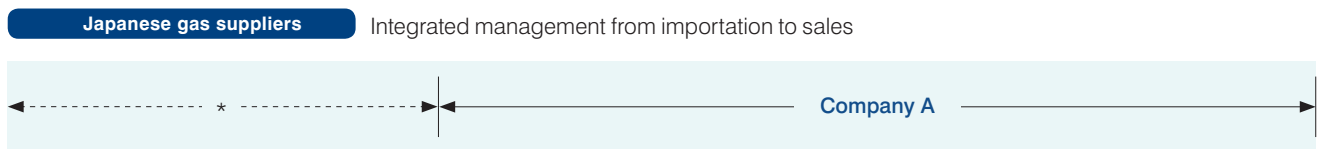
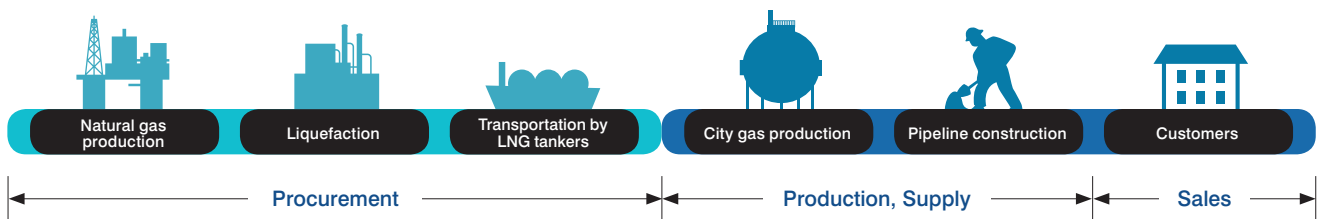


# Characteristics of Gas Suppliers in Japan

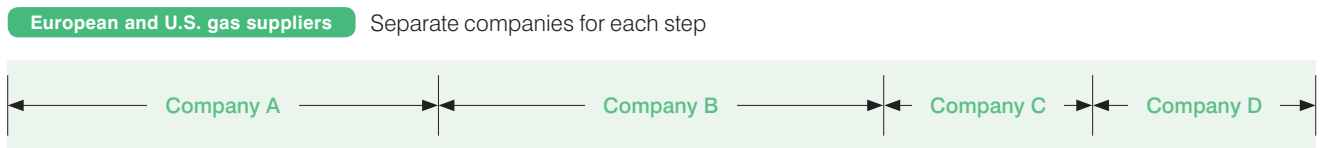
As Japan is an island nation, gas suppliers in this country have unique characteristics that are not seen in suppliers in Europe or the United States.

## 1 Management Across the Entire Gas Supply Chain, Including Procurement, Production, Supply, and Sales

In Europe and the United States, it is common for different aspects of gas supply, such as importation, production, transportation, and sales, to be handled by different operating companies. Conversely, in Japan, all of these tasks are often managed in an integrated manner by a single company.



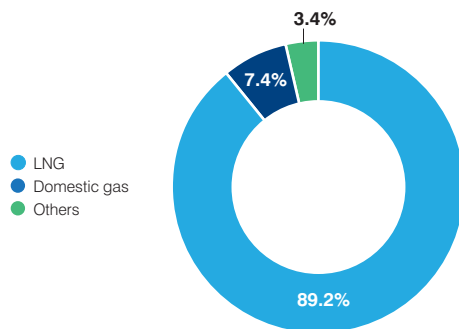
\* Certain gas providers, including Osaka Gas, are working to acquire interests in gas fields.



## 2 Majority of Resources are Imported as LNG

Currently, production of natural gas in Japan is very limited. Also, the country does not possess any international pipelines. Accordingly, Japan imports the majority of its gas resources in the form of LNG.

Breakdown of Raw Materials Used to Produce City Gas (2011.3)

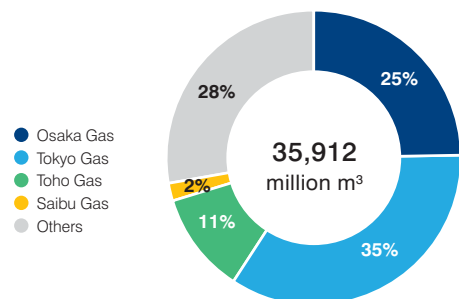


Source: Japan Gas Association's website

## 3 Majority of Domestic Gas Sales Conducted by Major Companies

While there are 209 gas suppliers spread across Japan, more than 70% of all domestic gas sales is attributable to four major companies.

