

LNG became Japan's largest import item

Growing importance of inexpensive and stable LNG procurement

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Summary

Japan's trade balance has been improving. Its trade deficit in January and February 2015 combined declined by 56% year on year to JPY1.6 trillion, the lowest for the period in three years, since 2012.

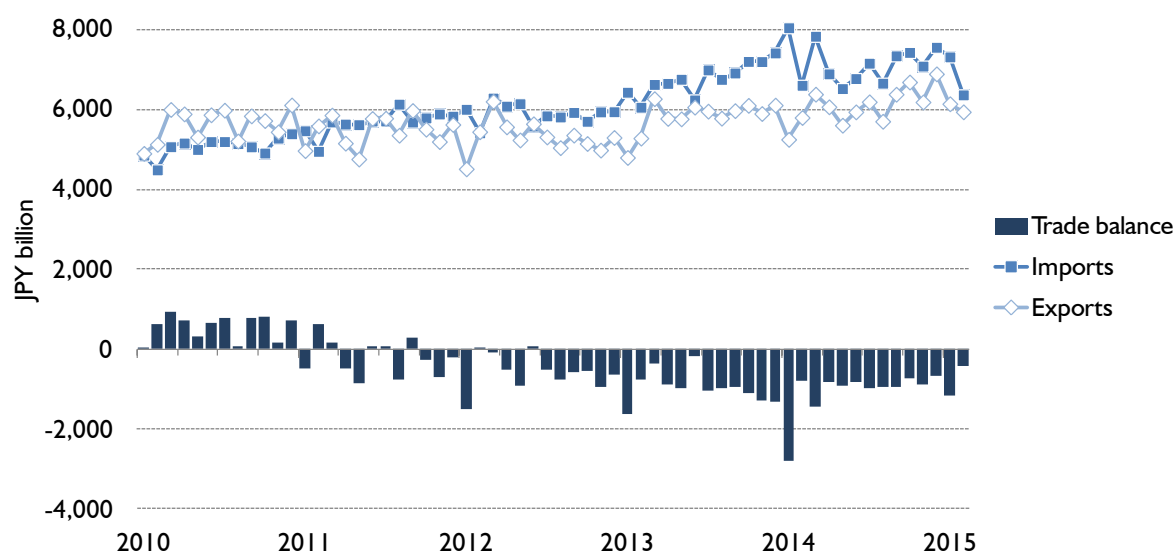
The liquefied natural gas (LNG) import value in February came to JPY633.7 billion under the situation as the import volume expanded by 220,000 tonnes year on year, though with the price falling by \$172 per tonne. On the other hand, the crude oil import value declined to JPY567.8 billion as the import volume plunged to 15.46 billion litres, with the price diving to a six-year low of \$49 per barrel. As a result, liquefied natural gas (LNG) replaced crude oil as Japan's largest import item.

In the future, LNG import prices are set to decline in line with the sharp crude oil price fall. Therefore, LNG's position as the largest Japanese import item is not expected to remain unchanged. However, LNG import volume is highly likely to retain the present high level, given that Japan's dependence on LNG-fired power generation is expected to remain high for the immediate future and that city gas consumption has remained robust in line with an economic recovery. The undercurrent indicates that the demand for inexpensive and stable LNG procurement will grow further.

Improving trade balance

Japan's trade balance has been improving (Figure 1). Exports in the January-February 2015 period¹ increased by 9.4% from the same period in the previous year to JPY12.1 trillion as the yen's depreciation began to produce long-awaited effects. In contrast, imports decreased by 6.6% to JPY13.7 trillion due to a crude oil price plunge since the second half of 2014 and imports' declining price competitiveness under the weaker yen. The trade deficit in the period declined by 55.6% to JPY1.6 trillion, the lowest for the period in three years, since 2012.

