Expanding Import Share of US Crude Oil and LPG in Japan in FY2025

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1. Record High Middle East Dependency for Crude Oil Imports in FY2024

In FY2024, Japan's crude oil imports decreased by 8.51 million kL (5.9%) year-on-year to 136.29 million kL, falling below the level of FY2020 during the COVID-19 pandemic and reaching the lowest level since FY1967 (Figure 1). This decline can be attributed to factors such as improved fuel efficiency in automobiles, reduced ethylene production, and a decrease in domestic demand for petroleum products due to fuel switching to gas and electricity.

Despite the decrease in overall crude oil imports, the dependency on the Middle East increased to 95.9% in FY2024, the highest level since FY1965 when comparable statistics became available. The Middle East dependency had once decreased to 82.5% in FY2015, the lowest since FY1996, due to the highest import share from Sakhalin and Eastern Siberia in Russia. However, in FY2016, China expanded the eligibility for crude oil import licenses to smaller refineries, leading to increased imports from Russia. This, in turn, reduced Japan's imports from Russia and increased the Middle East dependency. Furthermore, in FY2020, the easing of supply and demand caused by the COVID-19 pandemic led to a prioritization of importing cheaper Middle Eastern crude oil, resulting in the Middle East dependency exceeding 90% for the first time since FY1968. In FY2022, the reduction of imports from Russia due to sanctions following the invasion of Ukraine further increased the Middle East dependency to 95.2%. While imports from the US increased in FY2023, they decreased in FY2024, causing the Middle East dependency to surpass the FY2022 level.

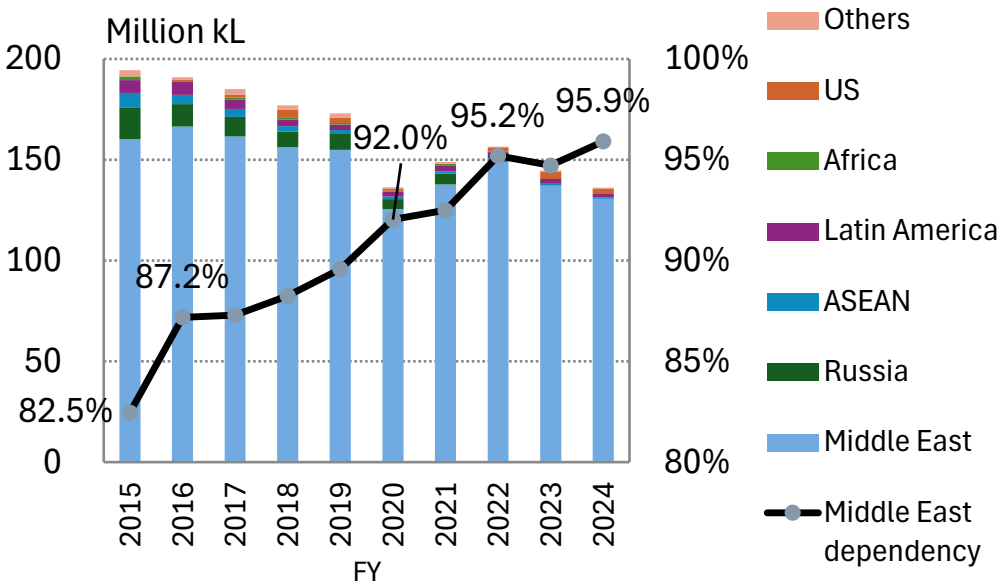

Figure 1: Volume of Japan's crude oil imports and Middle East dependency

Source: Ministry of Economy, Trade and Industry, “Yearbook of Mineral Resources and Petroleum Products Statistics”

2. Surge in Imports from the US in FY2025

However, the Middle East dependency has been declining since the beginning of FY2025 (Figure 2). From April to November, imports from the US have increased, resulting in the Middle East dependency of 93.0%, the lowest level for the same period since FY2020. Saudi Arabia experienced the largest decrease in volume, while Kuwait experienced the largest percentage decrease (Figure 3).

