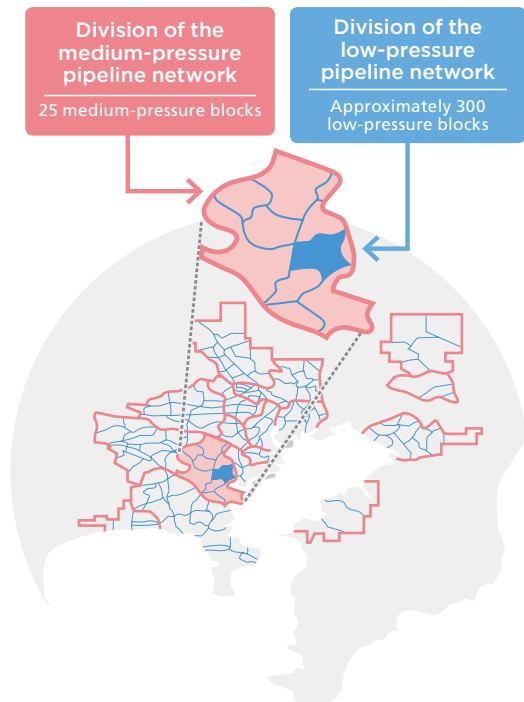
We conduct inner-pipe leakage testing and periodic safety inspections of gas appliances for all customers at least once every four years.

### Safety know-how and measures to prevent earthquake disasters

Resistance to seismic activity	High level of resistance to seismic activity, even in the case of major earthquakes, such as the Great Hanshin-Awaji (Kobe) Earthquake, or the Great East Japan Earthquake
Subdivision of units for supply stoppage in the event of an earthquake or other disasters	Subdivided the medium-pressure pipeline network into 25 blocks
	Subdivided the low-pressure pipeline network into approx. 300 smaller blocks
Periodic safety inspection	Installation of 4,000 seismometers (SI sensors)
	2.66 million (FY2020)

## Enhancement of resilience functions

We are accelerating enhancement of the resilience of our natural gas infrastructure in the Tokyo metropolitan area by creating our second circular trunk pipeline network through the opening of the Ibaraki Main Pipeline in March 2021 and by enhancing cooperation with local governments and other infrastructure companies.





# TCFD

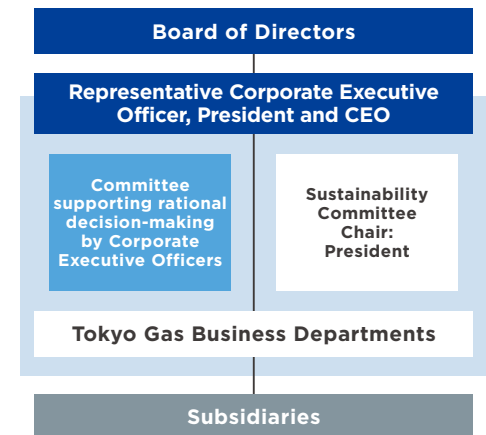
## The Tokyo Gas Group's climate-related initiatives

We regard the Task Force on Climate-Related Financial Disclosures (TCFD) framework as being an effective way to promote information disclosure and dialogue with stakeholders on climate-related issues. We therefore signed the statement of support for the TCFD, in May 2019. We began information disclosure according to TCFD's recommendation in fiscal 2020 and will continue to appropriately disclose information on the impact of climate change on the Tokyo Gas Group's business activities and the measures to be taken.

### Governance

We strive for appropriate, prompt decision-making and efficient execution of business operations by discussing the issue of promoting sustainability as an important matter related to business operation. This is done by a select committee that supports the Corporate Executive Officers' rational decision-making to help it to be proper and effective. When appropriate, Directors are provided with reports on the status of execution of business operations, which are based on decisions made by the Board of Directors, and hold discussions on them as needed. Moreover, a Sustainability Committee, which is chaired by the President and aimed at promoting sustainability issues, has been established to report important matters to the Board of Directors.

### Sustainability promoting structure





## Strategies

In our statement on future management, Compass2030, announced in November 2019 the Tokyo Gas Group declared it was to take up three challenges, including “Leadership in the effort to achieve Net-Zero CO<sub>2</sub>.” Since then, the move toward decarbonization has been gaining momentum in Japan as the Japanese government called for the nation to achieve net zero carbon emissions by 2050 and made a commitment to raise its reduction target in greenhouse gas emissions to 46% compared to the level in 2013.

Under such circumstances, the Tokyo Gas Group is working to increase the volume of natural gas it handles, by expanding overseas businesses and other means, expanding renewable energy sources which have a high affinity with natural gas, and gaining benefits from the decarbonization technology development of gaseous energy, such as hydrogen and methanation. We are dedicated to thereby enhance and increase the initiatives

Feature: Challenge to achieve Net-Zero CO<sub>2</sub> [▶ P.03](#)

aimed at achieving Net-Zero CO<sub>2</sub> emissions and take a leading role in the transition to a decarbonized society.

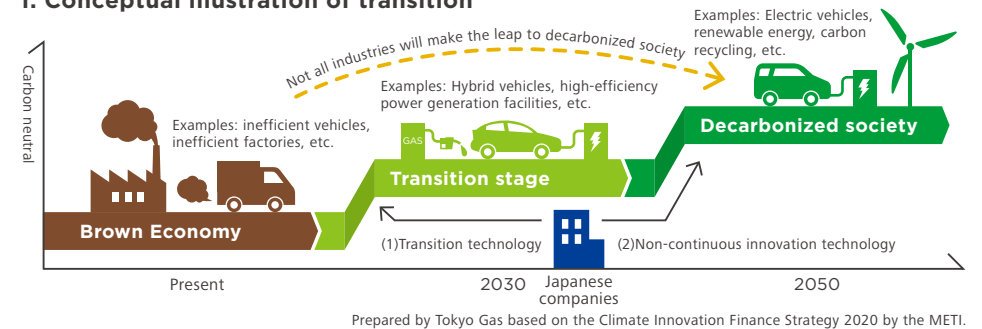
While realization of a decarbonized society is a global common target, the social implementation of decarbonization technology, such as by use of renewable energy, may not be sufficient to draw a viable roadmap to Net-Zero CO<sub>2</sub> for certain industries, countries, or regions. The Tokyo Gas Group therefore believes that it is important to tailor the efforts of transition toward decarbonization and lower carbonization, by making adjustments for the situation of each.

### ▶ 1. Conceptual illustration of transition

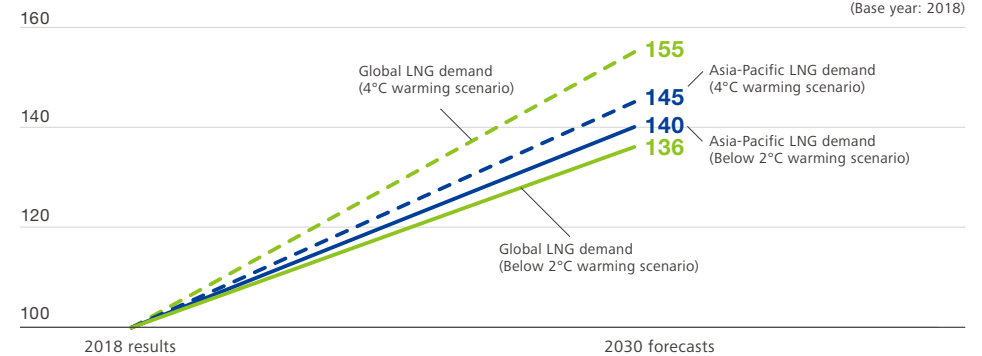
The International Energy Agency (IEA) is projecting growth in global LNG demand and in natural gas demand in Asia-Pacific toward 2030 in its multiple forecast scenarios. As we believe that natural gas provides a fast-acting way to reduce CO<sub>2</sub> emissions, we intend to contribute to the transition in Asia-Pacific via LNG business development, making use of our accumulated strengths and achievements in the LNG business.

### ▶ 2. Global natural gas demand projections

### 1. Conceptual illustration of transition



### 2. Global natural gas demand projections



## Major risks and opportunities driven by climate change, and the Tokyo Gas Group's initiatives

In identifying the Tokyo Gas Group's risks and opportunities related to climate change, we referred to two representative scenarios\*1 of the International Energy Agency and the Intergovernmental Panel on Climate Change -- the below 2°C warming scenario and the 4°C warming scenario -- summarized important factors that may affect our group's business, and evaluated the impacts from two aspects -- magnitude of impact and possibility to be affected -- for both scenarios. We then identified major factors and decided on our initiatives for each factor toward 2030.

### Major initiatives taken in FY2020

Opportunities and risks		Factors	Details of opportunities and risks	Tokyo Gas Group's initiatives toward 2030	Major initiatives taken in FY2020	
Below 2°C warming scenario	Opportunities	Markets	Global increase in demand for natural gas	A)Resources development and expansion of LNG/gas infrastructure and other overseas business to increase the natural gas transaction volume	1)Signing of a joint cooperation agreement with First Gen Corp. to construct and operate a floating LNG terminal in the Philippines	Promoted construction of a floating LNG terminal that enables use of a Floating Storage & Regasification Unit (FSRU), with the aim of introducing LNG to the Philippines as early as in the second half of 2022.
					2)Investment in a gas distribution company in Indonesia	Promoted use of unused gas and shift to natural gas from liquid fossil fuels with high CO <sub>2</sub> emissions, contributing to reduction in CO <sub>2</sub> emissions in the country.
					3)Acquisition of gas assets in Louisiana, U.S. and making Castleton Resources a subsidiary	The acquisition led to an increase by approx. 1.6 times in production volume from approx. 8 million m <sup>3</sup> /day, gas equivalent to approx. 13 million m <sup>3</sup> /day. Increase ownership interest in Castleton from 46% to over 70%.
	Opportunities	Energy resources	Affinity of renewable energy with natural gas	B)Effective use of natural gas to adjust fluctuation of output of renewable energy C)Increase in renewable energy transaction volume in Japan and overseas D)Use of PV, storage batteries, EV, etc. to promote new decentralized power source business and VPP	4)Acquisition of a large-scale solar power generation project in the U.S.	▶ Details on p. 37 example ①
					5)Acquisition of biomass power generation business, using wood pellets, in Takaoka, Toyama Pref. and Ichihara, Chiba Pref.	▶ Details on p. 37 example ①
					6)Investment in Principle Power, a floating wind power technology company in the U.S.	Promoted floating offshore wind power development in Japan and overseas by utilizing Principle Power's technology which excels in stability in maritime conditions.
					7)Evolution into "advanced smart energy"	Advanced smart energy by offering new value, such as use of AI and Big Data, Net-Zero CO <sub>2</sub> by using renewable energy facilities, carbon neutral LNG, etc., and enhanced comfort in offices, in addition to more energy saving, less CO <sub>2</sub> emission, and more resilience.
	Opportunities and risks	Resource efficiency and technology	Decarbonization technology innovation	E)development of decarbonization technologies for gaseous energy such as hydrogen and methanation, etc. F)Introduction and use of CCUS technologies	8)Issuance of the Company's first green bond	Plan to fund a renewable energy project with participation by the Tokyo Gas Group. Total amount: ¥10 billion, term: 10 years
					9)Supply of carbon neutral LNG and city gas, such as by the establishment of Carbon Neutral LNG Buyers Alliance	▶ Details on p. 37 example ②
					10)Accelerated development of CCUS technology and services aimed to be launched in FY2023	▶ Details on p. 03 Feature: Challenge to achieve Net-Zero CO <sub>2</sub>
					11)Accelerated development of a low-cost water electrolyzer, using fuel-cell technologies and knowhow	▶ Details on p. 03 Feature: Challenge to achieve Net-Zero CO <sub>2</sub>
	Opportunities and risks	Markets, and policies and laws	Introduction of carbon pricing*2	G)Fuel conversion, etc. to accelerate shift to natural gas Initiatives B) to F)	12)Launch of a methanation verification test and study of a carbon neutral alliance model in Tsurumi-ku, Yokohama	▶ Details on p. 03 Feature: Challenge to achieve Net-Zero CO <sub>2</sub>
Initiatives 1) to 12)						
4°C warming scenario	Opportunities	Resilience	Decentralized energy system using natural gas to enhance resilience	H)Enhanced resilience in the natural gas infrastructure I) Expanded use of decentralized energy system, such as smart energy networks, co-generation, ENE-FARM, etc. that are highly resilient and reduce energy consumption	13)Establishment of Ekimachi Energy Create with the JR East Group	▶ Details on p. 37 example ③
	Risks	Acuteness	Impact on operations, as associated with severer abnormal weather	J) Disaster countermeasures for LNG terminals and power stations to enhance establishment of water hazard-resilient Life Line, and full preparation for BCP.	14)Launch of the Ibaraki Line Service and commercial operation of the LNG tank No. 2 at Hitachi LNG Terminal	▶ Details on p. 37 example ④
					15)Comprehensive disaster-prevention drilling, assuming windstorm and flood damage	Confirmed the initial response, assuming damage caused by river flooding driven by a typhoon

\*1: Scenarios, for reference:

- Scenario of limiting the global average warming by less than 2°C above pre-industrial levels: Sustainable Development Scenario (SDS)(IEA WEO 2019); B2DS (IEA ETP 2017); RCP2.6 (IPCC AR5)
- Scenario of limiting the global average warming by 4°C above pre-industrial levels: IEA Stated Policies Scenario (STEPS) (IEA WEO 2019); RTS (IEA ETP 2017); RCP8.5 (IPCC AR5)

\*2 Introduction of appropriately-designed carbon pricing may promote shift to forms of energy with less CO<sub>2</sub> emissions but, depending on the scheme design, may negatively affect the company's business due to a rise in energy cost and other factors.

**Example 1 Expansion of introduction of renewable power sources**

**Aktina Solar Project** (631MWdc)

The first global solar project in which Tokyo Gas Group will take initiative from construction to commercial operation (Texas, U.S.)



**Fushiki Manyofuto Biomass Power Plant** (51MWdc)

Wood pellet biomass power generation facilities in Takaoka, Toyama Prefecture; to start commercial operation in October 2021



**Example 2 Carbon-neutral LNG and city gas**

Carbon neutral LNG (CNL) is the designation production of which is deemed as offsetting greenhouse gases, which are generated in the process, from extraction to the burning of natural gas. This offset is through the CO<sub>2</sub> reduction effects of support of forest regeneration and other environmental conservation projects. We are promoting improvement of the environment by this support.



On October 1, 2020, Tokyo Gas changed its supply of city gas used for the cogeneration system of Hotel New Otani, Tokyo, to carbon neutral city gas.



The Carbon Neutral LNG Buyers Alliance was established on March 9, 2021. The participating companies will work to increase the recognition of carbon neutral LNG in society and carry out initiatives to improve evaluation of the effects of initiatives by investment institutions and thereby encourage environment-conscious action.