Figure 1 | Imports/exports and trade balance



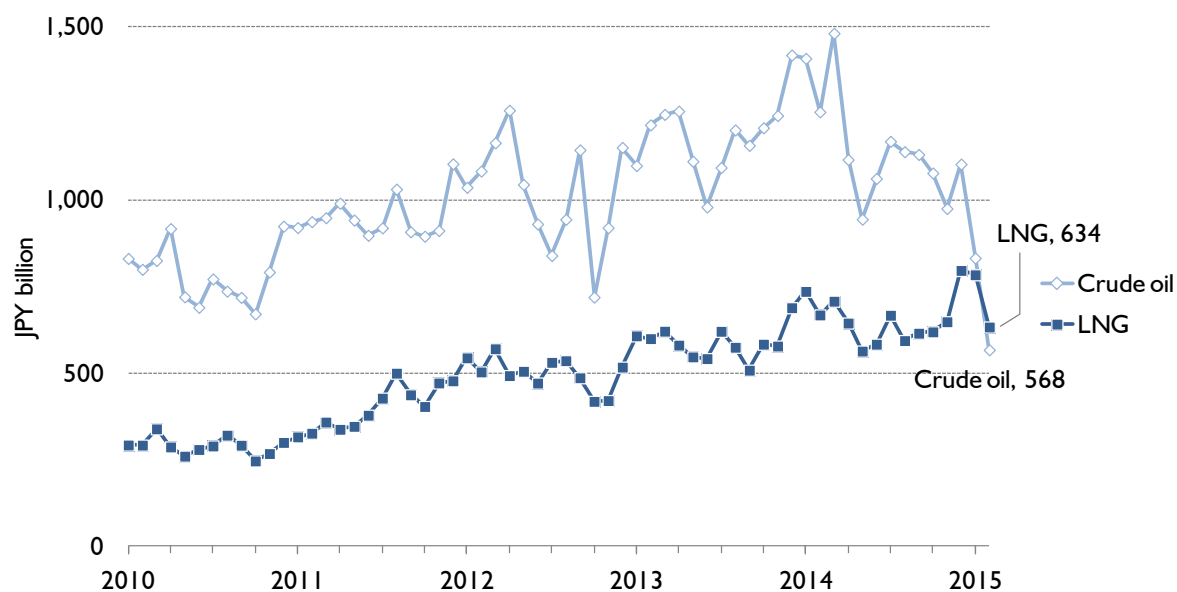
Source: Ministry of Finance "Trade Statistics"

LNG became Japan's largest import item

Then, the liquefied natural gas (LNG) import volume in February 2015 expanded by 220,000 tonnes year on year to 7.73 million tonnes while the price dropped by \$172 per tonne to \$695/t. As a result, LNG import value fell by only 5% to JPY633.7 billion (Figure 2). On the other hand, the crude oil import volume plunged to 15.46 billion litres even in the oil demand season, with the price plunging to a six-year low of \$49 per barrel. The crude oil import value posted a rapid drop of 55% to JPY567.8 billion. Consequently, the LNG import value exceeded the crude oil import value for the first time since January 1988 when comparable data became available.

¹ The January-February aggregation is used here as January and February trade data sharply change depending on whether the lunar New Year holidays are dominantly included in January or February.

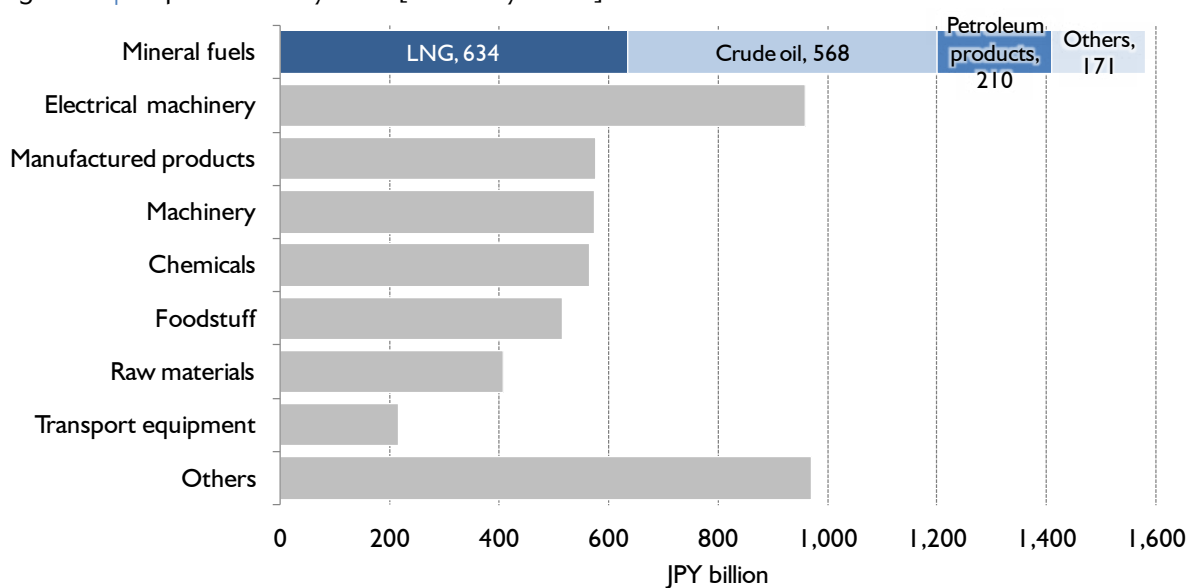
Figure 2 | LNG and crude oil imports in value



