Business overview



(¥ billion)

120

80

40

0

# 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 assetbacked trading and other operations.

#### Strengths

(¥ billion)

1,500

1,000

500

- 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

Net sales (LH) - Segment profit (RH)

2019.3

2020.3

2021.3

 Safety-related know-how and energy solution technological capabilities

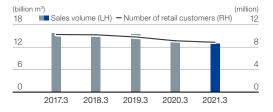
Net sales and segment profit

2018.3

#### 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



#### City Gas and LNG Sales Business



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.

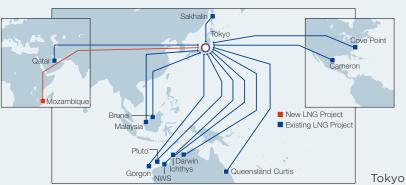
#### Diversification

#### 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.



We mainly trade between Japan and its export market countries Network connecting Asian, North American and European markets

destinations

Net sales and segment profit

2018.3

2017.3

2018.3

## **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 largevolume 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.

#### 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 newer

(rounded off to 10,000 kW )		
Renewable energy (photovoltaic, wind power, and biomass)	Domestic	28
	Overseas	108
	Total	136
Natural gas fired power generation	Domestic	287
	Overseas	123
	Total	410

#### Strengths

400

300

200

100

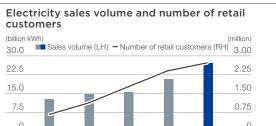
Owning one of the largest high-efficiency power plants among new power suppliers in the Greater Tokyo Area

■ Net sales (LH) - Segment profit (RH)

 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
- Damage to power generation facilities and supply troubles involving raw materials and fuels, stemming from a largescale disaster



2019.3

2020.3

2021.3



#### Acquisition of renewable energy sources

2020.3

2021.3

2019.3

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.

(¥ billion)

12

9

6



#### 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

to renewable energy		
April 2011	Invested in Shonai Wind-Power Generation (30.2% equity stake; 14,560kW output), which operates the Yuza Wind Power Station, etc.	
Feb. 2017	Entered into a capital alliance with Shizen Energy Inc., which is engaged in the energy business centering on photovoltaic power generation.	
April 2018	Invested in the Kashima Port Offshore Wind Project being promoted by Wind Power Energy Co., Ltd.	
May 2018	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.	
Dec. 2019	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) .	
May 2020	Invested in Principle Power, Inc., which develops and possesses wind float technology for floating-type offshore wind power generation.	
Aug. 2020	Acquired the 631MWdc Aktina Solar Project in Texas, U.S.A. developed by Hecate Energy.	
Nov. 2020	Invested in Chiba Offshore Wind Inc., established by Northland Power Inc. and Shizen Energy Inc.	
July 2021	Constructed and started commercial solar power operation of the Iwakuni-Yu Solar Power Plant (23,490kW output) in Yamaguchi Prefecture.	

80

40

#### Overseas Business

### **Overseas Business**

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.

#### 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

60

30

2017.3

2018.3

missing of business opportunities due to compliance with country-specific laws, regulations and/or business practices exchange rates on the revenue and expenditure of overseas

#### ■ Stagnation of business operation, increase in expenses, and ■ Impact of fluctuations in crude oil/gas prices and foreign business operations in general Crude oil price and foreign exchange rate (¥/\$) Crude oil price (LH) - Foreign exchange rate (RH) 90 120

2019.3

2020.3

2021.3

# Net sales ¥45.9 billion Segment profit ¥3.8 billion

#### Net sales and segment profit



#### **North America** Upstream Business Midstream- and Downstream Business Business Location Birdsboro Acario Innovation LLC/ Acario Investment One LLC TG Natural Resources Barnett • TGES America Eagle Ford Tokyo Gas America Ltd. (Houston) MT Falcon Baiio Heolios EnTG Aktina

#### 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.



#### **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.



(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.

(As of March 31, 2021)

2017.3

2018.3

Energy-related Business

# 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 (Y billion) 600 Net sales (LH) — Segment profit (RH) 40 450 300 300 20 150 0

2019.3



#### 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 knowhow," 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

2021.3

2020.3

- 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  $m^2$ , 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  $CO_2$  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

## **Urban Development Service**

(Real Estate)

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 (Y billion) 60 Net sales (LH) — Segment profit (RH) 20 45 30 10 15 0 2017.3 2018.3 2019.3 2020.3 2021.3

# Net sales \$\frac{\dagger}{48.4} \text{ billion} \text{ FY2020} \text{FY2020} Segment profit \$\frac{\dagger}{27.5} \text{ billion} \text{ FY2020}

#### 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.

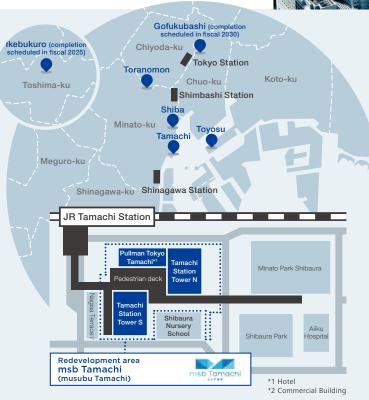
Note: Phase I: Land leasing business, Phase II: Office leasing business (based on capital investment by Tokyo Gas)

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.