**Example 4**

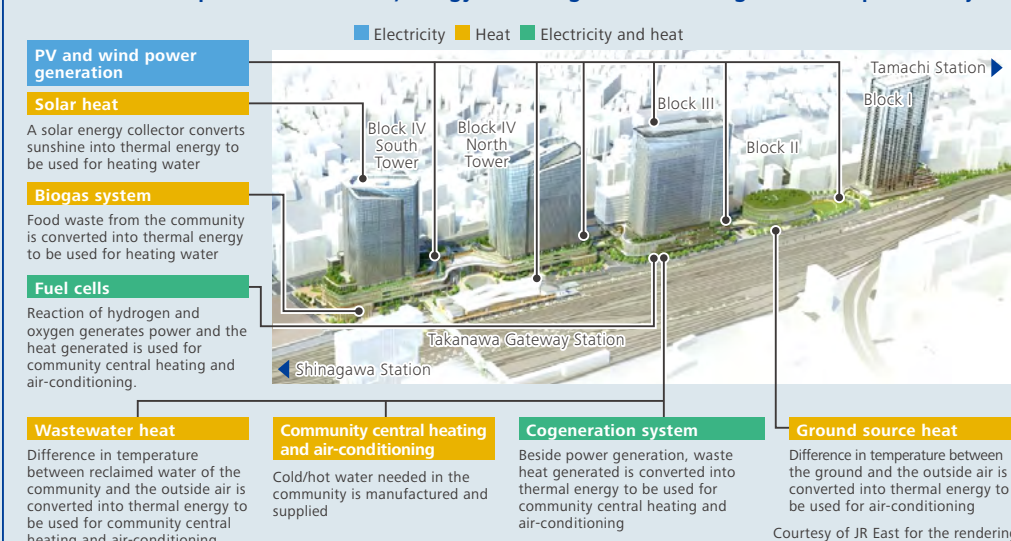
**Launch of the Ibaraki Line Service and commercial operation of the LNG tank No. 2 at Hitachi**



Connected a loop of high-pressure gas pipelines in the North Kanto area and achieved improved supply stability and enhanced gas transmission capacity through a mutual backup system of four LNG terminals

**Example 3 Establishment of Ekimachi Energy Create Co., Ltd.**

**Overview of adopted environmental/energy technologies in the Shinagawa Development Project**



**Energy management with integration of supply and demand**

Ensuring highly-reliable electric power supply and business continuity in case of disasters are ensured by use of diverse renewable energy sources (i.e., PV, wind power generation, wastewater heat, ground source heat, solar heat), multiplexing of power systems, adoption of cogeneration and emergency power generation facilities, etc.

**Risk management**

We have established an enterprise risk management (ERM) system, and explicitly stated major risks in the Risk Control Regulations.

The Risk Management Committee was established to improve the management level of the ERM system. The Committee regularly reviews the risks, and checks how the ERM system is being maintained and operated. It reports to a committee that supports Corporate Executive Officers' decision-making.

**Metrics and Targets**

The Tokyo Gas Group management vision Compass2030 has set the management guidelines and key figures for realizing corporate growth.

	FY2020 results	FY2022	FY2030
Contribution to CO <sub>2</sub> emissions reduction	<b>-6.68</b> million tons	<b>-6.50</b> million tons	<b>-10.00</b> million tons <sup>*1</sup>
Renewable power source transaction volume	<b>1.383</b> million kW	<b>2.00</b> million kW	<b>5.00</b> million kW <sup>*2</sup>
No. of customer accounts	<b>12.31</b> million	<b>14.80</b> million	<b>20.00</b> million <sup>*3</sup>
Natural gas transaction volume	<b>18.20</b> million tons	<b>17.00</b> million tons	<b>20.00</b> million tons <sup>*4</sup>

\*1 Base year: fiscal 2013, including contribution of emissions reduction during consumption by customers  
 \*2 Domestic and international, including procurement  
 \*3 Total no. of gas, power, and service agreements (domestic and international)  
 \*4 LNG equivalent Including overseas business and trading



# Corporate Governance

## Message from the Director, Chairperson of the Board

### Management will propel innovation for the realization of sustainability

I cherish the phrase “Learn history and usher in the times.” Looking back at the 136 -year history of Tokyo Gas, I find that the belief of the founder Shibusawa Eiichi, that the highest priority should be “Pursuit of the public interest,” has been successively inherited for generations. More than 50 years ago in 1969, amid the intensifying severity of urban pollution conditions such as air pollution, Tokyo Gas introduced use of liquefied natural gas (LNG), which is both environmentally friendly and economical, to Japan as the optimum solution to social challenges. In the 1980s, the company was also engaged in mecenat (in French, mécénat, meaning sponsorship or patronage) and social contribution activities as a “corporate citizen.” In the 1990s, global environmental problems worsened, and Tokyo Gas set its sights on becoming a top runner in the environmental management race. Since the 2000s, with the increased social attention given to corporate governance, we have been striving to be a “leading corporate governance company.” More recently, ESG and

SDGs have emerged as new key words, but I would say we have worked on these subjects for the past few decades.

Regarding governance, Tokyo Gas introduced an executive officer system in 2002 and began reducing the number of directors and inviting outside directors. In 2017, we made significant revisions to the Board of Directors rules: the authority to execute was broadened, and the role of the Board of Directors and the role of Corporate Executive Officers were clarified. And in June 2021, we made a transition to a “Company with a Nominating Committee, etc.”

For the past 136 years, the main energy source in Japan has shifted from coal to oil and gas, all of which, however, are fossil fuels. Carbon neutral is something totally new and different. Japan’s gas business has been liberalized and as one result Tokyo Gas will split off the Gas Pipeline Business in April 2022. I think this is the first time in its history that the Tokyo Gas Group is experiencing such drastic change.

Along with this changing external

Director,  
Chairperson of the Board  
**HIROSE Michiaki**

environment, management must also change. We therefore started working at two reforms: “governance reform” and “group formation reform.” While the “group formation reform” includes work and human resources and involves each and every employee, the “governance reform” focuses primarily on the executives. The Board of Directors has sent out a message that “The management will drive innovation” to interested persons both in and outside the company. This means “we, the management, change ourselves.” I have felt strongly that we must have firm resolve that “Tokyo Gas will be reborn.”

In Japan there are two types of “companies with a committee” – a “Company with an Audit and Supervisory Board” and a “Company with a Nominating Committee, etc.” The most significant difference is that in case of the latter the nominating committee effectively determines the top management. In our current era of historical transition, the CEO must be well accepted in and out of the company group to be entrusted with management authority. I believe that external recognition will allow the CEO to carry out duties with greater confidence. That is why the Board of Directors has decided to adopt the “Company with a Nominating Committee, etc.” form. In all cases, I think that experiencing scrutiny not only by internal eyes but also external eyes will increase transparency as well as the diversity.

I am also hoping that the move to a “Company with a Nominating Committee, etc.” will make management stronger and deeper. As I

said earlier, Tokyo Gas must transform itself from being in the gas business to being engaged in the electric power business, and much more in overseas business, as two of the major ongoing and unprecedented drastic changes that challenge us. By creating two management bodies, the Board of Directors and the Executives, I think we can realize deeper discussions and deeper decision-making.

The Board of Directors is expected to have supervisory functions and broader discussion, while execution requires professionalism and deeper debate. I believe that we have been able to create a management system which leads to bring even better solutions, as the Board of Directors and executives are well balanced, allowing them to have candid exchange of opinions or even a conflict of opinions in some cases. As the Chairperson of the Board of Directors, I understand that it is important that the Board and the executives fulfill their respective roles and responsibilities. Governance reform never ends.

The role of Chairperson will also become more important. The post-transition Board of Directors in addition to making resolutions will have more matters to be reported from the execution side and to check. We have to decide each time what matter should be discussed by the Board, and what should be reported from the execution side. I certainly expect executives to proactively report to the Board but I think that there will be cases where the Board needs to

request reporting. I believe that the Chairperson must lead such operational preparations.

Moreover, in order to conduct a Board of Directors meeting that serves its purpose in being a “Company with a Nominating Committee, etc.,” it is important that the Chairperson understands the contexts and issues of the execution efforts and communicates with executives to a certain extent. Given these considerations, it seems more important that the Chairperson works on a full-time basis, regardless of being an internal or external director.

In order for the 136-year-old Tokyo Gas Group to become a sustainable company, we must keep changing as the environment changes. In my view unless we continue to propel innovation, we cannot succeed in making lasting development. Please look forward to Tokyo Gas as the company which transforms itself to match the changing times.





## Message from an Outside Director

# We will enhance the governance system by each and every one of us playing his or her role

## I was strongly impressed with the determination of Tokyo Gas in its decision to move to a “Company with a Nominating Committee, etc.”

I have attended the Tokyo Gas Board of Directors as an Outside Audit & Supervisory Board Member



Director Outside  
**NOHARA Sawako**

for three years. During that period, the governance system has steadily evolved and appears to have shifted to a monitoring-oriented approach. I have found it easier to check the progress of the Medium-Term Management Plan because the Company has more specifically set key metrics to monitor Medium-Term Management Plan which started in fiscal 2020 and the enhanced KPIs have made it easier to monitor the overall management.

Since fiscal 2019, prompted by the spinoff of the Pipeline Network Division resulting from the liberalization of the nation’s gas business, the reform of the group’s organizational structure had been discussed as an ongoing topic. In the same year, we also began discussions on the reform of the corporate governance system.

At first, some members expressed conservative opinions about the structure of a “Company with a Nominating Committee, etc.” However, I thought that the transition to that structure should not be something to be afraid of as it would not be something totally different. This was partly because I have served as an outside director at two companies other than Tokyo Gas and both companies have adopted the structure of a “Company with a Nominating Committee, etc.” In fact, I had a real-time experience of the transition at one of these companies – from a “Company with Board of Corporate Auditors” to a “Company with a Nominating Committee, etc.”

I also believed that if we were to consider a governance system, it should be a “Company with a Nominating Committee, etc.” as we are in the midst of unprecedented important management reforms by setting forth the Three Challenges (Leading Net-Zero CO<sub>2</sub>, Building a value co-creation ecosystem, and

Transforming the LNG value chain) in our management vision, Compass2030. So when we have decided to consider moving in the direction of a “Company with a Nominating Committee, etc.,” I was strongly impressed and very pleased with determination of Tokyo Gas to make drastic changes not only in the vision and Medium-Term Management Plan, but also in the decision to move to a “Company with a Nominating Committee, etc.”

## I think the enhanced governance system will help make operations and internal systems more advanced

The move to a “Company with a Nominating Committee, etc.” will bring several changes. First, the authority to execute will be further expanded, and, as the Board of Directors changes to a supervisory function as its main function, the difference in roles will become clearer, speeding up the execution.

KPIs and other targets should be more directly linked to individual profit plans, so that executives regularly report on business progress to the Board of Directors, and the Board adequately monitors the progress. When objectives are clearly spelled out, the roles of each side will be more visible. This means, in my view, that each body and committee will play its role, leading to the enhancement of the governance system.

I have been appointed as an outside director since this fiscal year, ending March 2022, and am a member of the Nominating Committee and Compensation Committee. The Nominating Committee, in which outside directors hold the majority of the seats, is empowered to make decisions on the personnel change of executives.

The Committee is required to listen to how the candidates were chosen using personnel systems and evaluation methods that have been chosen to identify any unclear points, propose improvements, and draw conclusions. This may also lead to reviewing how to create career paths to the top management and how to evaluate human resources. As for the Compensation Committee, it is responsible for determining the amount of remuneration for each executive. Here, we will first need to sort out why and how the remuneration has become what it is today. This may also lead to reviewing the compensation system. We see cases like these at many other companies.

By shifting to a more robust governance system, the personnel valuation and compensation systems, which have been promoted by extending the existing internal rules, may be reviewed and replaced with more advanced rules. Putting a positive, constructive spin to actions being taken, Tokyo Gas can overhaul its operations and rules, using the outside directors’ requests and suggestions to more logically sorting out reasons. I believe that it will become easier to implement reforms and make the systems more visible.

It is also crucially important that Tokyo Gas explains clearly and politely to the shareholders that the Company is in the midst of a major management reform undertaking and wants the shareholders’ support and understanding in increasing investment required in the process of this change, as such and understanding that its vision extends beyond the investment phase. I would also like to welcome new shareholders who will be excited about our new vision as an energy company, stated in Compass2030.

## Basic views on corporate governance

To realize continuous growth and increase in our medium- to long-term corporate value, as an “energy frontier corporate group” that focuses on natural gas, the Tokyo Gas Group aims at the realization of comfortable lifestyles and environmentally friendly cities and works to ensure continued development while consistently earning the trust of customers, shareholders, and society.

Based on this philosophy, we aim to clarify management and executive responsibilities and strengthen auditing and monitoring functions with a commitment to management legality, soundness, and transparency.

We endeavor to enhance corporate governance systems by propelling accurate and prompt decision-making, efficient business executions.