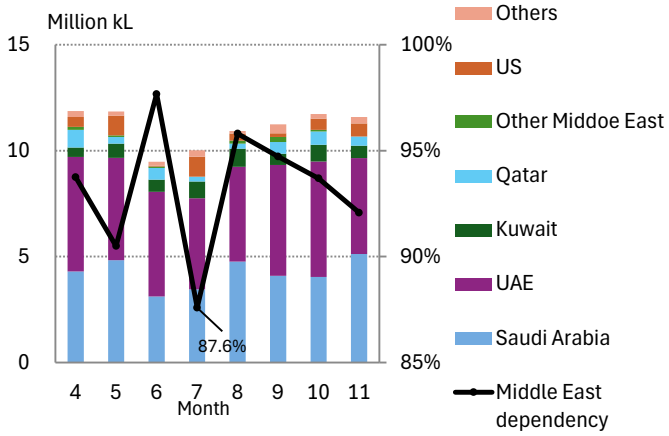

Figure 2: Japan's monthly crude oil imports and Middle East dependency from April to November 2025

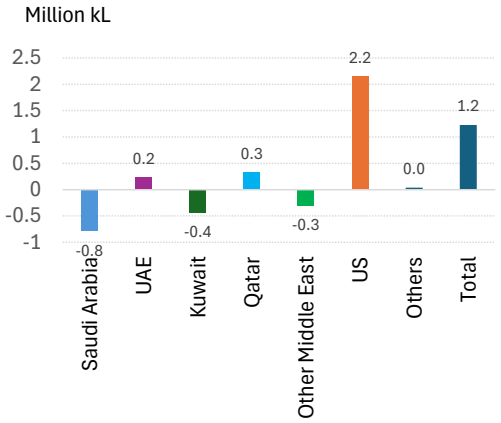

Figure 3: Change in Japan's crude oil imports from April to November 2025 compared to the same period in the previous year

Source: Ministry of Economy, Trade and Industry, "Monthly Report of Mineral Resources and Petroleum Products Statistics"

The increase in Japan's imports of US crude oil is indirectly influenced by the intensified US-China trade friction. The US has exported crude oil to China every month since March 2020, with the exception of August 2024 (Figure 4). However, due to China's retaliatory measures against Trump's tariffs in February 2025 (an additional 10% tariff on crude oil), US crude oil exports to China plummeted to zero in March 2025. This resulted in a surplus of US crude oil, leading the US to increase exports to Asian countries other than China, including Japan. Exports to Japan reached a record high in March 2025, and increased year-on-year in May, July, and August.