Source: Ministry of Finance "Trade Statistics"

In this way, LNG became Japan's biggest import item (Figure 3), replacing crude oil. LNG imports in value were limited to a little more than one-third of crude oil imports five years ago, indicating how rapidly LNG imports expanded.

Figure 3 | Import value by item [February 2015]

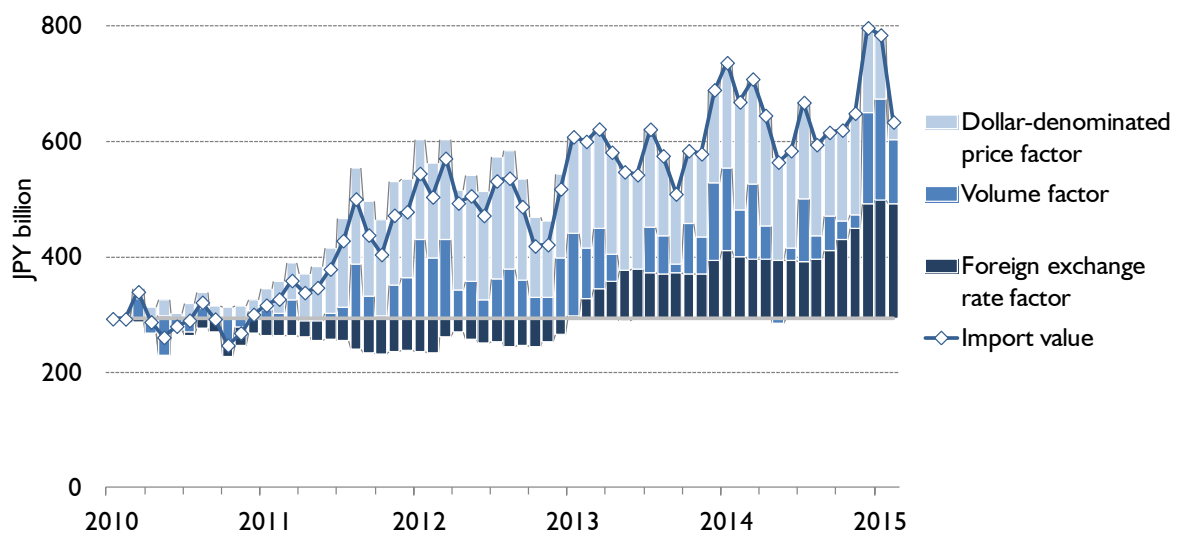


Source: Ministry of Finance "Trade Statistics"

Import volume expansion and weaker yen become major factors behind LNG import value expansion

A decomposition analysis² of three factors – volume, dollar-denominated price and foreign exchange rate – was conducted to review quantitatively the two-fold increase in LNG import value over four years (Figure 4). The volume factor has persistently worked to expand the import value since the Great East Japan Earthquake in 2011 as LNG-fired power generation increased substantially. Along with the volume factor, the dollar-denominated price factor had contributed to boosting the import value. The prices, however, have begun to reduce their contributions as they have fallen since early 2015 in line with crude oil prices' free fall since the second half of 2014³. The foreign exchange rate factor began to make positive contributions to the LNG import value expansion in 2013 as the yen weakened due to the Bank of Japan's extraordinary monetary easing under the Abenomics economy-boosting policy and monetary policy normalisation in the United States. This factor has become the largest contributor to the expansion. Of the increase of JPY340.9 billion in the LNG import value from January 2010 to February 2015, the volume factor accounts for JPY112.1 billion, the dollar-denominated price factor for JPY30.3 billion and the foreign exchange rate factor for JPY198.4 billion.