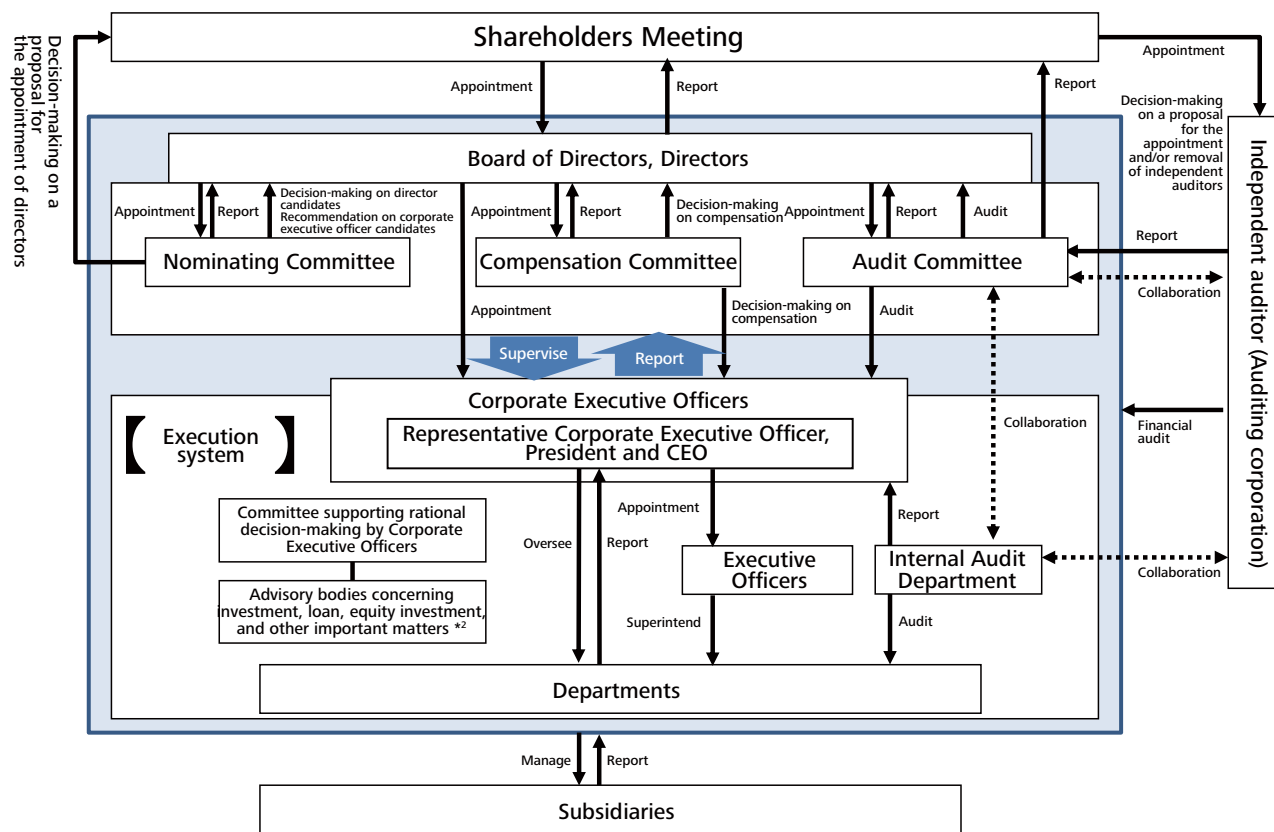
## Overall Corporate Governance Structure

Following approval of the 221st shareholders meeting, Tokyo Gas has made a transition to a “Company with a Nominating Committee, etc.” and has established three committees: a Nominating Committee to determine director candidates and recommend corporate executive officer candidates; an Audit Committee to audit execution of duties by directors and corporate executive officers; and a Compensation Committee to determine remuneration for directors and corporate executive officers.

The Board of Directors determines management policies, supervises execution of duties by corporate executive officers, delegates decision-making concerning important matters for business execution to corporate executive officers, and asks them to report the status of the execution, when needed.

Corporate executive officers are required to contribute to appropriate, prompt decision-making and to ensure efficient business operations by taking up in a committee (generally meeting weekly) that supports the corporate executive officers’ reasonable decision-making matters to be submitted to the Board of Directors and other important managerial matters. Executive officers are assigned responsibility for ensuring prompt business operations by corporate executive officers. Tokyo Gas has thus adopted and established a governance structure that ensures high legality, soundness, and transparency.

### Tokyo Gas Co., Ltd.



## Overview of Corporate Governance System

(As of June 29, 2021)

Number of directors	9	Number of meetings of Board of Directors*1	12
Average age of directors	63.8	Attendance rate of Outside Directors at Board of Directors*1 meetings	100%
Number of Outside Directors	6	Term of office of directors	1 year
Number of independent officers	6	Performance-linked remuneration	Yes
Participation of Outside Directors in determination of remuneration	Yes	Share purchase system to reflect the perspective of shareholders in management	Yes
Participation of Outside Directors in selecting director candidates	Yes		

\*1 Total for the period from June 2020 to May 2021

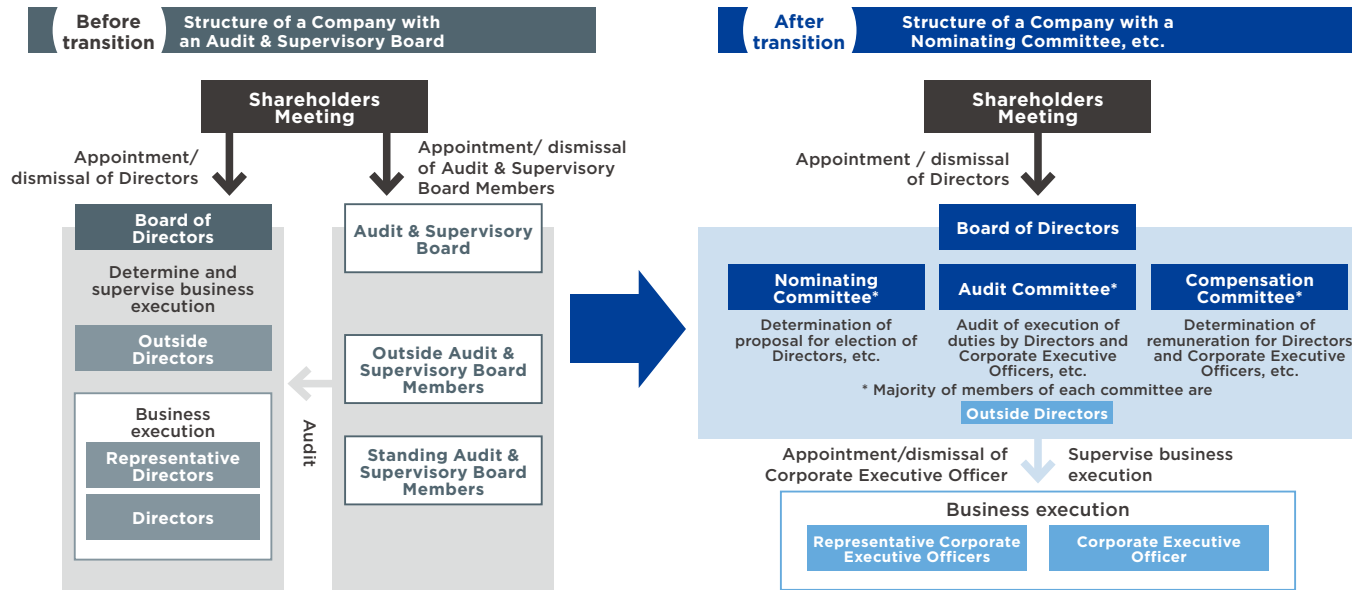
### Investment Evaluation Committee

An advisory body included in \*2

The Investment Evaluation Committee chaired by the Executive Officer in charge of financial affairs evaluates matters that require the evaluation of the significance, economy and risks related to investment evaluates, conducts post-investment follow-up, and reports to Corporate Executive Officers and others concerned.

## Transition to a Company with a Nominating Committee, etc.

In response to perhaps the most drastic changing environment surrounding the Tokyo Gas Group since the company's foundation, we have decided to enhance corporate governance by transitioning to a Company with a Nominating Committee, etc. This was initiated in order to significantly respond to challenge and innovation by the management. The transition in corporate structure is intended to enhance the speed of decision-making and improve the supervisory function of the Board of Directors as it faces the changing environment and tasks of expanding business areas.



## History of Tokyo Gas in enhancing corporate governance

- 2002**
  - Adopted an executive officer system and reduced the number of directors
  - Started appointment of outside directors
- 2005**
  - Established an advisory committee (to establish ad hoc committees concerning nomination and compensation, and to improve transparency)
- 2016**
  - Established the Basic Policy on Corporate Governance
  - Started the evaluation of effectiveness of the Board of Directors
- 2017**
  - Revised the Regulations of the Board of Directors (Orientation toward a monitoring model)
- 2021**
  - Made a transition to a Company with a Nominating Committee, etc. (Established Nominating, Compensation, and Audit Committees with a majority being outside directors)

Note	June 2018	3/8 = 38%
Increase in the ratio of outside directors in the Board	June 2019	4/9 = 44%
	June 2021	6/9 = 66%

### Nominating Committee



The Nominating Committee makes decisions on proposals to the Shareholders Meeting concerning appointments and dismissal of directors and on proposals to the Board of Directors concerning corporate executive officers, among other matters.



Nominating Committee	
Chairperson	SAITO Hitoshi (Outside)
Committee members	TAKAMI Kazunori (Outside)
Committee members	NOHARA Sawako (Outside)
Committee members	HIROSE Michiaki

### Audit Committee



The Audit Committee audits the execution of duties by directors and Corporate Executive Officers, determines audit reports, and also determines agenda items concerning appointment, dismissal, or refusal of reappointment of independent auditors, among other matters.

Audit Committee	
Chairperson	INDO Mami (Outside)
Committee members	EDAHIRO Junko (Outside)
Committee members	ONO Hiromichi (Outside)
Committee members	NAKAJIMA Isao

### Compensation Committee

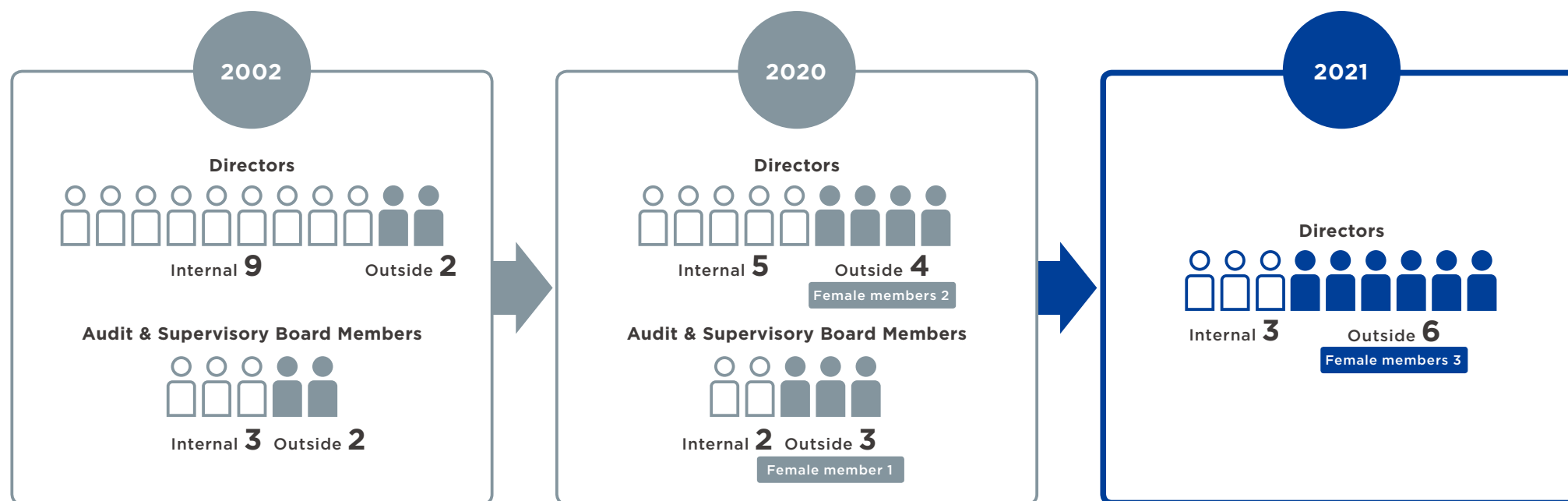


The Compensation Committee sets policy related to remuneration of directors and corporate executive officers, and makes decisions on remuneration of each director and each corporate executive officer, according to the policy, among other activities.

Compensation Committee	
Chairperson	TAKAMI Kazunori (Outside)
Committee members	SAITO Hitoshi (Outside)
Committee members	NOHARA Sawako (Outside)
Committee members	HIROSE Michiaki
Committee members	UCHIDA Takashi

## Enhancement of Governance

Composition of the Board of Directors



### Role of the Board of Directors

Pursuant to the provisions of the relevant legislation, the Articles of Incorporation, and the Regulations of the Board of Directors, the Board of Directors conducts important decision-making of the Company's management, such as management policy and plans, and supervision of execution of business operations. In addition, the Board of Directors delegates to corporate executive officers a large part of its authority concerning business execution in order to make decisions in an appropriate, prompt manner.

### Management and composition of the Board of Directors

In principle, the Board of Directors meets once a month to decide basic policies of management and to supervise execution of duties by corporate executive officers, among activities. At present, the Board of Directors comprises 9 directors, 6 of whom are outside directors.

### Appointment of Directors

To ensure that the Board of Directors conducts appropriate decision-making and management supervision, persons who are selected as directors are deemed to be individuals who possess abundant experience, in-depth knowledge, and a high level of expertise. Outside directors shall be individuals who have perspectives on matters including corporate management, social and economic trends, and international affairs. They are also required to meet the Company's Independence Standards for Outside Officers. Concerning the selections of nominees for the position of director, the Nominating Committee, a majority of which is comprised of independent outside directors, determines agenda items of the Shareholders Meeting and the reasons for election of the nominees are disclosed in the reference materials for the Shareholders Meeting. Those materials are included in the notice of convocation of the Shareholders Meeting.

## Effectiveness of Board of Directors

### Analysis and Evaluation of Effectiveness of Board of Directors as a Whole

To maintain and enhance the effectiveness of the Board of Directors, we analyzed and evaluated the Board of Directors' effectiveness by holding exchanges of opinions at the meetings of the Board of Directors, using the questionnaire-based self-evaluations completed by the directors as a point of reference.

The effectiveness of the Board of Directors was confirmed to have been further enhanced, mainly because questionnaire-based quantitative evaluations remained satisfactory as before, along with the fact that vigorous discussions were being held through exchanges of opinions at the meetings of the Board of Directors, and that measures such as on-site inspections facilitated the

### Questionnaire

#### Contents of the questionnaire

#### (quantitative and qualitative evaluation)

- Management of meetings of the Board of Directors (composition of members, contents of materials, and time of holding)
- Functions of meetings of the Board of Directors (decision-making for policies, status of monitoring, status of establishment and management of internal control system, and reporting from the execution side)
- Other (offering of workshops, on-site inspections, and other programs for outside officers)
- Free comments

#### Examples of free comments of the questionnaire

- In addition to setting up and reviewing KPIs that are appropriate for monitoring, risks need to be clearly quantified and presented.
- It is important to further improve the system for enabling collection of information indispensable for monitoring.
- Deeper discussions are needed on strategies for achieving Net-Zero CO<sub>2</sub>.

understanding of outside officers on the Company's business operations.

To realize further improvement in the effectiveness of the Board of Directors, it will be necessary for efforts to continue without interruption. To realize further improvement in the effectiveness of the Board of Directors, it will be necessary for efforts to continue without interruption. The evaluation confirmed that, going forward, Directors intended to establish a common recognition on the way the Board of Directors ought to be in terms of its monitoring model and demonstrate its recognition, in addition to continue to carry out initiatives to promote understanding of the Company's business operations.

### Evaluation and comments from the third-party evaluation

- Aggregated results of the questionnaire generally showed high scores for each question item for the current fiscal year as in the previous years. They confirmed that the effectiveness of the Board of Directors was ensured to be at a high level.
- As a company which has made a transition to a Company with a Nominating Committee, etc., how to preserve the effectiveness of the monitoring function of the Board of Directors is important. Directors must establish a common recognition on the way the Board of Directors ought to be in terms of its monitoring model and demonstrate its recognition.