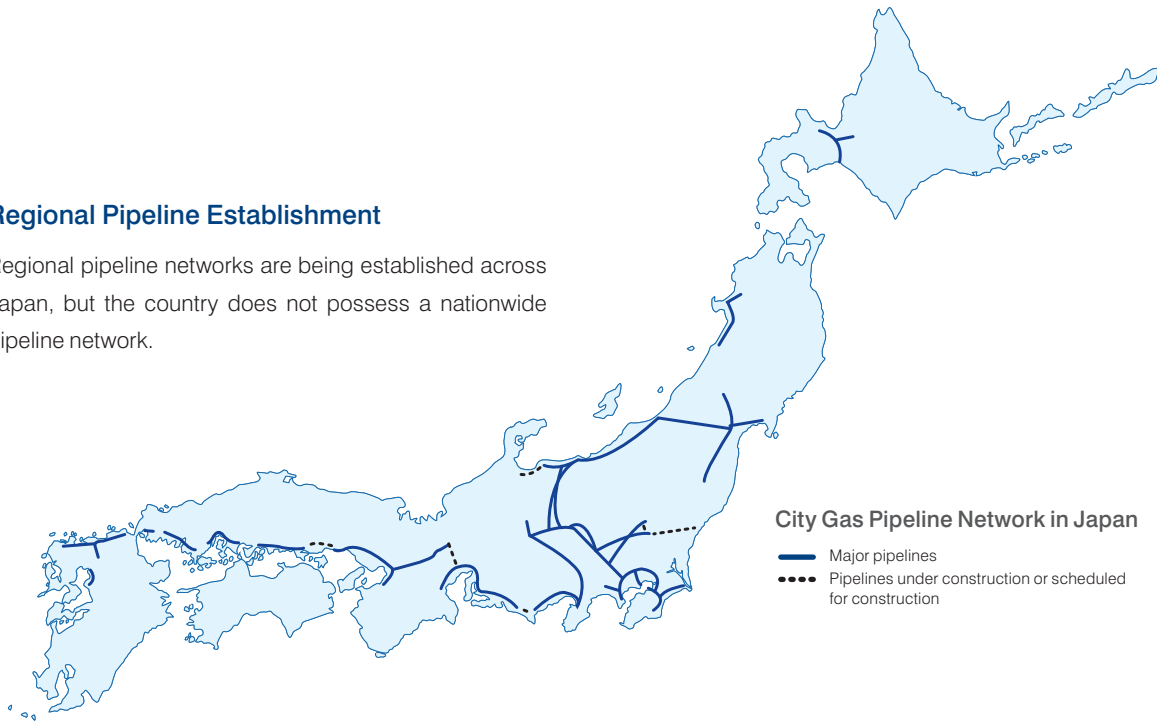
Gas Sales Volume Market Share in Japan (2012.3)



Note: In this graph, 1 m<sup>3</sup> = 41.8605 MJ/m<sup>3</sup>.  
Source: Japan Gas Association, "Gas Sales Volumes"

## 4 Regional Pipeline Establishment

Regional pipeline networks are being established across Japan, but the country does not possess a nationwide pipeline network.



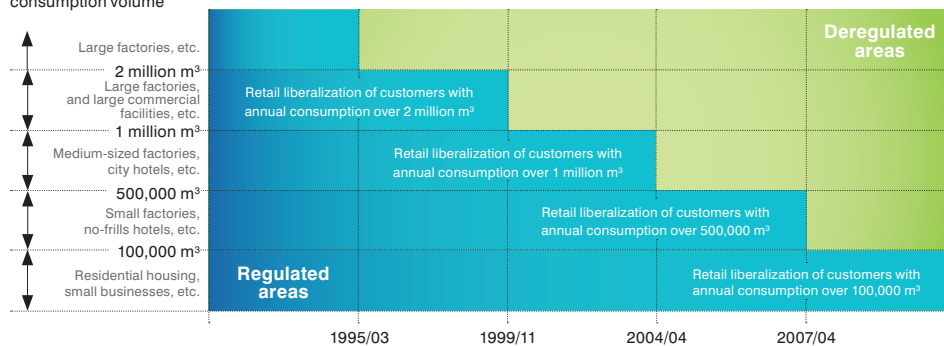
## 5 Progressive Deregulation and Fuel Cost Adjustment System

### Deregulation

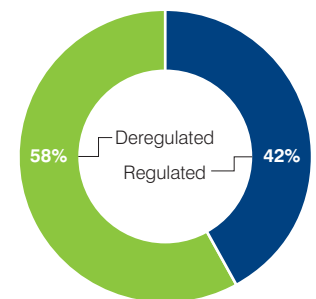
Ever since partial deregulation was adopted in 1995, deregulation has progressed by gradually expanding the sphere of retail in the gas business.

#### Progression of Retail Liberalization

Annual contracted gas consumption volume



#### Market Deregulation (2012.3)



### Fuel Cost Adjustment System

The price of procuring gas resources is determined on the basis of the fuel cost adjustment mechanism by reflecting the external factors of foreign exchange rates and crude oil prices. Referred to as the Fuel Cost Adjustment System, this mechanism serves to adjust gas rates in reflection of the impacts of such external factors. As this system causes a time lag before fluctuations in prices of raw materials can be reflected in gas rates, such price fluctuations can result in short-term impacts on the performance of gas suppliers on an individual fiscal-year basis. However, these impacts are neutralized over the medium to long term.

#### Fuel Cost Adjustment System