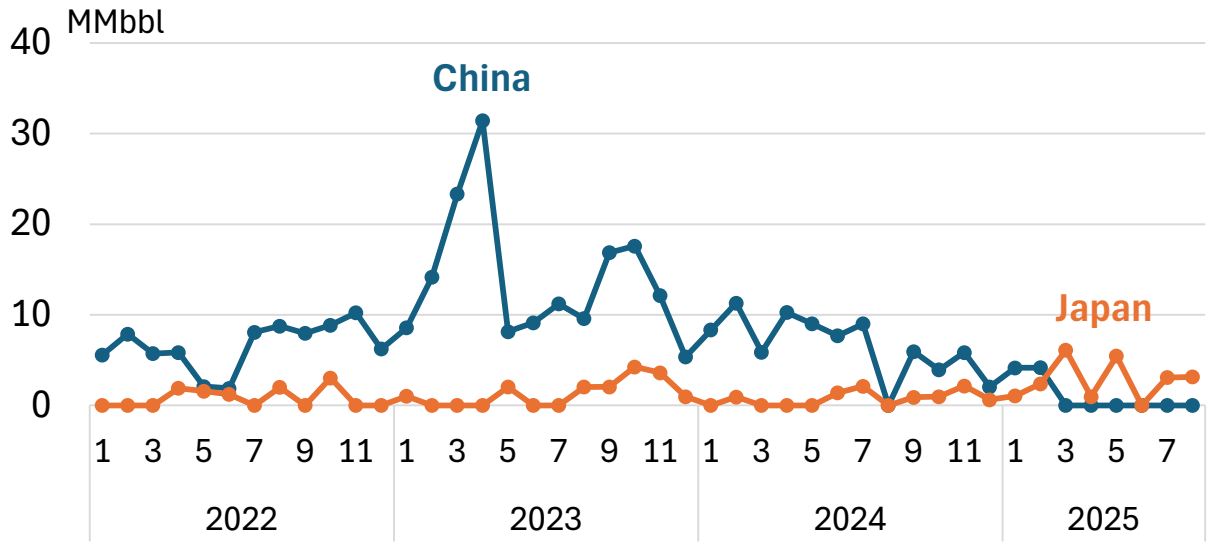

Figure 4: US crude oil exports to China and Japan

Source: EIA

However, replacing all crude oil with US crude oil is not feasible for Japan. Transportation from the US to Japan involves longer distances, resulting in longer lead times and higher freight costs. Furthermore, there are limitations in maritime transport through the Panama Canal. Additionally, Japanese refineries are often designed based on heavier Middle Eastern crude oil, with desulfurization and cracking units optimized for sulfur content and specific gravity. While US shale-derived light sweet crude oil yields higher proportions of gasoline and naphtha, it may not be optimally utilized in units designed for heavier oil. Indeed, the

increased import volume from Qatar compared to the same period last year is due to increased imports of heavy Al-Shaheen crude oil (Figure 3).

3. Lowest Middle East ratio for Japan's LPG imports since FY1965 in FY2024

In FY2024, LPG imports increased by 0.4% year-on-year to 10.38 million tons, accounting for 81.8% of domestic sales (Figure 5). The Middle East ratio decreased by 1.4 percentage points to 3.6%, the lowest level since FY1965.

The Middle East ratio for LPG was 93.5% in FY2010, exceeding even that of crude oil. However, since FY2012, the expansion of imports from the US has led to a decline in the Middle East ratio. This is because LPG production in the US has increased as a byproduct of shale gas production. Moreover, LPG had relatively fewer obstacles to export, unlike crude oil, which was subject to a general export ban, and LNG, which lacked adequate export infrastructure.

Furthermore, LPG production in Australia increased as a byproduct of increased natural gas production, leading to increased imports from Australia since FY2017. In Canada, the development of shipping facilities on the Pacific coast in 2019 led to increased imports from Canada since FY2019. These factors have contributed to the continued decline in the Middle East ratio.

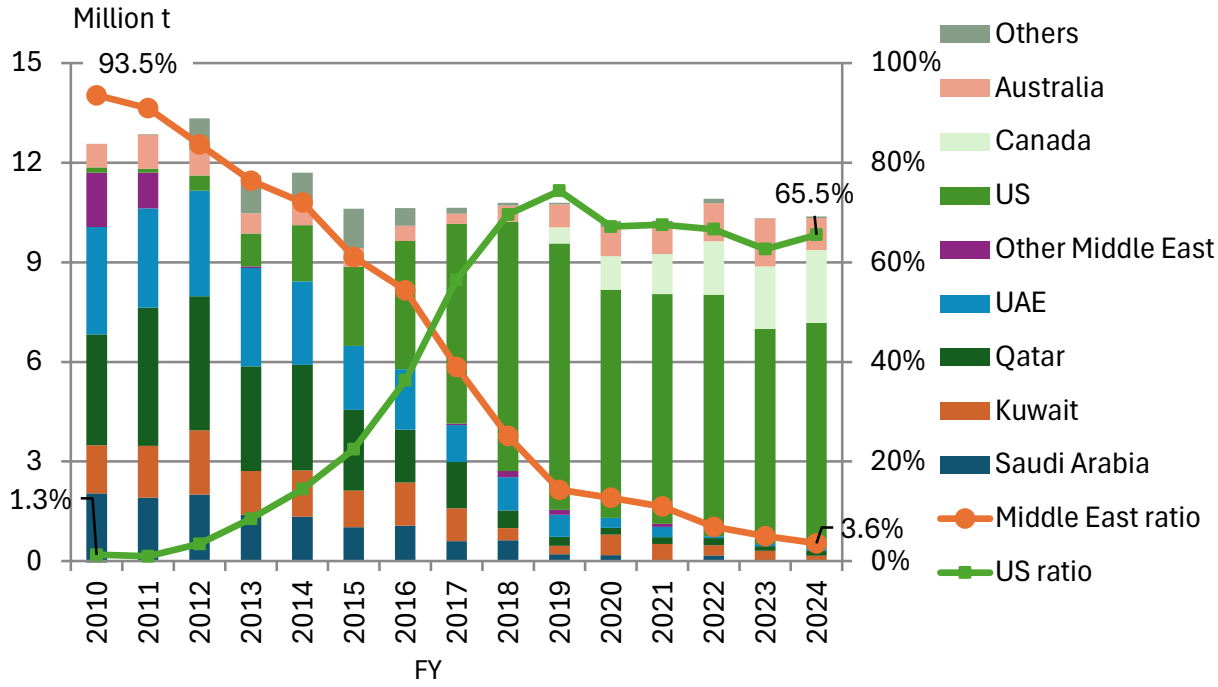

Figure 5: Volume of LPG Imports, Middle East Ratio, and US Ratio
Source: Ministry of Economy, Trade and Industry, "Yearbook of Mineral Resources and Petroleum Products Statistics"