### Policy for Training of Directors

When Directors assume their positions, the Company provides them with training opportunities to help them understand their responsibilities. The Company also provides training courses and other programs to enable Directors to update their knowledge while in office.

The Company periodically provides Outside Directors with information on the Tokyo Gas Group's business, finances, organization, and other matters.



## Officer Remuneration System

The Compensation Committee held on June 29, 2021 resolved a Basic Policy on Officer Remuneration.

### 1. Basic Policy on Officer Remuneration

As a Company with a Nominating Committee, etc., a Compensation Committee has been established as stipulated in the Companies Act, and it selects a chairperson from outside directors, secures objectivity and transparency, and determines remuneration of individual officers (directors and corporate executive officers).

#### (1) Role of officers and officer remuneration

The role assigned to officers is to seek to enhance short-term, medium- and long-term corporate value, and officer remuneration shall serve as an effective incentive for them to perform that role.

#### (2) Level of officer remuneration

The level of officer remuneration shall be suitable for the role, responsibility and performance of the officer, and be in consideration of changes in the business environment, and the level of other companies according to the research of an external specialized institution.

#### (3) Composition of annual remuneration

- Remuneration of officers shall comprise fixed remuneration (basic remuneration) and incentive remuneration (bonus, share-based compensation).

**Basic remuneration** A fixed amount in accordance with the post of each individual is paid as monthly remuneration.

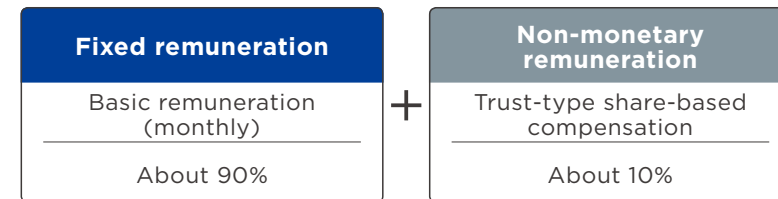
**Bonuses** As a short-term incentive remuneration, a bonus is paid once a year and its amount reflects the evaluation of individual performance against financial and non-financial indicators\* beside the basic amount set by each rank. Indicators are reviewed and selected each year.

**share-based compensation** As a medium- to long-term incentive remuneration, points are provided based on the base amount set by each rank. The stocks are provided based on the number of points at retirement.

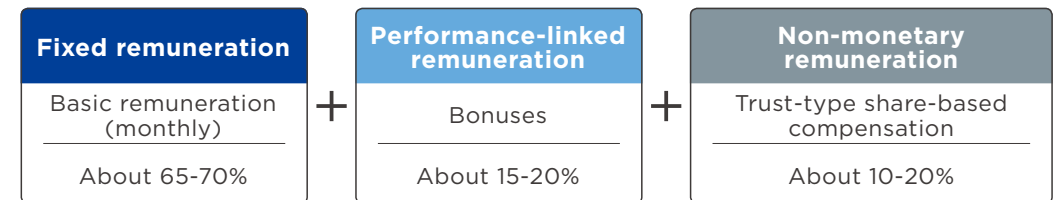
- Remuneration for directors is comprised of basic remuneration and share-based compensation, while remuneration for corporate executive officers (including those who concurrently serve as directors) is comprised of basic remuneration, bonuses, and stock compensation

- The approximate ratios of each type of remuneration for directors are 90% in basic remuneration and 10% in share-based compensation. The approximate ratios for corporate executive officers (including those who concurrently serve as directors) are 65-70% in basic remuneration, 15-20% in bonuses, and 10-20% in share-based compensation.

### Composition of remuneration for directors (internal and outside)



### Composition of remuneration for corporate executive officers



#### \*Adoption of non-financial indicators

The Basic Policy on Officer Remuneration, which was resolved at the Compensation Committee meeting held on June 29, 2021, has incorporated non-financial indicators, in addition to financial indicators, in the evaluation of term performance for bonuses of corporate executive officers. The indicators are to be reviewed each year. The term and those for FY2021 are as follows.

\* Indicators for bonus evaluation for FY2021

■ Financial indicators: Profit attributable to owners of parent; Operating profit + equity method income

■ Non-financial indicators: Contribution to CO<sub>2</sub> emissions reduction; Renewable power source transaction volume; Diversity in human resources; Natural gas transaction volume; Transportation volume; Number of customer accounts

## 2. Introduction of a share-based compensation plan using a trust

The Compensation Committee meeting held on June 29, 2021 resolved to introduce a share-based compensation plan for directors and corporate executive officers with the objective of providing incentives encouraging the enhancement of corporate value. Separately, an introduction of a similar share-based compensation plan for executive officers has also been resolved.

### (1) Overview

The Company has established a share trust (see the "Overview of the trust"). Points are to be granted to officers each year according to their position, and they shall receive company shares based on the points when they retire/resign.

### (2) Target persons


Directors (including outside directors) and corporate executive officers

### (3) Overview of the trust

(The table below includes executive officers.)

Trust period	From August 2021 to August 2024 (tentative)
Amount to be contributed by the Company as funds for acquiring shares	¥461,889,900
Method to acquire shares for the trust	Acquisition via disposal of treasury shares
Number of shares for the trust	224,600 shares

### Press release on the share-based compensation plan

 **"Notice on the Introduction of a Share-based Compensation Plan" (June 29, 2021)**  
[https://www.tokyo-gas.co.jp/Press\\_e/20210629-04e.pdf](https://www.tokyo-gas.co.jp/Press_e/20210629-04e.pdf)

 **"Decisions on Matters related to Share Acquisition for the Share-based Compensation Plan" (July 28, 2021)**  
<https://www.tokyo-gas.co.jp/news/press/20210728-04.pdf>

## 3. Total Remuneration for Directors and Audit & Supervisory Board Members for FY2020 (Reference)

(Results of the Remuneration System before transition to a Company with a Nominating Committee, etc.)

Classification of officers	Total value of remuneration (¥ million)	Total value of remuneration by type (¥ million)			Number of eligible officers
		Fixed remuneration (Monthly remuneration)	Performance-linked remuneration		
			Monthly remuneration	Bonuses	
Directors (excluding outside directors)	323	241	49	32	6
Audit & Supervisory Board Members (excluding outside Audit & Supervisory Board members)	74	74	—	—	2
Outside Directors	45	39	—	6	5
Outside Audit & Supervisory Board Members	35	35	—	—	4

\* The number of officers includes one internal director, one outside director, and one outside Audit & Supervisory Board member who retired upon the conclusion of the 220th Annual Shareholders Meeting.

\* It was resolved that the amount of monthly remuneration of all Directors (including Outside Directors) should be under ¥50 million at the 205th Annual Shareholders Meeting and that the amount of annual bonus for all Directors should be under ¥90 million at the 206th Annual Shareholders Meeting.

\* It was resolved that the amount of monthly remuneration of all Audit & Supervisory Board members (including outside members of the Audit & Supervisory Board) should be under ¥12 million at the 190th Annual Shareholders Meeting.



## Internal Control System

Ensuring the legality, soundness, and transparency of the management based on our Management Philosophy, we strive to clarify responsibilities of management and execution, enhance supervising and auditing functions, and promote accurate and prompt decision-making, efficient execution of business operations, in order to sustainable growth and improvement in medium- to long-term corporate value. In addition, Tokyo Gas and its subsidiaries direct their efforts toward

lasting development by respecting the autonomy of each and sharing the pursuit of total optimization as their common cause.

In order to ensure appropriate business operation of the Tokyo Gas Group, the Basic Policy on Development of Internal Control Systems has been adopted by the Board of Directors and corporate executive officers have accordingly and effectively established the Internal Control Systems and have been operating them.

## Response to “Internal Controls Reporting System”

To comply with the “Internal Control Reporting System” under the Financial Instruments and Exchange Act, Tokyo Gas follows the internal control basic framework presented in Financial Services Agency standards, arranges and administers internal control related to financial reporting, assesses their effectiveness, and improves them as necessary. In the internal control report for the previous consolidated fiscal year prepared following this system, which found

our internal control regarding financial reporting to be effective, the Auditors expressed the opinion that all the material points were represented appropriately.

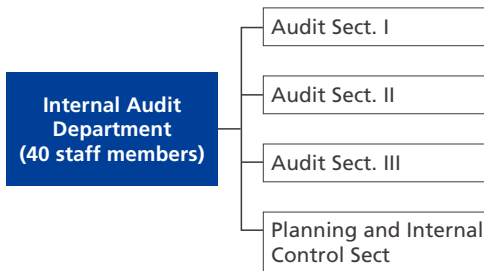
### Overview of Internal Control System

1	2	3	4	5	6	7
System to ensure that officers and employees perform their duties in conformance with laws, the Articles of Incorporation, etc.	System to store and manage information regarding the execution of duties by corporate executive officers	Regulations and other systems on managing the risk of loss of the Group	System to ensure that the performance of duties by corporate executive officers is conducted efficiently	System to ensure appropriateness of business operation by the Group subsidiaries	Items regarding employees assisting with the duties of the Audit Committee	System concerning reporting to the Audit Committee and system to ensure effective auditing by the Audit Committee

### Specific Examples of Internal Control System

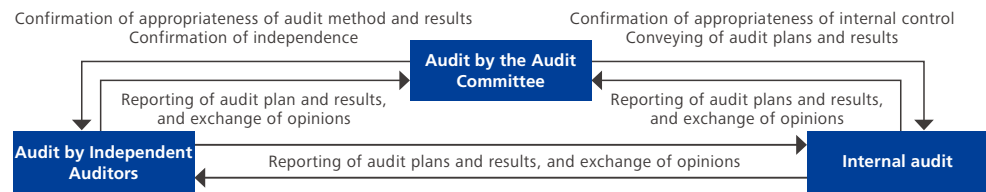
#### Internal Audit Department

The Internal Audit Department of the Tokyo Gas Group has been established to efficiently and effectively audit the status of execution of business operations. The Department reports audit results to the Audit Committee, directors of the audited subsidiaries, and other parties concerned. The Internal Audit Department, an organization for internal audit of the Company, has the objective of conducting effective, expert auditing with its composition and number of staff as shown on the right (as of June 29, 2021).



#### Audit Committee

In addition to the establishment of an organization that enables the Tokyo Gas Group’s officers and employees report to the Audit Committee without delay, numerous actions have been taken to facilitate effective audit activities, including collaboration of the Audit Committee, the Internal Audit Department, and Independent Auditors.





## Compliance

### Compliance Structure

Tokyo Gas has established the Management Ethics Committee chaired by the President and CEO. It discusses at the executive level overall actions for maintaining and improving compliance awareness, monitors the implementation of compliance-related measures, and checks actions to be taken from the next year onward. It issues instructions to make improvement if needed. In response to this, individual divisions and subsidiaries set up compliance committees to carry out inspections and improvements suiting their own operations. The Tokyo Gas Group maintains the Code of

Conduct as the standard for behavior when carrying out duties. We are making continued efforts to ensure the Code of Conduct is known and observed by employees through workplace discussions participated by all employees at their respective workplaces and through rank-specific training sessions on the occasions of their entry and promotion.

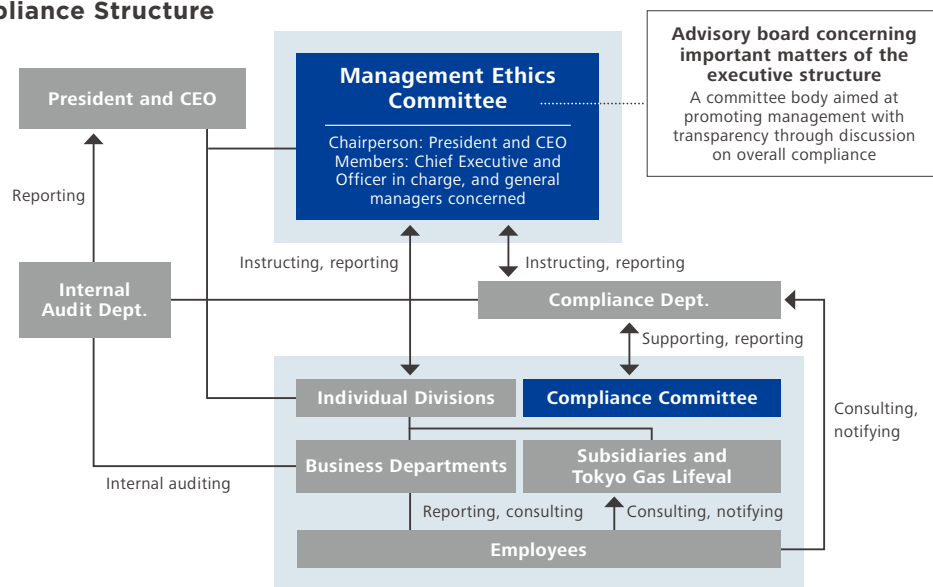
### Compliance Risk Management

We have formulated and implemented escalation rules that encourage any employee finding anything unusual to notify the employee's manager without hesitation and have been effectively operating internal and external consultation desks. We are thereby endeavoring to ensure that compliance-related issues are discovered and resolved at an early stage and our corporate self-regulatory processes functions effectively.

We monitor the effectiveness of Group compliance promotion activities by conducting regular compliance awareness surveys of all employees. The results of these surveys are

reflected in initiatives for the following years. Moreover, the Internal Audit Department conducts internal audits of the Company and its subsidiaries, focusing on potential risks that may materialize and their degree of importance from the viewpoint of strict compliance with laws and regulations, corporate ethics and social norms. The status of improvement concerning any recommendations made as a result of the internal audits is checked in a follow-up audit in the following year to ensure steady improvement in risk management.

### Compliance Structure



### Examples of specific actions

#### Workplace discussions

Each workplace of the Tokyo Gas Group carries out a workshop, mainly led by a person in charge of compliance promotion (21,966 participants in FY2020). Using the awareness building tools based on the Tokyo Gas Group's Code of Conduct, participants learn about the recent trend concerning corporate compliance and discuss how to actually practice the Code of Conduct, which is intended to lead to taking actions.

#### Rank-specific training

Rank-specific training sessions, including those for new employees, are carried out for the Group employees, so as to enhance compliance mindedness. (1,322 participants in FY2020).

#### Legal training

Every year, legal training sessions are carried out for all Group employees with the aim of enhancing understanding of legal knowledge such as that involving the Anti-Monopoly Act, Act against Unjustifiable Premiums and Misleading Representations, and the Subcontract Act, which we are required to comply with (10,600 participants in FY2020). In addition to checking the objectives of laws and regulations, we seek to provide during the training sessions practical information by incorporating interpretation on specific cases\*1 which were disclosed by the Fair Trade Commission and the Consumer Affairs Agency.

