

# **Outline of Supply Plans for FY2013**

## **(Non-Consolidated)**

**March, 2013**  
**Tokyo Gas Co., Ltd.**

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## Introduction

The Great East Japan Earthquake in March, 2011, forced us to call into question the nature of energy supply, and we, Tokyo Gas Group, are expected to tackle speedily with such agendas as “Enhancement of energy security”, “Energy cost reduction”, and “Innovation of energy systems”, and also assume that the role for natural gas to play is expected to grow furthermore.

Tokyo Gas Group posted long-term management vision, “Challenge 2020 Vision for energy and the future” in November 2011, and is promoting the enhancement of LNG value chain thereafter.

<Enhancement of LNG Value Chain>

1. Enhancement of added value delivered through the LNG value chain
2. Expansion of areas covered by the LNG value chain

With these initiatives, Tokyo Gas Group will make an effective contribution to realize a prosperous, fulfilling way of life, competitive domestic industries, and an environment-friendly society where people can live in peace of mind through the spread and expansion of natural gas use, pursuing sustained growth for the Group at the same time.

### 1. Gas Penetration Plan

For the next five years, the average number of newly connected customers is expected to be about 210,000 per year. We foresee an average annual growth rate of 1.1 percent in our customer base over the next five years, projecting the customer base of 11.290 million by the end of FY2017.

(Unit: thousand)

	FY2012 Outlook	FY2013	FY2014	FY2015	FY2016	FY2017	CAGR (2013-2017)
Number of new customers	208	218	220	217	212	209	0.1%
Total number of customers*	10,675	10,799	10,925	11,049	11,170	11,290	1.1%

\*Total numbers of customers = Number of gas meters installed

### 2. Gas Sales Volume Plan

With the gradual recovery of the economy and the aggressive marketing mainly for the industrial demand, the plan foresees the total gas sales volume of approximately 16.4 billion m3 in FY2017. As a result, the projected average annual growth rate over the next five-year period would be 3.0 percent.

(Unit: Million m3, 45MJ/m3)

	FY2012 Outlook*	FY2013	FY2014	FY2015	FY2016	FY2017	CAGR (2013-2017)
Total gas sales volume	14,139	14,571	14,806	15,478	15,907	16,379	3.0%

\*FY2012 number is after standardization (applied temperature is adjusted for the one adopted for FY2013 and after).

The standardization applies all the following tables.

#### (1) Residential demand

In this sector, the amount of sales per customer is in decline due to such factors as the reduction in the number of family members per household, a rise in the share of collective residential properties with high levels of air tightness and insulation, and the penetration of high-efficiency gas equipment. The trend of excess population influx into the Tokyo metropolitan area is expected to moderately continue, and we are committed to efforts for the cultivation of new demand and the penetration and expansion of its cutting-edge equipment and systems such as Ene-Farm. We expect its residential gas sales volume in FY2017 to be 3.4 billion m3.

【Residential gas sales volume】

(Unit: Million m3, m3/customer·year, 45MJ/m3)

	FY2012 Outlook	FY2013	FY2014	FY2015	FY2016	FY2017	CAGR (2013-2017)
Residential gas sales volume	3,390	3,405	3,408	3,414	3,422	3,433	0.3%
Gas sales volume per customer	380	377	374	371	368	366	-0.7%

#### (2) Commercial and other demand

With the spread and expansion of co-generation systems and marketing for the air-conditioning demand, we foresee its commercial and other gas sales volume in FY2017 to be 3.0 billion m3.

【Commercial and other gas sales volume】 (Unit: Million m3, 45MJ/m3)

	FY2012 Outlook	FY2013	FY2014	FY2015	FY2016	FY2017	CAGR (2013-2017)
Commercial and other gas sales volume	2,651	2,650	2,660	2,773	2,885	2,987	2.4%
Incl. Large-volume gas sales volume	(1,306)	(1,323)	(1,330)	(1,432)	(1,500)	(1,556)	(3.6%)

### (3) Industrial demand

This sector accounts for the largest share of the total gas sales of the company. The sales volume in this sector is expected to grow as a result of the development of large-volume demands for the expansion of our business to a wider area, fuel conversion to natural gas from other sources, marketing for the power generation demand, and the spread and expansion of co-generation systems. For these reasons, we expect its FY2017 industrial gas sales volume to be 7.7 billion m3.

