

Natural Gas Resource Development

As well as ensuring the stable procurement of gas resources, we aim to lower procurement prices in a bid to ensure fair prices in the Asian market. To achieve these goals, in addition to conventional large-scale projects we are pursuing unconventional sources of natural gas and actively taking various upstream interests.

Overseas Mid-Downstream Operations

To allow for flexible resource procurement and to ensure fair prices in the Asian market, we are leveraging both our power generation businesses centered on natural gas and our proprietary know-how and pushing forward with energy services projects.

Developing Business through the LNG Value Chain

We aim to develop our business throughout the LNG value chain, maximizing value through linked business spanning the procurement and transportation of LNG, the production and supply of city gas, and the provision of energy solutions.

► Overview of Major Overseas Upstream Operations

Project	Annual contracted quantity (Thousands of tons)	Commencement of project	Duration	Contract type	Upstream interest (%)
① Darwin	1,000	2006	17 years (-2022)	FOB	3.07
② Pluto	1,500-1,750	2012	15 years	Ex-Ship, FOB	5.0
③ Gorgon	1,100	(2014)	25 years	FOB	1.0
④ Queensland Curtis	1,200	(2014)	20 years	Ex-Ship	1.25 (Upstream) 2.5 (Midstream)
⑤ Ichthys	1,050	(2016)	15 years	FOB	1.575
⑥ Cordova	—	Production	—	—	3.75
⑦ Barnett	—	Production	—	—	25.0

Darwin LNG Project



Belgium, T-Power

Natural gas power project
(Tokyo Gas interest: 26.66%) Capacity 425 MW



Malaysia, Gas Malaysia Sdn. Bhd.

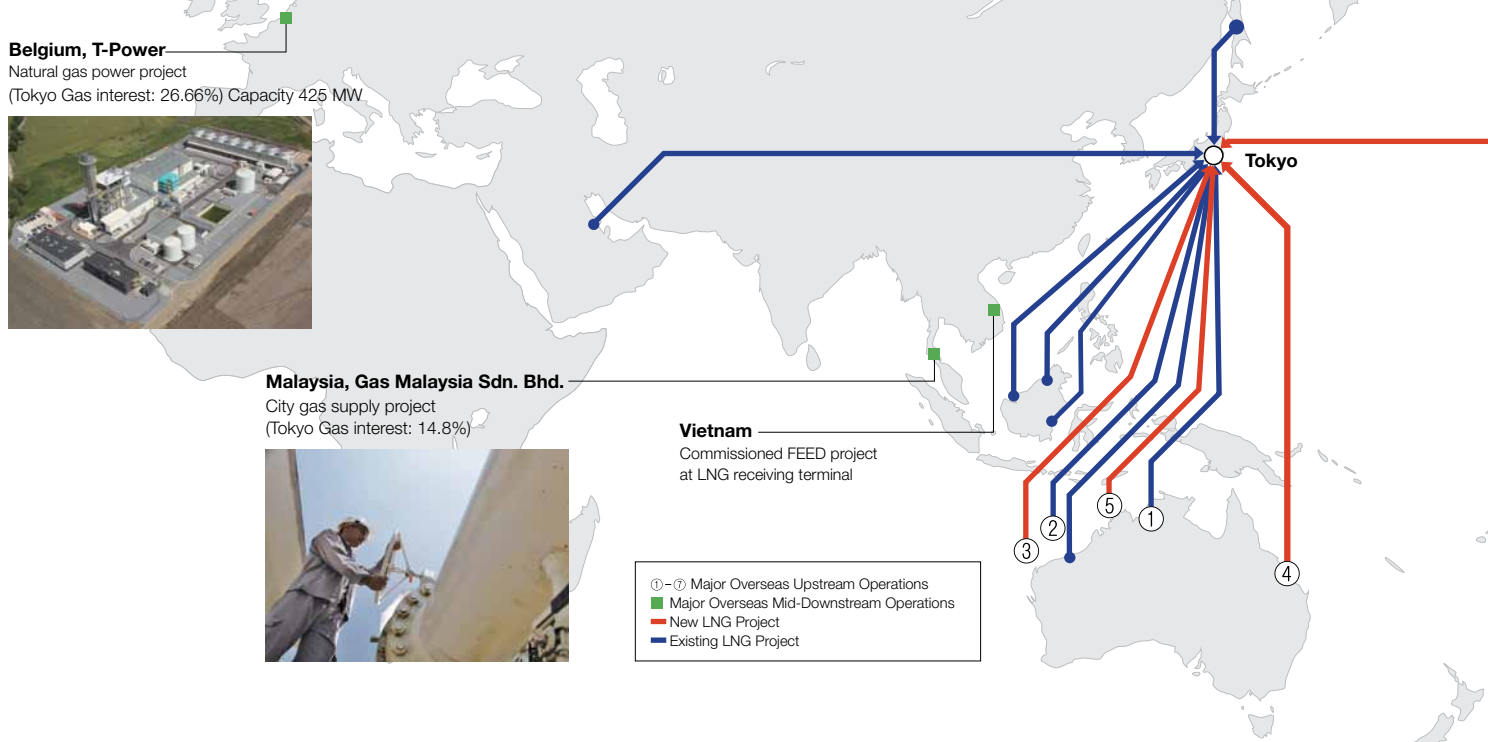
City gas supply project
(Tokyo Gas interest: 14.8%)