\*1: Cartel and abuse of dominant bargaining position (Anti-Monopoly Act), misleading representation and favorable representation (Act against Unjustifiable Premiums and Misleading Representations), etc.

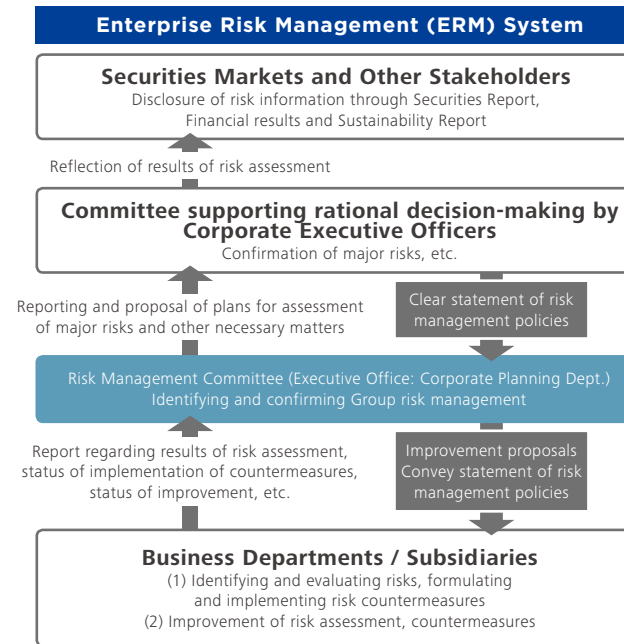
## Risk Management System

In accordance to the Risk Management Regulations which stipulated basic items of the Tokyo Gas Group's risk management, we have established an enterprise risk management (ERM) system and are using an "ordinary-time response" (to understand risks and device and implement measures against the risks) method, or an "emergency-time response" (to respond when a significant risk emerges) method.

### Ordinary-time response

Our Risk Management Regulations have explicitly stated specific initiatives and major risks at ordinary times and an enterprise risk management (ERM) system has been established to undertake them. The Risk Management Committee was established with the aim of improving the management level of the ERM system. The Committee checks progress regarding the establishment and operational status of the ERM system, including periodic risk assessments. It also reports to a committee that supports the corporate executive officers' reasonable decision-making.

Under the framework, around 150 Risk Management Promotion Officers are deployed in the business departments of Tokyo Gas and its subsidiaries in order to promote ERM. Each year, we assess risks and the implementation and improvement status of countermeasures. This system facilitates the steady implementation of the ERM-PDCA (Plan-Do-Check-Act) cycle.



### Emergency-time response

Because the company provides public services that comprise a lifeline, for many years it has also had a crisis management system that serves as a response system in case an accident or other risk-related event actually occurs. Specifically, we have formulated Emergency Response Organization Regulations. In case of major crises, including major natural disasters, such as earthquakes, or production or supply disruptions arising from major accidents at pipelines or LNG terminals, as well as spread of highly pathogenic or infectious diseases, terrorism, failures in mission-critical IT systems, and compliance problems, the Emergency Response Organization has been established to respond to the situation immediately in accordance with the Emergency Response Organization Regulations. Periodic training is conducted in relation to response measures against large earthquakes, cyber terrorism, and other major risks. Moreover, the company has also formulated a business continuity plan (BCP) outlining its responses in the event of a major earthquake of the magnitude as assumed by Japan's Cabinet Office, a major accident disrupting gas supply, a widespread blackout, highly pathogenic or infectious diseases, etc. This plan is in place to reinforce the company's risk management system.

### Business or other risks which may significantly affect judgment of investors (as of March 31, 2021)

#### 1. Risks associated with accidents, disasters, etc.

- (1) Energy resource procurement difficulties
- (2) Natural disasters
- (3) Accidents and supply impairments accompanying city gas production and supply, and power generation
- (4) Spread of a highly virulent or contagious infections
- (5) Unforeseeable, large-scale power outages
- (6) Problems in securing the safety of city gas and in quality of gas appliances
- (7) Damage caused by rumors arising from a city gas accident of another company

#### 2. Market fluctuation risk

- (1) Fluctuation in market prices and interest rates
- (2) Fluctuation of the electric power market

#### 3. Risks associated with business execution

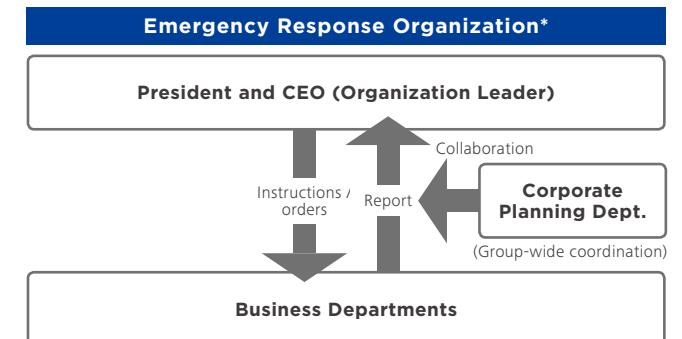
- (1) Risks related to existing businesses
  - a) Decrease in demand caused by intensified competition
  - b) Fluctuation in material prices
  - c) Changes in laws, regulations, and national or local energy policy
  - d) Fluctuation in gas sales volume caused by climate change
  - e) Decrease in existing demand caused by changes in the business environment
  - f) Interruption of telephone services at call centers
  - g) Delay in technology development
- (2) Risks associated with overseas business development
- (3) Delay in development of new markets
- (4) Inability to recover investments

#### 4. Risks related to information management and system operation

- (1) Leakage of personal information
- (2) Shutdown or malfunction of IT systems
- (3) Cyber attacks

#### 5. Risks related to corporate social responsibility

- (1) Compliance violations
- (2) Response to new environmental regulations
- (3) Insufficient customer services
- (4) Insufficient response to human rights issues



\* A department in charge of an executive office is predetermined depending on the type of emergency.

**Board of Directors** (As of June 29, 2021)

Director, Chairperson of the Board  
**HIROSE Michiaki**



April 1974 Joined the Company  
June 2009 Director, Managing Executive Officer and in charge of Corporate Planning Dept., Corporate Communications Dept. and Affiliated Companies Dept.  
April 2012 Representative Director, Executive Vice President and Chief Executive of Living Energy Div.  
April 2014 Representative Director, President  
April 2018 Director, Chairperson of the Board

Reason for  
appointment

Over the course of his career, HIROSE Michiaki has engaged mainly in planning-related work duties. For four years, from April 2014 until March 2018, he served as President. Since April 2018, as Director and Chairman, he has served as chairman of the Board of Directors. He is highly knowledgeable, and has extensive work experience with the Company.

Director **Outside**  
**SAITO Hitoshi**



April 1976 Joined Mitsui Fudosan Co., Ltd.  
June 2011 Executive Managing Director and Executive Managing Officer of Mitsui Fudosan Co., Ltd.  
April 2013 Managing Director and Senior Executive Managing Officer of Mitsui Fudosan Co., Ltd.  
April 2015 Managing Director, Senior Executive Managing Officer and Chief Executive of International Div. of Mitsui Fudosan Co., Ltd.  
June 2017 Advisor of Mitsui Fudosan Co., Ltd.  
June 2019 Director of the Company  
June 2020 Retired from Advisor of Mitsui Fudosan Co., Ltd.

Reason for  
appointment

Mr. SAITO Hitoshi is expected to use his international perspective acquired from overseas businesses in the real estate industry, as well as his management capabilities, broad outlook and in-depth knowledge gained through a wide range of business development for the Company's management.

Significant  
joint  
responsibilities

Outside Director of GLOBESHIP Corporation

Director  
Representative Corporate Executive  
Officer, President and CEO  
**UCHIDA Takashi**



April 1979 Joined the Company  
June 2015 Director, Managing Executive Officer and Chief Executive of Energy Resources Business Div.  
April 2016 Representative Director, Executive Vice President and Chief Executive of Residential Sales and Service Div.  
April 2018 Representative Director, President and CEO  
June 2021 Director  
Representative Corporate Executive Officer, President and CEO

Reason for  
appointment

In his career, UCHIDA Takashi has engaged mainly in planning, resources and overseas business-related work duties. Since April 2018, he has served as President and CEO, with ultimate responsibility for the execution of duties within the company. He is highly knowledgeable, and has extensive work experience with the Company.

Director **Outside**  
**TAKAMI Kazunori**



April 1978 Joined Matsushita Electric Industrial Co., Ltd. (Current Panasonic Corporation)  
June 2009 Managing Director of Panasonic Corporation  
April 2012 Representative Director, Senior Managing Executive officer and President of Appliances Company of Panasonic Corporation  
April 2015 Representative Director, Executive Vice President and in charge of Japan region, Customer Satisfaction, and Design of Panasonic Corporation  
June 2017 Corporate Advisor of Panasonic Corporation  
March 2018 Retired from Corporate Advisor of Panasonic Corporation  
June 2019 Director of the Company

Reason for  
appointment

Mr. TAKAMI Kazunori is expected to use his management capabilities, broad outlook and in-depth knowledge acquired through a wide range of business development in the electrical industry for the Company's management.

Significant  
joint  
responsibilities

Outside Director of Tokyo FM Broadcasting Co., Ltd.  
Outside Director of Nojima Corporation  
Outside Director of FUJITA KANKO INC.

Director  
**NAKAJIMA Isao**



April 1982 Joined the Company  
April 2015 Senior Executive Officer, CFO and in charge of Finance Dept., Accounting Dept., Purchasing Dept. and Real Estate Management Dept.  
April 2018 Senior Managing Executive Officer, CFO and in charge of Finance Dept., Accounting Dept., Personnel Dept. and Purchasing Dept.  
March 2019 Retired as Senior Managing Executive Officer  
June 2019 Audit & Supervisory Board Member of the Company  
June 2021 Retired from Audit & Supervisory Board Member of the Company  
June 2021 Director of the Company

Reason for  
appointment

NAKAJIMA Isao is highly knowledgeable in financial affairs and accounting, and has extensive work experience with the Company. He has carried out financial and accounting operations and has served as Senior Managing Executive Officer.

## Corporate Executive Officers

Representative Corporate Executive Officer, President and CEO	UCHIDA Takashi	
Representative Corporate Executive Officers, Vice Presidents	NOHATA Kunio	Chief Executive of Pipeline Network Company
	SAWADA Satoru	Chief Executive of Residential Sales and Service Div. In charge of Tokyo 2020 Olympic and Paralympic Dept.
Senior Managing Corporate Executive Officer	SASAYAMA Shinichi	Chief Executive of Asset Optimization & Trading Div.

## Executive Officers

Senior Managing Executive Officers	HAYAKAWA Koki	The Japan Gas Association
	KISHINO Hiroshi	In charge of Corporate Planning Dept., Group Formation Reforms Project Dept., and Business Development Project Dept.
	KIMOTO Kentaro	Chief Executive of Digital Innovation Div.
Managing Executive Officers	SHIGITANI Ayumi	President, Representative Director of TOKYO GAS INET CORP.
	HIGO Takashi	Chief Executive of Energy Solution Div.
	HOSOYA Isao	Chief Executive of Gas & Power Div., in charge of Sustainability Dept.
	TANAZAWA Satoshi	Chief Executive of Global Business Div.
	OGAWA Shinsuke	In charge of Personnel Dept., Secretary Dept., General Administration Dept., Corporate Communications Dept., and Internal Audit Dept.
	SAITO Akihiro	Chief Executive of Administration Div., Pipeline Network Company.
Executive Officers	KONISHI Yasuhiro	President, Representative Director of Tokyo Gas Engineering Solutions Corporation
	SATO Hirofumi	CFO, In charge of Financial Management Dept., Accounting Dept., Purchasing Dept., and Compliance Dept.
	YOSHIOKA Tomoyuki, KADO Masayuki, ENDO Yo, SUGESAWA Nobuhiro, TSUJI Eito, KURIMOTO Kazuya, IMAI Tomoo, KONISHI Masako, TAKEUCHI Atsunori, OKUMURA Eigo, MINAMI Taku, YAKABE Hisataka, OHASHI Taro, NAKAMURA Hajime	

### Director Outside EDAHIRO Junko



April 2003 Representative Director of Edahiroba Inc. (Current e's Inc.)  
 May 2006 Director and Chairperson of Change Agent Inc.  
 August 2018 Professor of Shizenkan University Graduate School of Leadership & Innovation  
 June 2019 Director of the Company  
 October 2019 Representative Director of Shimokawa Seeds K.K.  
 September 2020 President of For Future Company ( Miraisozobu in Japanese)

#### Reason for appointment

Ms. EDAHIRO Junko is expected to use her experience as a corporate manager, advanced specialization related to the environment and in-depth knowledge as an environmental journalist for the Company's management.

#### Significant joint responsibilities

Representative Director of e's Inc.  
 Director and Chairperson of Change Agent Inc.  
 Professor of Shizenkan University Graduate School of Leadership & Innovation  
 Representative Director of Shimokawa Seeds K.K.  
 President of For Future Company ( Miraisozobu in Japanese)

### Director Outside NOHARA Sawako



December 1988 Joined Life Science Institute Co., Ltd.  
 July 1995 Joined InfoCom Research, Inc.  
 December 2001 President and Representative Director of IPSe Marketing, Inc.  
 June 2018 Audit & Supervisory Board Member of the Company  
 April 2020 Project Professor, Graduate School of Media and Governance, Keio University  
 June 2021 Retired from Audit & Supervisory Board Member of the Company  
 June 2021 Director of the Company

#### Reason for appointment

Ms. NOHARA Sawako is highly knowledgeable, and possesses corporate management experience and high-level IT-related expertise. We hope that she will make use of these qualities for the Company's management.

#### Significant joint responsibilities

President and Representative Director of IPSe Marketing, Inc.  
 Outside Director of DAIICHI SANKYO COMPANY, LIMITED  
 Outside Director of Keikyu Corporation

### Director Outside INDO Mami



April 1985 Joined Daiwa Securities Co. Ltd.  
 April 2016 Senior Managing Director of Daiwa Institute of Research Ltd.  
 December 2016 Retired from Senior Managing Director of Daiwa Institute of Research Ltd.  
 December 2016 Commissioner of Securities and Exchange Surveillance Commission  
 December 2019 Retired from Commissioner of Securities and Exchange Surveillance Commission  
 June 2020 Director of the Company

#### Reason for appointment

Ms. INDO Mami is expected to use her in-depth experience as analyst and consultant and in other areas related to corporate management in the financial sector as well as her extensive perspectives and advanced knowledge for the Company's management.

#### Significant joint responsibilities

External Audit & Supervisory Board Member of AIG Japan Holdings KK  
 Outside Director of FUJITEC CO., LTD.  
 Outside Director of Ajinomoto Co., Inc.