Figure 4 | Decomposition analysis of LNG import value changes [compared with January 2010]



Note: Month-to-month changes since January 2010 have been decomposed according to the Logarithmic Mean Divisia Index and accumulated.

Source: Compiled from Ministry of Finance "Trade Statistics"

The volume factor is unlikely to make any significantly greater contribution to the LNG import value through mid-2015. The dollar-denominated price factor will make a negative contribution as LNG prices fall in line with the crude oil price plunge. The foreign exchange rate factor may make a greater positive contribution to the LNG import value if the yen weakens against the dollar on growing speculations about United States'

² Month-to-month changes since January 2010 have been decomposed according to the Logarithmic Mean Divisia Index and accumulated.

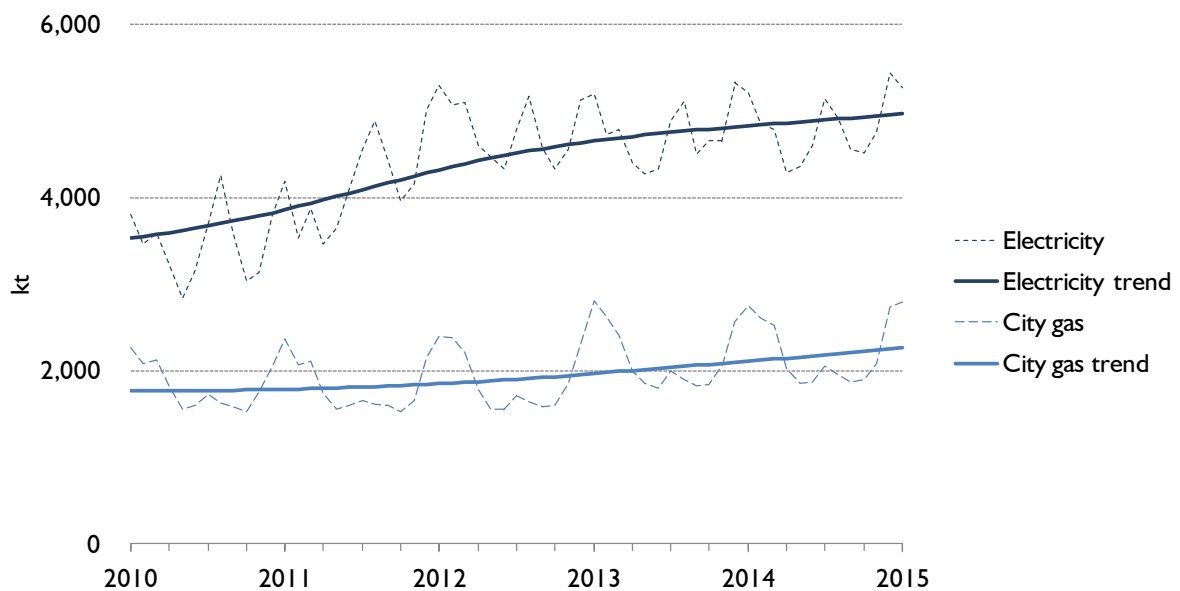
³ LNG import prices reflect crude oil import price changes in three months after the changes.

interest rate hikes. Overall, LNG is unlikely to retain its position as Japan's largest import item thanks to the dollar-denominated price factor's negative contribution.

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The crude oil import volume, however, is expected to follow a downward trend due to the improvement of vehicle fuel efficiency and oil-fired power generation's downturn after a sharp rise following the Great East Japan Earthquake. In contrast, the LNG import volume is highly likely to retain the present high level, given that Japan's dependence on LNG-fired power generation is expected to remain high in the absence of progress in the restart of nuclear power plants for the immediate future and that city gas consumption has remained robust in line with an economic recovery (Figure 5). The undercurrent indicates that the demand for inexpensive and stable LNG procurement will grow further.

Figure 5 | LNG consumption



Note: The trends have been calculated with the Hodrick-Prescott filter.

Sources: Ministry of Economy, Trade and Industry "Electricity Survey Statistics" and "Gas Industry Statistics"

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