Vietnam

Commissioned FEED project at LNG receiving terminal

- ①-⑦ Major Overseas Upstream Operations
- Major Overseas Mid-Downstream Operations
- New LNG Project
- Existing LNG Project



Procurement and Transportation

We import more than 12 million tons of LNG per year, based on long-term contracts through 11 projects in 6 countries, centered on politically stable regions.

We strive to keep **transportation costs down** by using our own eight-tanker fleet efficiently to meet our own needs as well as by providing transportation for other companies.

► Tokyo Gas LNG Imports by Country

Location	2010	2011	2012	Composition
Malaysia	4,479	4,479	4,409	(34.7%)
Australia	2,297	2,264	3,379	(26.6%)
Brunei	1,155	1,362	1,439	(11.3%)
Indonesia	843	1,011	835	(6.5%)
Russia	1,605	1,678	1,682	(13.2%)
Qatar	358	290	235	(1.9%)
Alaska	139	—	—	—
Other	440	826	734	(5.8%)
Total	11,315	11,910	12,712	(100.0%)

A carrier Tokyo Gas manages directly



Mexico, MT Falcon

Natural gas power generation
(Tokyo Gas interest: 30%)
Capacity 2,233 MW



Mexico, Bajio

Natural gas power generation
(Tokyo Gas interest: 49%)
Capacity 601 MW



Brazil, Ecogen

Energy services project
(Tokyo Gas interest: 10%)



Brazil, Malhas Project

Natural gas pipeline project
(Tokyo Gas interest: 15%)



Production and Power Generation

With three plants in the Tokyo metropolitan area, our LNG storage and production facilities are some of the largest in the world. We are continuing to expand our production system to meet growing demand for city gas. We also operate highly efficient power generation facilities that employ leading-edge technology and feature reduced environmental impact. By fiscal 2020, we expect to increase our generation capacity of the current 2,000 MW to between 3,000 MW and 5,000 MW.

Supply

Tokyo Gas provides a stable supply of city gas via a pipeline network totaling 60,298 km (consolidated), centered on the Tokyo metropolitan area. Moving forward, we will extend our pipelines into regions of demand, promote earthquake preparedness measures, and build supply networks that are highly resistant to disaster.

▶ Power Generation Business



1 Tokyo Gas Yokosuka Power Co., Ltd.

Capacity	240 MW x 1 station	240 MW
Generation method	Combined cycle generation	
Start of operation	2006	
Tokyo Gas interest	75%	



2 Tokyo Gas Baypower Co., Ltd.

Capacity	100 MW x 1 station	100 MW
Generation method	Combined cycle generation	
Start of operation	2003	
Tokyo Gas interest	100%	



3 Ohgishima Power Co., Ltd.

Capacity	407 MW x 3 stations*	1,221 MW
Generation method	Combined cycle generation	
Start of operation	Rollout of operations since commencement in 2010	
Tokyo Gas interest	75%	



4 Kawasaki Natural Gas Power Generation Co., Ltd.

Capacity	420 MW x 2 stations	840 MW
Generation method	Combined cycle generation	
Start of operation	2008	
Tokyo Gas interest	49%	

* Unit 3 is scheduled to start up operations in fiscal 2015.