### Director Outside ONO Hiromichi



April 1979 Joined Ajinomoto Co., Inc.  
 June 2011 Member of the Board & Corporate Vice President in charge of Finance and Purchasing  
 April 2013 Member of the Investment Committee of Government Pension Investment Fund  
 June 2017 Retired from Member of the Board of Ajinomoto Co., Inc.  
 June 2017 Retired from Member of the Investment Committee of Government Pension Investment Fund  
 June 2020 Audit & Supervisory Board Member of the Company  
 June 2021 Retired from Audit & Supervisory Board Member of the Company  
 June 2021 Director of the Company

#### Reason for appointment

Mr. ONO Hiromichi possesses a high level of experience in business administration and knowledge in finance and accounting. We hope that he will make use of these qualities for the Company's management.

#### Significant joint responsibilities

Outside Director of Mebuki Financial Group, Inc.

# BUSINESS OVERVIEW



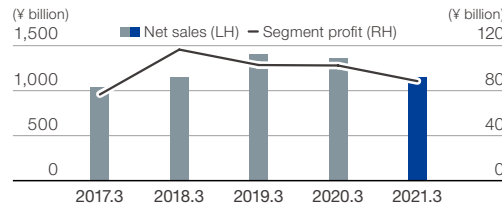
# City Gas and LNG Sales Business

**Outline** By promoting electricity and services, we are seeking to expand the service area of our city gas business, which has so far been operating in the Greater Tokyo Area, by expanding its application to household, commercial and industrial use as well as use for power generation and other purposes. By taking redefining LNG, which is a raw material for city gas, as a commodity, we will also strive to increase the purchasing flexibility and price competitiveness of LNG and expand our LNG business into asset-backed trading and other operations.

## Strengths

- A customer base of over 11 million customers and a relationship of trust with customers based on close ties with local communities
- A proven track record of providing a safe and reliable supply of gas to customers
- The Kanto region centered around Tokyo, with its high concentration of production and consumption, as our primary sales area
- Safety-related know-how and energy solution technological capabilities

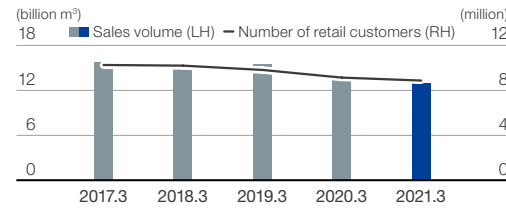
## Net sales and segment profit



## Risks

- Difficulties in LNG procurement due to geopolitical risks, etc., related to raw material imports
- Supply troubles caused by damage to production and supply facilities, stemming from a large-scale disaster
- Intensified competition driven by market deregulation; decline in demand caused by changing lifestyles

## City gas sales volume and number of retail customers



## Number of retail customers

**8.863 million**  
As of March 31, 2021

## City gas sales volume

**12.99 billion m³**  
FY2020

Equivalent to approximately **35%** of total nationwide gas sales volume in Japan

## Segment profit

**¥88.4 billion**  
FY2020

Japan relies heavily on LNG imports for procuring natural gas. Most LNG imports are long-term contract based and linked to crude oil prices. With the aim of achieving stable, affordable, and flexible LNG procurement under these conditions, the Tokyo Gas Group is striving to achieve diversification in three areas: supply sources, contract terms and conditions, and the LNG network.

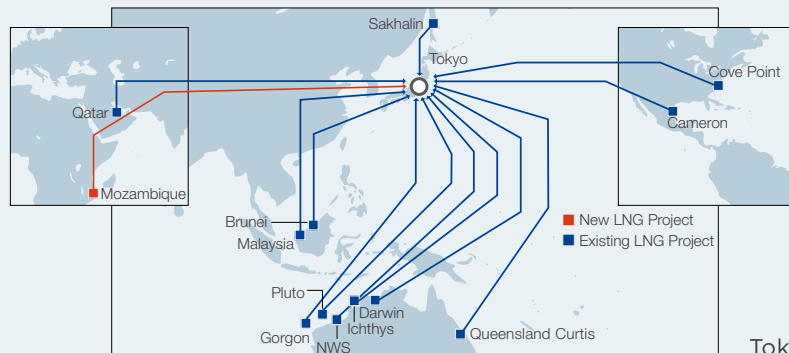
### Diversification 1

## Supply sources

In 2018, we started to procure LNG from the U.S.A., in addition to supplies procured from existing sources, including Southeast Asia, Australia and Sakhalin. In 2020, the portfolio agreement with Shell Eastern Trading, under which multiple sources supply us with LNG,

came into effect, increasing our supply sources to 16 projects. In the future, we will work to further diversify our procurement sources, including a Mozambique LNG project whereby we will jointly purchase LNG with Centrica, in an effort to improve supply stability.

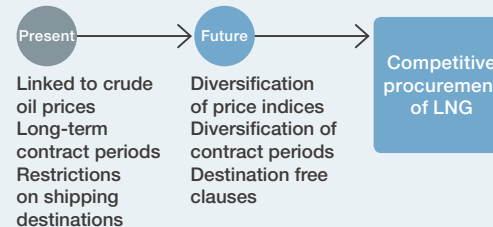
### Main supply sources of Tokyo Gas (long-term contract-based)



### Diversification 2

## Contract terms and conditions

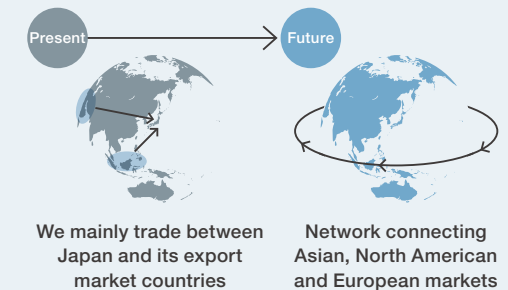
We are diversifying price indices by adding contracts based on U.S. natural gas prices and coal prices in addition to conventional contracts based on crude oil prices. We are also making procurement more flexible by adding contracts without restrictions on shipping destinations and those with a more diversified contract period, which may include medium-term, short-term or spot procurement.



### Diversification 3

## LNG Network

We form strategic alliances with various companies in Japan and abroad to establish an LNG network that links the Asian, North American and European markets. In this way, we aim to improve LNG transport efficiency, reduce costs, and increase the flexibility of procurement and sales contracts.



# Electric Power Business

**Outline** We are engaged in a comprehensive electric power business that extends from fuel procurement to power generation and sales. As a new power supplier, we own one of the largest power plants in the Greater Tokyo Area. In addition to electricity wholesaling and sales to large-volume consumers, we have been making efforts to capture retail customers. In the future, with the aim of achieving Net-Zero CO<sub>2</sub>, we will also focus on acquiring renewable power sources and deliver electricity tailored to customer needs.

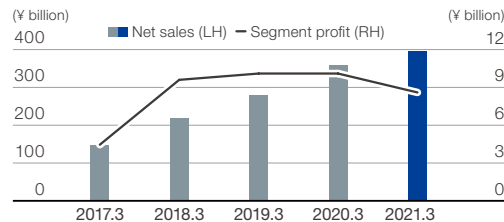
## Strengths

- Owning one of the largest high-efficiency power plants among new power suppliers in the Greater Tokyo Area
- A community-based sales network composed of Lifeval, Enesta and other outlets, and a customer base of more than 11 million customers

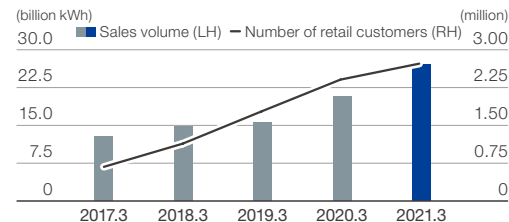
## Risks

- Impact on revenue and expenditure of fluctuations in prices on the wholesale power trading market and raw materials and fuel costs
- Damage to power generation facilities and supply troubles involving raw materials and fuels, stemming from a large-scale disaster

## Net sales and segment profit



## Electricity sales volume and number of retail customers



## Achievements over the past five years since the full deregulation of the electric power retail market

In the electric power retail business, we offer a one-stop service providing gas, electricity and services. We were supplying electric power to 2,717,000 customers as of March 31, 2021 and hold the largest market share for the fifth consecutive year in the low voltage category among new power suppliers.

## Progress in the development of energy power sources (as of March 31, 2021)

Owned power  
(rounded off to 10,000 kW)

	Domestic	Total
<b>Renewable energy (photovoltaic, wind power, and biomass)</b>	28	136
	Overseas	108
<b>Natural gas fired power generation</b>	287	410
	Overseas	123

## Acquisition of renewable energy sources

The Tokyo Gas Group has been working on photovoltaic, onshore wind power, and biomass power generation, and has made progress in the provision of electricity generated from renewable energy. We will continue to promote the development and purchase of renewable energy sources in collaboration with business partners.



### Wind power generation

By making use of our experience in onshore wind power generation, following the construction of a station on our own site in 2005, we have participated in Shonai Wind-Power Generation, which operates the Yuza Wind Power Station in Yamagata Prefecture. At the same time, we are purchasing power from two wind power stations operated by Kuroshio Wind Power Generation in Chiba Prefecture. Going forward, we will promote the development of bottom-mounted offshore wind power generation in Kashima Port, Ibaraki Prefecture, and also work on floating-type offshore wind power generation, which is anticipated to grow.



### Overseas renewable energy initiative: Photovoltaic power generation

In August 2020, Tokyo Gas America Ltd. acquired the 631MWdc Aktina Solar Project in Texas, U.S.A. developed by Hecate Energy, a U.S. renewable energy developer. We intend to expand the scale of overseas renewable energy sources.



## Recent major development related to renewable energy

<b>April 2011</b>	Invested in Shonai Wind-Power Generation (30.2% equity stake; 14,560kW output), which operates the Yuza Wind Power Station, etc.
<b>Feb. 2017</b>	Entered into a capital alliance with Shizen Energy Inc., which is engaged in the energy business centering on photovoltaic power generation.
<b>April 2018</b>	Invested in the Kashima Port Offshore Wind Project being promoted by Wind Power Energy Co., Ltd.
<b>May 2018</b>	Prominet Power Co., Ltd. (a wholly-owned subsidiary of Tokyo Gas) acquired part of Tokyo Century Corporation's stake in its wholly-owned company, SFK Power LLC (39% equity stake; 9,717kW output), jointly with Kyudenko Corporation.
<b>Dec. 2019</b>	Acquired an equity interest in a renewable energy joint venture company in Mexico which was established by ENGIE in France (50% equity stake; 900MW output).
<b>May 2020</b>	Invested in Principle Power, Inc., which develops and possesses wind float technology for floating-type offshore wind power generation.
<b>Aug. 2020</b>	Acquired the 631MWdc Aktina Solar Project in Texas, U.S.A. developed by Hecate Energy.
<b>Nov. 2020</b>	Invested in Chiba Offshore Wind Inc., established by Northland Power Inc. and Shizen Energy Inc.
<b>July 2021</b>	Constructed and started commercial solar power operation of the Iwakuni-Yu Solar Power Plant (23,490kW output) in Yamaguchi Prefecture.

# Overseas Business

## Strengths

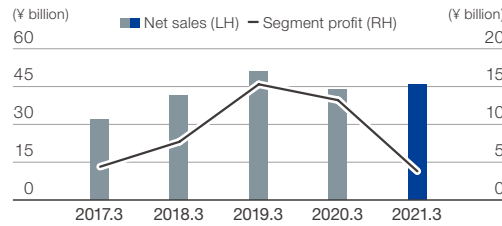
- Know-how in the midstream and downstream businesses accumulated in Japan
- Global network established through activities such as raw material procurement and business participation

## Risks

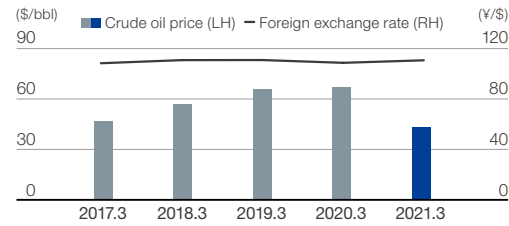
- Stagnation of business operation, increase in expenses, and missing of business opportunities due to compliance with country-specific laws, regulations and/or business practices
- Impact of fluctuations in crude oil/gas prices and foreign exchange rates on the revenue and expenditure of overseas business operations in general

**Outline** Toward realizing the targets set in Compass2030, the Tokyo Gas Group is expanding its overseas business by engaging mainly in resource development, renewable energy, and LNG infrastructure businesses in North America, Australia, Southeast Asia, and Europe.

## Net sales and segment profit

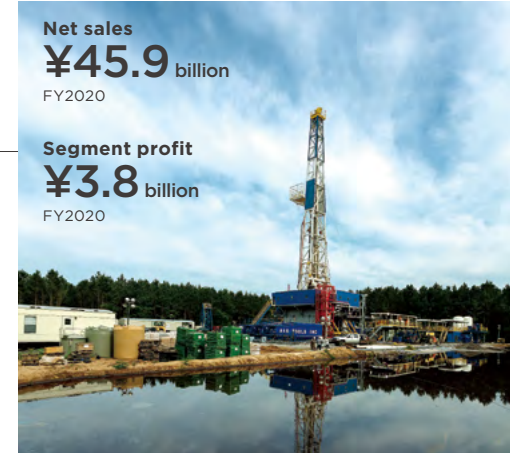


## Crude oil price and foreign exchange rate

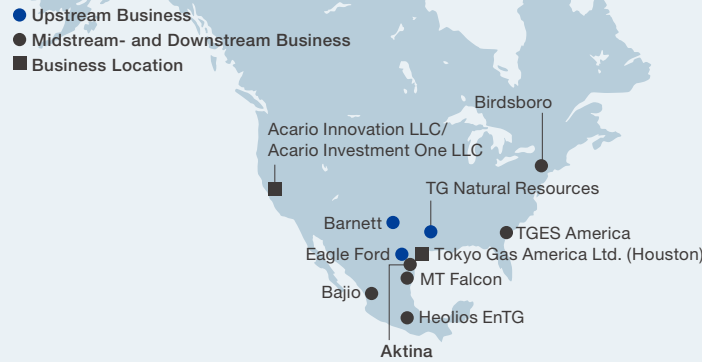


Net sales  
**¥45.9 billion**  
FY2020

Segment profit  
**¥3.8 billion**  
FY2020



## North America



(As of March 31, 2021)

## Resource Development Business

We invest in prime assets by making use of our knowledge and insights regarding local markets, regulations, and business structures. We have acquired these through our experience in business operations and the dispatch of personnel. At the same time, We monitor commodity price trends and carefully estimate the productivity and reserves of gas fields.

## Midstream and Downstream Business

In addition to the natural gas-fired power generation business, we will also continue to focus on the renewable energy business. Following collaboration with the French company ENGIE in Mexico, we are now working on our own solar power generation project (Aktina) in the U.S.A.