【Industrial gas sales volume】 (Unit: Million m3, 45MJ/m3)

	FY2012 Outlook	FY2013	FY2014	FY2015	FY2016	FY2017	CAGR (2013-2017)
Industrial gas sales volume	5,897	6,243	6,508	7,056	7,352	7,658	5.4%
Incl. Large-volume gas sales volume	(5,784)	(6,125)	(6,387)	(6,931)	(7,223)	(7,525)	(5.4%)

### (4) Wholesale demand

We expect the gas sales volume to other gas utilities/marketing companies in FY2017 to be 2.3 billion m3, taking into account the trends in industrial demand among wholesale customers.

【Wholesale gas volume】 (Unit: Million m3, 45MJ/m3)

	FY2012 Outlook	FY2013	FY2014	FY2015	FY2016	FY2017	CAGR (2013-2017)
Wholesale gas volume	2,202	2,273	2,229	2,235	2,248	2,301	0.9%

## 3. Production/Purchasing Volume and Feedstock Use Plan

We aim to heighten flexibility in our procurement by engaging in upstream business development and through the utilization of short-term business transactions to cope with demand fluctuation, making an effort to procure more competitive resources in addition to long-term contract based procurement of resources and commencement of receiving unconventional LNG.

【Gas production and purchasing volume】 (Unit: Million m3, 45MJ/m3)

		FY2012 Outlook	FY2013	FY2014	FY2015	FY2016	FY2017
Natural gas	LNG	13,591	13,874	14,093	14,575	14,960	15,456
	Domestic natural gas	240	234	243	255	263	270
Petroleum oil	LPG	423	543	557	739	779	753
	Boil-off gas	105	76	76	76	76	76
Other	Biogas	0	1	1	1	1	1
Total		14,360	14,729	14,970	15,646	16,079	16,556

【Gas resource/fuel use volume】 (Unit: 1,000 ton)

	FY2012 Outlook	FY2013	FY2014	FY2015	FY2016	FY2017
LNG	10,682	10,910	11,082	11,448	11,747	12,136
LPG	360	463	475	630	665	642

#### 4. Major Facility Plan

We will improve the security and disaster prevention initiatives by taking measures resistant to earthquakes and floods as well as accelerating the replacement of aged pipes. We will install and reinforce the production and supply infrastructure to establish more safe and secure base of supply and to respond more appropriately to gas demand projection, taking into account the heightened expectation and demand toward natural gas from customers and society at large.

- We will complete the Hitachi LNG terminal, the Ibaraki-Tochigi Line and the Koga-Moka Line both connecting to the existing network.
- We will newly plan the Kisarazu Rinkai Line (2nd phase) (Kisarazu City – Kimitsu City)
- We will complete the Shin-Negishi Line (Yokohama City), the 2nd Phase of the Yokohama Line (Yokohama City – Kawasaki City), and the Saito Line (Soka City – Koga City).
- We will install vaporizers in the Ohgishima LNG Terminal and the Sodegaura LNG Terminal, and complete the construction of the No.4 LNG tank in the Ohgishima LNG Terminal.

##### 【Major pipeline plans】

Planned Commencement	Name	Route	Inner Diameter (mm)	Total Length (km)
Oct. 2013	Shin-Negishi Line	Isogo ward, Yokohama city – Izumi ward, Yokohama city	600	14.0
Oct. 2013	Yokohama Line (2nd phase)	Aoba ward, Yokohama city – Asao ward, Kawasaki city	750	6.3
Feb. 2015	Kisarazu Rinkai Line (2nd phase)	Kisarazu city – Kimitsu city	300	8.7
Oct. 2015	Saito Line	Soka city – Koga city	600	39.9
Mar. 2016	Ibaraki Tochigi Line	Hitachi city – Moka city	600	81.3
Mar. 2016	Extended Tochigi Line	Moka city, Tochigi pref.	400	2.7
Mar. 2018	Koga Moka Line	Koga city – Moka city	600	49.8