▶ Supply Networks



1 Sodegaura LNG Terminal

Import volume FY2012	4,942 million ton/year
Storage capacity	1,610,000 kl
Vaporization capability	1,310 t/h



2 Ohgishima LNG Terminal

Import volume FY2012	3,991 million ton/year
Storage capacity	600,000 kl
Vaporization capability	1,115 t/h



3 Negishi LNG Terminal

Import volume FY2012	3,058 million ton/year
Storage capacity	1,155,000 kl
Vaporization capability	460 t/h

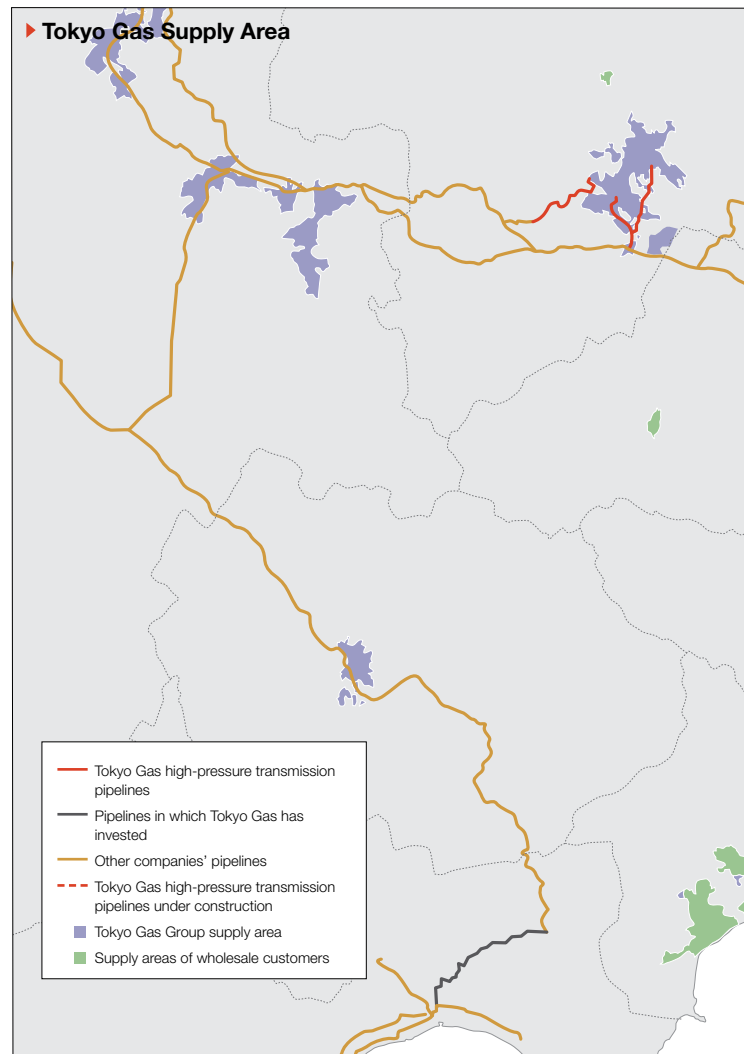


4 Hitachi LNG Terminal

Start of operation	Scheduled to commence operations in FY2015
Storage capacity	230,000 kl
Vaporization capability	—