## Southeast Asia

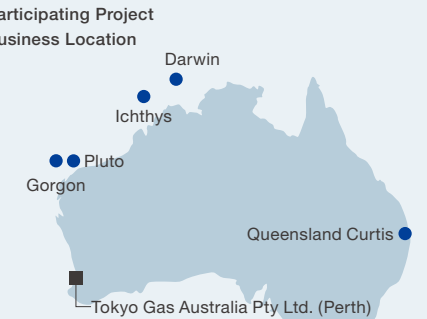


(As of March 31, 2021)

## Midstream and Downstream Business

We have taken part in the construction of LNG terminals, power plants, and other energy infrastructure and facilities. We also provide support for demand development, LNG terminal operations, LNG procurement and other activities. We thus offer a broad array of value across the entire value chain.

## Australia



(As of March 31, 2021)

## Resource Development Business

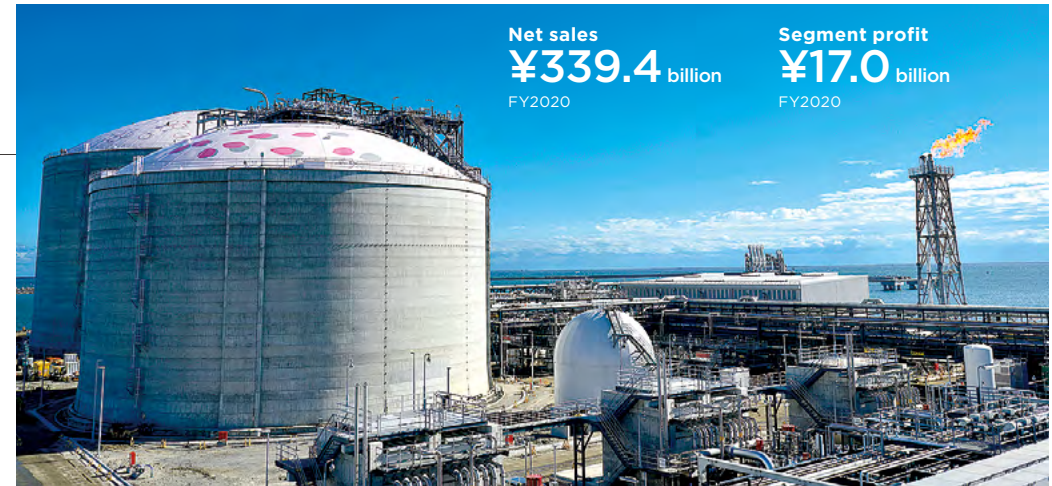
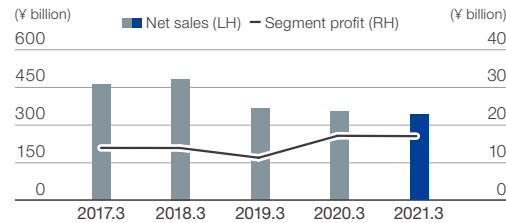
We have invested in five LNG projects in Australia, which has grown into a major LNG supply base for East Asia. We will continue to operate and manage these projects to maximize the value of our holdings.



# Energy-related Business

**Outline** Since 1969, when we introduced LNG for the first time to Japan, we have consistently handled processes across the entire LNG value chain. Utilizing the technological capabilities and know-how developed through these processes, we provide one-stop solutions, including LNG terminals, pipelines, district heating and cooling, and energy services, to match the needs of customers both in Japan and overseas.

## Net sales and segment profit



## Providing engineering solutions leveraging technological capabilities and know-how developed over a half century

During our half-century operations across the entire LNG value chain that extends from upstream processes to downstream processes, we have designed and built LNG terminals, pipelines, district heating and cooling centers and various other facilities and equipment. Based on the strength of our “user’s know-how,” which we have cultivated through our own use, we provide engineering solutions to clients both in Japan and overseas.

## One of the world’s largest district heating/cooling centers celebrated its 50th anniversary - The Shinjuku District Heating and Cooling Center -



The Shinjuku District Heating and Cooling Center, the first of its kind in the Greater Tokyo Area to provide cold/hot heat to a district in 1971, celebrated its 50th anniversary. The Center is one of the world’s largest systems of its kind, serving 22 buildings, mostly hotels and offices with a total floor area of 2.27 million m<sup>2</sup>, in the Shinjuku area. It also distributes electricity to the Tokyo Metropolitan Government Buildings. We have evolved technologies to meet the needs of the times, from measures to combat air pollution to energy saving, the reduction of CO<sub>2</sub> emissions, and the enhancement of resilience.

## Thailand: LNG receiving terminal PMC (Project Management Consultation)



We are involved in project management for the construction of the Nong Fab LNG Terminal commissioned by PTT LNG Co., Ltd., based in Thailand. We received this order in recognition of the advanced technical capabilities and the extensive experience accumulated by Tokyo Gas Engineering Solutions Corporation through the construction and operation of LNG terminals in Japan and overseas. We are managing the entire project, including technological and contractual aspects, in order to ensure that the design, procurement, construction and trial operation performed by the construction contractor proceed smoothly as planned.

# Urban Development Service (Real Estate)

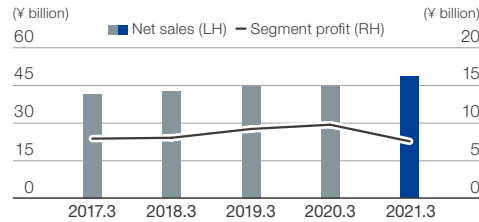
Net sales  
**¥48.4 billion**  
FY2020

Segment profit  
**¥7.5 billion**  
FY2020



**Outline** Over the course of 136 years in business, the Tokyo Gas Group has acquired large-scale and medium-scale areas of land with high asset value. We have made full use of the properties by operating an office and residential real estate leasing business mainly in city center areas with the basic concept of securing stable revenue and improving asset value. We are also working on joint projects with business partners in an effort to make area-based energy proposals and promote urban development.

## Net sales and segment profit



## Office leasing business

### msb Tamachi (musubu Tamachi)

We are engaged in the business of leasing high value-added office space, mainly in city center areas using large properties. At msb Tamachi, we have introduced a smart energy network and have enhanced business continuity planning (BCP), contributing to the creation of an advanced, appealing community. Phase I of development (Tamachi Station Tower S and Pullman Tokyo Tamachi) was completed in May 2018, and Phase II (Tamachi Station Tower N) was completed in July 2020.

Note: Phase I: Land leasing business, Phase II: Office leasing business (based on capital investment by Tokyo Gas)

msb Tamachi (musubu Tamachi)

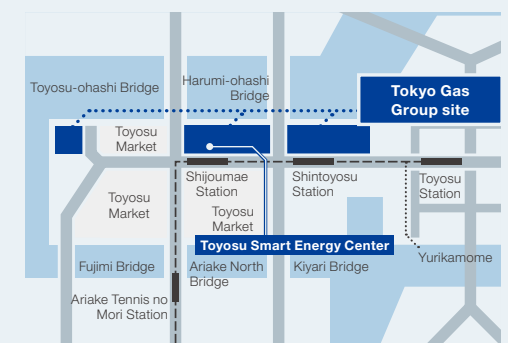


## Residential leasing business

We are also engaged in the development of urban-type rental housing complexes "La Tierra Series." In January 2021, the LaTierra Itabashi of 843 units in 22 apartment buildings was completed. By accelerating acquisition of properties, we will enhance the value we offer to our customers through the residential leasing business and to work towards the betterment of society.

### Toyosu area property development

The Toyosu area is now attracting even greater attention as a waterfront blessed with greenery, despite being situated in a prime location, approximately 4 km away from Tokyo Station. The Tokyo Gas Group owns approximately 18 ha of land at the Toyosu Wharf and aims to contribute to the ESG management and prime, charming urban development from a long-term perspective.



## 10-Year Consolidated Financial Highlights\*1

	2012.3	2013.3	2014.3	2015.3	2016.3	2017.3	2018.3	2019.3	2020.3	2021.3
Net Sales (¥ million)	1,754,257	1,915,639	2,112,117	2,292,548	1,884,656	1,587,085	1,777,344	1,962,308	1,925,235	<b>1,765,146</b>
Operating Profit (¥ million)	77,075	145,633	166,044	171,753	192,008	58,365	116,302	93,704	101,418	<b>77,675</b>
Operating Profit Margin (%)	4.39	7.60	7.86	7.49	10.19	3.68	6.54	4.78	5.27	<b>4.40</b>
Ordinary Profit (¥ million)	75,620	147,453	159,613	168,169	188,809	55,688	111,546	89,386	102,645	<b>70,500</b>
Profit attributable to owners of parent (¥ million)	46,060	101,678	108,451	95,828	111,936	53,134	74,987	84,555	43,293	<b>49,505</b>
Equity (¥ million)	839,166	927,634	1,011,787	1,069,515	1,100,271	1,101,498	1,136,027	1,159,055	1,147,747	<b>1,153,813</b>
Total Assets (¥ million)	1,863,885	1,992,403	2,176,816	2,257,662	2,251,518	2,230,269	2,334,316	2,428,149	2,539,919	<b>2,738,348</b>
Interest-bearing Debt (¥ million)	625,830	642,550	713,823	730,739	715,769	713,596	724,940	803,216	905,066	<b>1,065,988</b>
Operating Cash Flow (¥ million)	194,565	240,448	248,831	237,680	257,122	217,439	240,328	246,436	213,171	<b>229,315</b>
Free Cash Flow (¥ million)	48,152	56,651	827	13,084	25,089	14,081	31,583	22,655	(13,887)	<b>(17,116)</b>
EBITDA (¥ million)	225,580	284,403	306,424	313,605	337,194	222,670	281,643	255,585	271,296	<b>257,485</b>
Capital Expenditure (¥ million)	146,413	183,797	248,004	224,596	232,033	203,358	208,745	223,781	227,058	<b>246,431</b>
Depreciation (¥ million)*2	148,505	138,770	140,380	141,852	145,187	164,305	165,342	161,881	169,878	<b>179,810</b>
EPS (Earnings per Share) (¥)	17.70	39.52	43.10	39.15	46.68	23.02	164.12 <sup>3</sup>	187.60	97.86	<b>112.26</b>
BPS (Book Value per Share) (¥)	324.67	360.70	402.91	438.28	460.35	479.74	2,487.58 <sup>3</sup>	2,575.99	2,602.53	<b>2,616.37</b>
Number of Issued Shares (Common Stock) (thousands of shares)	2,590,715	2,577,919	2,517,551	2,446,778	2,396,778	2,302,856	458,073 <sup>3</sup>	451,356	442,436	<b>442,436</b>
Dividend per Share (¥)	9	10	10	10	11	11	55 <sup>3</sup>	60	60	<b>60</b>
DOE (Dividends on Equity) (%)	2.74	2.91	2.59	2.34	2.42	2.29	2.25	2.35	2.29	<b>2.30</b>

Notes: \*1 The financial information contained in this integrated report is based on annual securities report. However, it has not been audited by Audit firms etc.

\*2 Depreciation includes amortization of long-term prepaid expenses.

\*3 The Company carried out a share consolidation at a ratio of 5 common shares to 1 on October 1, 2017.

The dividend per share of ¥55.0 is calculated on the post-consolidation basis (the interim dividend of ¥5.50 per share before the share consolidation and the year-end dividend of ¥27.50 per share after the share consolidation).

	2012.3	2013.3	2014.3	2015.3	2016.3	2017.3	2018.3	2019.3	2020.3	2021.3
Payout Ratio (%)	50.85	25.30	23.20	25.55	23.57	47.79	33.51	31.98	61.31	<b>53.45</b>
Total Payout Ratio (%)	61.36	60.70	60.00	60.80	60.10	60.71	60.17	60.31	61.00	<b>60.12</b>
Current Ratio (%)	156.9	162.2	156.7	150.6	155.5	142.7	135.6	156.0	152.0	<b>132.7</b>
D/E (Debt-Equity) Ratio (times)	0.75	0.69	0.71	0.68	0.65	0.65	0.64	0.69	0.79	<b>0.92</b>
Equity Ratio (%)	45.0	46.6	46.5	47.4	48.9	49.4	48.7	47.7	45.2	<b>42.1</b>
ROE (Return on Equity) (%)	5.4	11.5	11.2	9.2	10.3	4.8	6.7	7.4	3.8	<b>4.3</b>
ROA (Return on Assets) (%)	2.5	5.3	5.2	4.3	5.0	2.4	3.3	3.6	1.7	<b>1.9</b>
Total Asset Turnover (times)	0.95	0.99	1.01	1.03	0.84	0.71	0.78	0.82	0.78	<b>0.67</b>
WACC (%)	3.1	3.2	3.2	3.6	3.4	3.0	3.1	3.0	2.7	<b>2.6</b>
Number of city gas retail customers (thousand)	9,615.4	9,721.1	9,844.8	9,982.3	10,125.7	10,269.4	10,209.0	9,821.0	9,129.0	<b>8,863.0</b>
Gas sales volume (million m <sup>3</sup> )	15,190	15,390	14,735	15,541	15,436	15,720	15,568	15,198	13,855	<b>12,990</b>
Gas Sales Volume, Gas Volume used in-house*4	15,833	16,741	17,225	18,360	18,587	19,053	19,052	18,397	17,666	<b>17,577</b>
Number of electricity retail customers (thousand)	—	—	—	—	—	635	1,105	1,742	2,350	<b>2,717</b>
Electric power sales volume (billion kWh)	8.27	9.98	9.71	10.61	10.96	12.65	14.66	15.48	20.60	<b>24.76</b>

\*4: It is the amount that added self-consuming volume (excluded volume for Nijio) to a Consolidated gas sales volume

#### Computations

Operating Cash Flow = Profit attributable to owners of parent + Amortization of Long-term Prepaid Expenses + Depreciation

Free Cash Flow = Profit attributable to owners of parent + Amortization of Long-term Prepaid Expenses + Depreciation – Capital Expenditure

Current Ratio = Current Assets (year-end) / Current Liabilities (year-end) x 100

Debt-Equity Ratio = Interest-bearing Debt (year-end) / Equity (year-end)

Equity Ratio = Equity (year-end) / Total Assets (year-end) x 100

Total Asset Turnover = Net Sales / Total Assets (average)

WACC calculation data (fiscal 2020 actual)

- Cost of interest-bearing debt: Real interest rate of 0.75% (after tax)