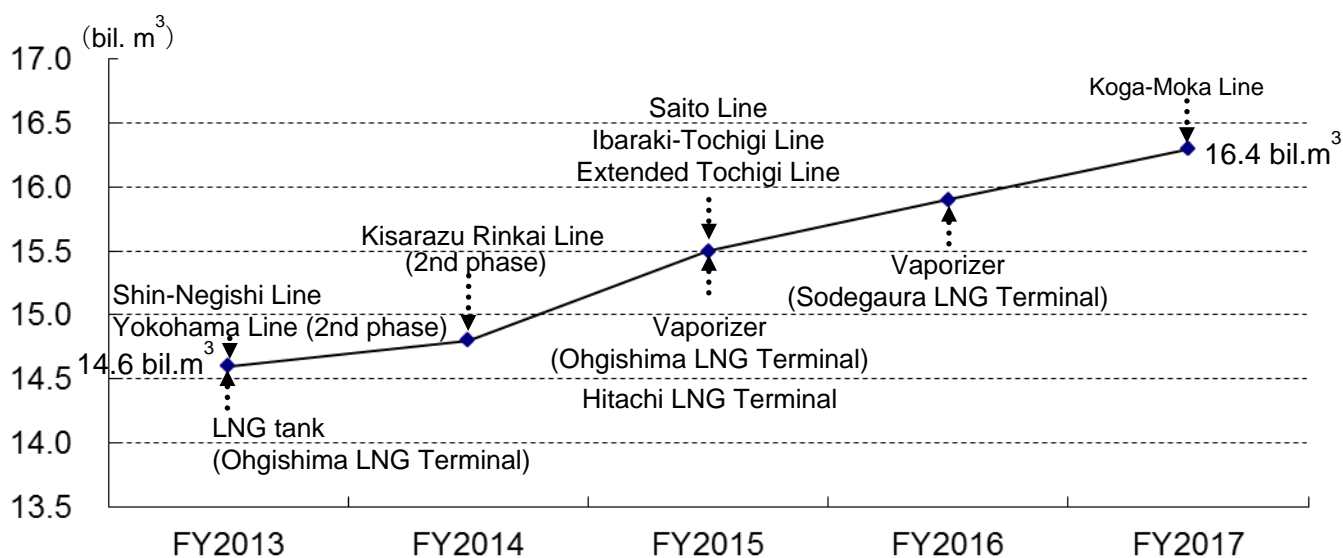
##### 【Total length of pipelines at year-end】 (Unit: km)

FY2012 Outlook	FY2013	FY2014	FY2015	FY2016	FY2017
55,507	56,218	56,855	57,588	58,181	58,810

##### 【Major production facilities plans】

Planned commencement	Installed site	Installed facilities	No. of units
Oct. 2013	Ohgishima LNG Terminal	LNG storage tank	1
Jul. 2015	Ohgishima LNG Terminal	LNG vaporizer	1
Mar. 2016	Hitachi LNG Terminal	LNG storage tank	1
Mar. 2016	Hitachi LNG Terminal	LPG storage tank	1
Mar. 2016	Hitachi LNG Terminal	LNG/LPG vaporizer	3
Mar. 2016	Hitachi LNG Terminal	LPG vaporizer	2
Dec. 2016	Sodegaura LNG Terminal	LNG/LPG vaporizer	2

##### 【Gas sales volume plan and facilities development plan】



## 5. Capital Investment Plan

Tokyo Gas plans to invest a total of 745.7 billion yen in its facilities (after advanced depreciation of contribution for construction) over the five-year period of the supply plans (FY2013 – FY2017) as follows.

- (1) Production facilities; the further reinforcement of stable production systems through construction of the Hitachi LNG Terminal, expansions of the LNG-related facilities in the three terminals on Tokyo Bay and construction of the No.4 LNG storage tank in the Ohgishima LNG Terminal, as well as by proper measures for continued operation under long-term blackout situation, by appropriate methods resistant to earthquakes and floods and by scheduled repair and renovation of aged facilities.
- (2) Supply facilities; the establishment of stable supply systems and safety assurance through investment in pipeline installation for new demand development, formation of main pipeline network (reference: P5 “Supply Area Map”), facilities for measures resistant to earthquakes and floods, and further promotion of replacing aged pipes.
- (3) Business facilities; the further reinforcement of business development systems through improvements to information systems, enhancement of earthquake-proof business buildings, and promotion of technology development.
- (4) Incidental business facilities; improvements mainly to existing facilities.