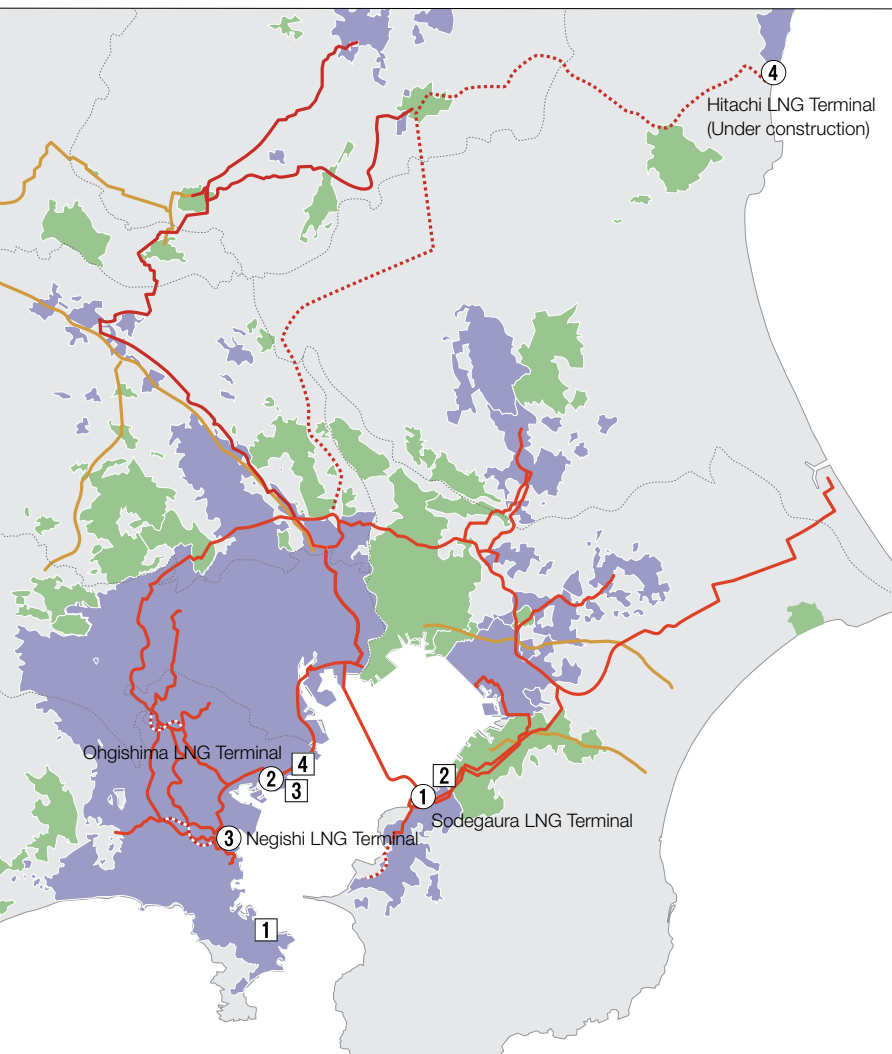
Conceptual drawing of completed terminal

▶ Tokyo Gas Supply Area



Gas Sales and Service

In the residential sector, spearheaded by Tokyo Gas LIFEVAL community-based marketing systems, we are proposing lifestyle values based on gas. We are also working to promote "ENE-FARM" residential fuel cells and are **supplying electricity**. In the commercial and industrial sectors, we introduce cogeneration and air conditioning systems and promote fuel conversion from other sources. In these ways, we help to provide energy and contribute to reductions in CO₂ emissions.



▶ Gas Sales Volume



LNG tank lorries



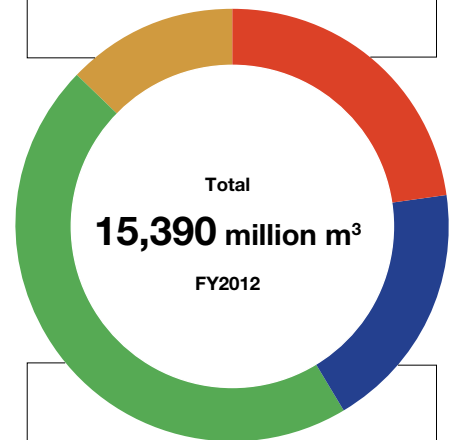
"ENE-FARM" residential fuel cell

For wholesale use

1,953 million m³
13%

For residential use

3,535 million m³
23%



For industrial use

7,055 million m³
46%

For commercial use

2,847 million m³
18%

Regenerative burner system



Cogeneration system