- Cost of shareholders' equity

- Risk-free rate: 10-year JGB yield of -0.035%

- Risk premium: 5.5%, Beta coefficient of 0.75

## Consolidated Balance sheets

	(Million yen)	
	2020.3.31	2021.3.31
<b>Assets</b>		
Non-current assets		
Property, plant and equipment		
Production facilities	224,515	231,177
Distribution facilities	548,095	594,662
Service and maintenance facilities	48,492	15,992
Other facilities	475,249	564,495
Inactive facilities	316	316
Construction in progress	162,862	89,283
Total property, plant and equipment	1,459,532	1,495,927
Intangible assets		
Goodwill	2,056	5,320
Other intangible assets	154,066	290,316
Total intangible assets	156,123	295,637
Investments and other assets		
Investment securities	216,052	230,782
Long-term loans receivable	50,615	57,279
Retirement benefit asset	29	114
Deferred tax assets	49,132	47,368
Other investments	46,407	60,814
Allowance for doubtful accounts	(405)	(301)
Total investments and other assets	361,831	396,057
Total non-current assets	1,977,487	2,187,623
Current assets		
Cash and deposits	151,288	157,881
Notes and accounts receivable-trade	221,123	218,985
Lease receivables and investments in leases	20,363	19,618
Securities	-	1,210
Merchandise and finished goods	1,905	1,980
Work in process	11,868	11,595
Raw materials and supplies	64,703	46,464
Other current assets	91,748	93,848
Allowance for doubtful accounts	(570)	(857)
Total current assets	562,431	550,725
<b>Total assets</b>	<b>2,539,919</b>	<b>2,738,348</b>

	(Million yen)	
	2020.3.31	2021.3.31
<b>Liabilities</b>		
Non-current liabilities		
Bonds payable	404,998	474,998
Long-term borrowings	429,541	458,881
Deferred tax liabilities	18,531	24,269
Retirement benefit liability	71,976	58,416
Provision for gas holder repairs	3,122	3,172
Provision for safety measures	593	349
Provision for appliance warranties	12,985	10,843
Provision for point card certificates	1,000	1,635
Asset retirement obligations	14,424	23,313
Other noncurrent liabilities	53,501	89,188
Total non-current liabilities	1,010,676	1,145,067
Current liabilities		
Current portion of non-current liabilities	54,428	108,704
Notes and accounts payable-trade	78,593	84,265
Short-term borrowings	6,507	5,706
Income taxes payable	29,708	11,710
Other current liabilities	200,865	204,623
Total current liabilities	370,104	415,010
<b>Total liabilities</b>	<b>1,380,780</b>	<b>1,560,077</b>
<b>Net assets</b>		
Shareholders' equity		
Share capital	141,844	141,844
Capital surplus	2,067	1,145
Retained earnings	967,718	990,762
Treasury shares	(3,875)	(3,907)
Total shareholders' equity	1,107,754	1,129,845
Accumulated other comprehensive income		
Valuation difference on available-for-sale securities	15,843	22,990
Deferred gains or losses on hedges	1,444	(11,240)
Foreign currency translation adjustment	22,412	4,322
Remeasurements of defined benefit plans	292	7,895
Total accumulated other comprehensive income	39,992	23,968
Non-controlling interests	11,391	24,457
<b>Total net assets</b>	<b>1,159,138</b>	<b>1,178,271</b>
<b>Total liabilities and net assets</b>	<b>2,539,919</b>	<b>2,738,348</b>

## Consolidated Statements of Income

	(Million yen)	
	2019.4.1-2020.3.31	2020.4.1-2021.3.31
Net sales	1,925,235	1,765,146
Cost of sales	1,344,171	1,212,624
Gross profit	581,064	552,522
Selling, general and administrative expenses		
Supply and sales expenses	408,730	410,167
General and administrative expenses	70,915	64,679
Total selling, general and administrative expenses	479,645	474,846
Operating profit	101,418	77,675
Non-operating income		
Interest income	2,330	1,586
Dividend income	5,433	2,398
Share of profit of entities accounted for using equity method	5,211	1,482
Gain on derivatives	100	7,979
Miscellaneous income	7,352	7,757
Total non-operating income	20,429	21,204
Non-operating expenses		
Interest expenses	11,412	12,629
Loss on derivatives	1,174	9,373
Miscellaneous expenses	6,614	6,376
Total non-operating expenses	19,202	28,379
Ordinary profit	102,645	70,500
Extraordinary income		
Gain on sale of non-current assets	-	3,114
Gain on sale of investment securities	-	5,283
Gain on bargain purchase	-	2,008
Gain on settlement of contract	11,627	-
Total extraordinary income	11,627	10,406
Extraordinary losses		
Impairment losses	28,152	10,255
Loss on valuation of investment securities	18,643	4,466
Total extraordinary losses	46,796	14,722
Profit before income taxes	67,476	66,184
Income taxes-current	31,196	16,887
Income taxes-deferred	(7,197)	(1,175)
Total income taxes	23,999	15,712
Profit	43,477	50,471
Profit attributable to non-controlling interests	184	966
Profit attributable to owners of parent	43,293	49,505

## Consolidated Statements of Comprehensive Income

	(Million yen)	
	2019.4.1-2020.3.31	2020.4.1-2021.3.31
Profit	43,477	50,471
Other comprehensive income		
Valuation difference on available-for-sale securities	(6,878)	7,178
Deferred gains or losses on hedges	(850)	(10,014)
Foreign currency translation adjustment	(1,916)	(14,869)
Remeasurements of defined benefit plans, net of tax	6,150	7,751
Share of other comprehensive income of entities accounted for using equity method	178	(6,259)
Total other comprehensive income	(3,316)	(16,212)
Comprehensive income	40,161	34,259
Comprehensive income attributable to		
Comprehensive income attributable to owners of parent	40,148	33,480
Comprehensive income attributable to non-controlling interests	12	778

Consolidated Statements of Income  
Consolidated Statements of  
Comprehensive Income

## Consolidated Statements of Cash Flows

	(Million yen)	
	2019.4.1-2020.3.31	2020.4.1-2021.3.31
Cash flows from operating activities		
Profit before income taxes	67,476	66,184
Depreciation	165,615	176,087
Impairment losses	28,152	10,255
Amortization of long-term prepaid expenses	4,263	3,722
Loss on retirement of property, plant and equipment	2,164	3,274
Loss (gain) on sale of non-current assets	244	(3,102)
Loss (gain) on sale of investment securities	(108)	(5,283)
Loss (gain) on valuation of investment securities	18,643	4,466
Loss (gain) of derivatives	1,073	1,393
Gain on bargain purchase	-	(2,008)
Increase (decrease) in retirement benefit liability	5,206	(2,918)
Increase (decrease) in provision for appliance warranties	(1,072)	(2,141)
Interest and dividend income	(7,763)	(3,984)
Interest expenses	11,412	12,629
Share of loss (profit) of entities accounted for using equity method	(5,211)	(1,482)
Decrease (increase) in trade receivables	52,646	5,126
Decrease (increase) in inventories	172	18,643
Increase (decrease) in trade payables	8,952	8,080
Increase (decrease) in accrued consumption taxes	7,979	(1,072)
Decrease (increase) in accounts receivable-other	(1,619)	(6,242)
Other, net	(23,678)	11,217
Subtotal	334,549	292,844
Interest and dividends received	14,510	7,843
Interest paid	(11,087)	(12,630)
Income taxes paid	(31,676)	(32,482)
Net cash provided by (used in) operating activities	306,296	255,574
Cash flows from investing activities		
Payments into time deposits	(55)	(4,287)
Purchase of securities	-	(1,200)
Purchase of investment securities	(23,989)	(37,467)
Proceeds from sale and redemption of investment securities	1,916	16,573
Purchase of property, plant and equipment	(177,664)	(172,652)
Purchase of intangible assets	(41,908)	(35,725)
Purchase of long-term prepaid expenses	(2,183)	(2,456)
Proceeds from sale of non-current assets	282	5,151
Payments for retirement of property, plant and equipment	(36)	(1,043)
Long-term loan advances	(16,989)	(11,831)
Proceeds from collection of long-term loans receivable	4,853	4,037
Net decrease (increase) in short-term loans receivable	530	(2,854)
Payments of guarantee deposits	(2,709)	(6,957)
Proceeds from refund of guarantee deposits	1,855	4,916
Purchase of shares of subsidiaries resulting in change in scope of consolidation	(17,908)	(32,579)
Proceeds from purchase of shares of subsidiaries resulting in change in scope of consolidation	-	7,006
Payments for acquisition of businesses	(393)	(25,208)
Other, net	3,601	667
Net cash provided by (used in) investing activities	(270,798)	(295,911)

	(Million yen)	
	2019.4.1-2020.3.31	2020.4.1-2021.3.31
Cash flows from financing activities		
Repayments of lease obligations	(2,646)	(2,414)
Proceeds from long-term borrowings	71,542	51,035
Repayments of long-term borrowings	(43,390)	(35,981)
Proceeds from issuance of bonds	90,000	90,000
Redemption of bonds	(30,000)	(20,000)
Purchase of shares of subsidiaries not resulting in change in scope of consolidation	(131)	(2,275)
Dividends paid	(27,839)	(26,449)
Other, net	(34,362)	(1,905)
Net cash provided by (used in) financing activities	23,171	52,009
Effect of exchange rate change on cash and cash equivalents	(489)	(5,088)
Net increase (decrease) in cash and cash equivalents	58,179	6,584
Cash and cash equivalents at beginning of period	93,032	151,218
Increase (decrease) in cash and cash equivalents resulting from change in scope of consolidation	6	8
Cash and cash equivalents at end of period	151,218	157,811

# Delayed Impact of Gas Rate Adjustment System

## Gas Rate Adjustment System's Medium- to Long-Term Neutralizing Effect on Crude Oil Price and Exchange Rate Formation

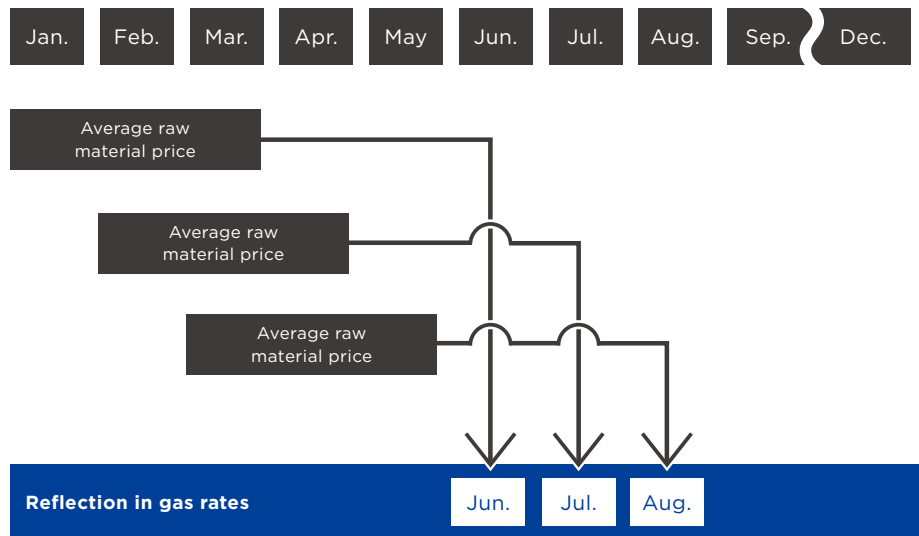
Gas prices are determined using the gas rate adjustment system. Through this system, average raw material prices over a three-month period according to trade statistics are compared with the raw material cost that is used as the standard (standard average raw material cost), and the gas rates are adjusted using a defined calculation method based on the differences. A time lag of four months on average (called a sliding time lag) exists between the payment of raw material

costs and the reflection of such changes in gas rates.

Consequently, fluctuations in crude oil prices and exchange rates may result in the under recovery or over recovery of raw material costs if this lag cuts across a fiscal year, thereby affecting income. Looking at the medium- to long-term, however, the gas rate adjustment system has a neutralizing effect on the income impacts of fluctuations in raw material costs.

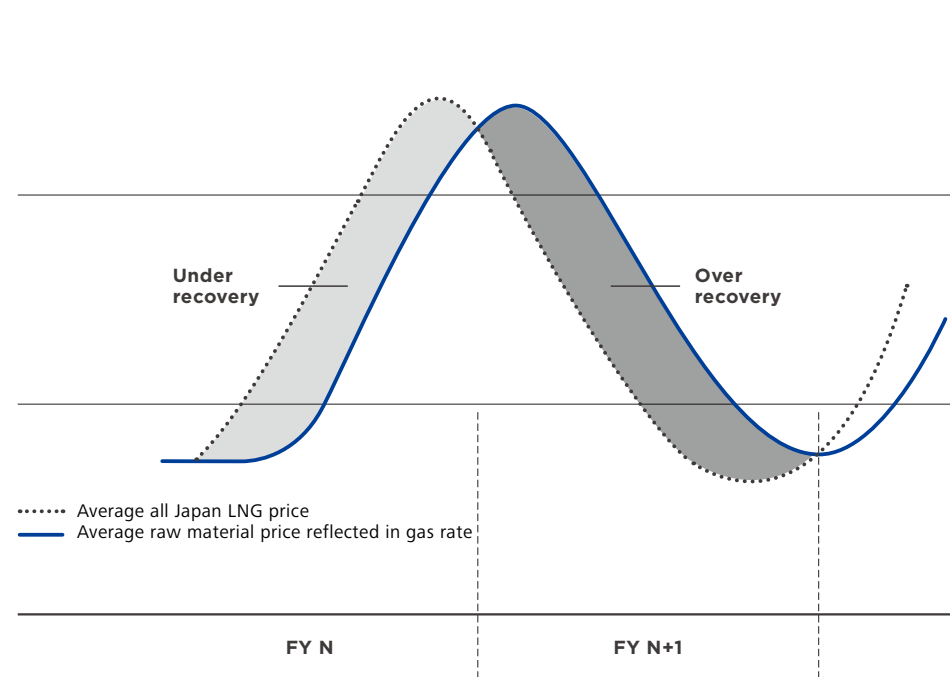
### Timing of the Standard Average Raw Material Cost Calculation and Reflection in Gas Rates

Timing of standard average raw material cost calculation



The average raw material price over the past three months is calculated every month and then reflected in the gas rate three months later.

### How the Sliding Time Lag in Rates Works





Financial and Industry Data (EXCEL Spreadsheet Data Available)

## **Investors' Guide**

[www.tokyo-gas.co.jp/IR/english/library/invguid\\_e.html](http://www.tokyo-gas.co.jp/IR/english/library/invguid_e.html)

Quarterly Financial Results

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## **Consolidated Financial Results Bulletin**

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**Tokyo Gas Co., Ltd.**

### **INTEGRATED REPORT 2021**

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Published on August, 2021

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Details of Corporate Governance

## **Corporate Governance Report**

[www.tokyo-gas.co.jp/IR/english/gvnnc/index\\_e.html](http://www.tokyo-gas.co.jp/IR/english/gvnnc/index_e.html)

Sustainability activities

## **Tokyo Gas Group Sustainability Report**

<https://tokyo-gas.disclosure.site/en>