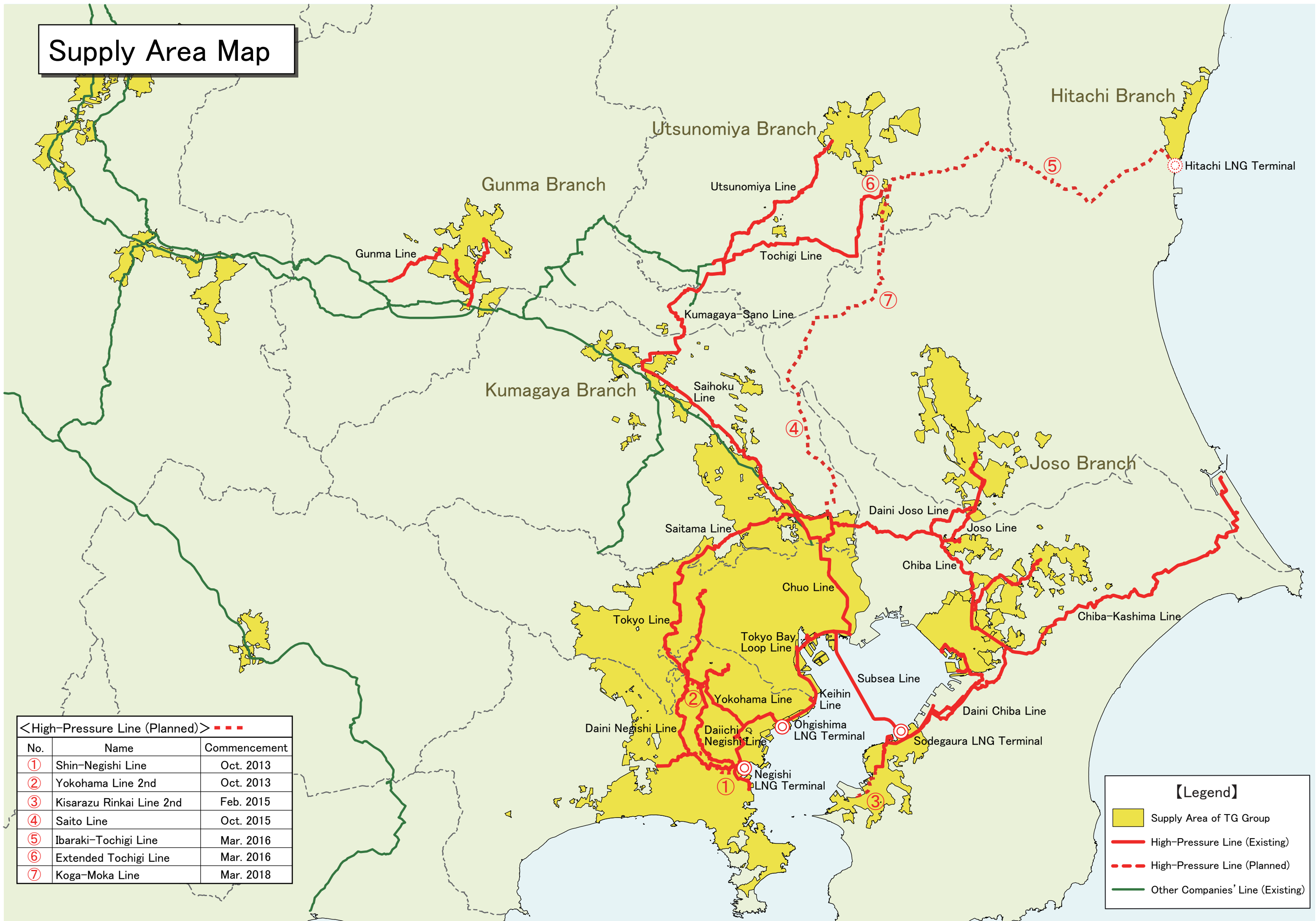
### 【Facility investment plans】

(Unit: billion yen)

	FY2012 Outlook	FY2013	FY2014	FY2015	FY2016	FY2017	FY2013- FY2017 Total
LNG facilities	17.1	19.6	24.3	23.2	0.1	1.2	68.3
Other	7.8	8.5	7.9	6.2	8.3	6.5	37.5
Production facilities	25.0	28.1	32.2	29.4	8.4	7.7	105.7
Trunk line investment	18.6	21.0	23.3	28.8	10.7	5.7	89.6
Other	68.6	74.8	73.9	70.6	68.7	70.6	358.7
Supply facilities	87.3	95.8	97.3	99.4	79.4	76.3	448.2
Business facilities	17.8	22.3	34.1	40.1	51.2	40.9	188.6
Gas supply business Facilities (*)	130.1	146.2	163.6	168.8	139.0	124.9	742.6
Incidental business facilities	0.5	0.8	0.6	0.6	0.6	0.6	3.1
Total (*)	130.6	147.0	164.2	169.4	139.6	125.5	745.7

\*: After advanced depreciation of contribution for construction

# Supply Area Map



<High-Pressure Line (Planned)> - - -

No.	Name	Commencement
①	Shin-Negishi Line	Oct. 2013
②	Yokohama Line 2nd	Oct. 2013
③	Kisarazu Rinkai Line 2nd	Feb. 2015
④	Saito Line	Oct. 2015
⑤	Ibaraki-Tochigi Line	Mar. 2016
⑥	Extended Tochigi Line	Mar. 2016
⑦	Koga-Moka Line	Mar. 2018

**【Legend】**

- Supply Area of TG Group
- High-Pressure Line (Existing)
- High-Pressure Line (Planned)
- Other Companies' Line (Existing)