4. Increased LPG imports from the US in FY2025

In FY2025, the US ratio has been rapidly increasing, partly due to decreased imports from Canada (Figure 6). Especially since June, the US share has exceeded 90% for six consecutive months, reaching 100% in September and October, indicating an over-reliance on the US as the sole import source. Similar to crude oil, the US-China trade friction prompted China to include LPG in its retaliatory measures in April 2025, causing China to increase imports from sources other than the US. As a result, the demand for US LPG from China weakened, leading to a relative decrease in the price of US LPG and an increase in exports to Asian countries other than China, including Japan.

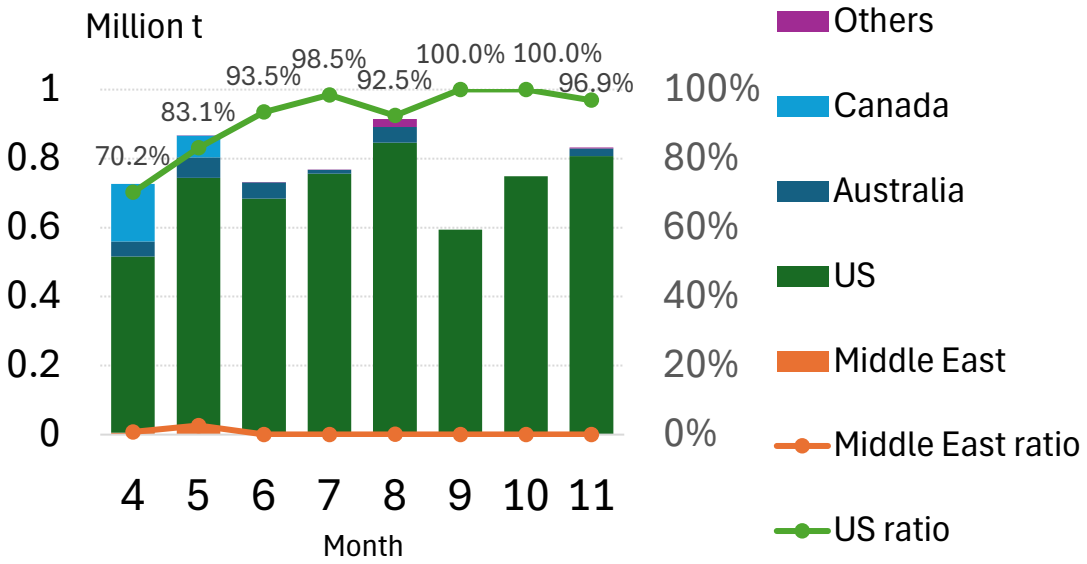

Figure 6: Monthly LPG Imports, Middle East Ratio, and US Ratio from April to November 2025
Source: Ministry of Economy, Trade and Industry, “Yearbook of Mineral Resources and Petroleum Products Statistics”, Ministry of Finance, "Trade Statistics".
Note: Import volume for November 2025 is estimated from the country-specific import share of trade statistics.

5. Ensuring Stable Supply by Mitigating Geopolitical Risks

The potential risks to Japan's stable supply of crude oil are increasing. With the high level of reliance on the Middle East for crude oil, military tensions between Israel and Iran escalated in June 2025, raising concerns about the potential targeting of energy facilities and the possibility of Iran blockading the Strait of Hormuz. These events can trigger supply insecurity. Furthermore, the risk of piracy and other threats is rapidly increasing in the Strait of Malacca, raising concerns about navigational safety.

On the other hand, since FY2019, the US, Canada, and Australia have accounted for over 85% of the LPG import share, reducing the impact of potential geopolitical risks in the Middle East. While the US-China trade friction has a negative impact on the Japanese economy, US crude oil can be transported directly to Japan via the trans-Pacific route, contributing to the diversification of supply routes and risk mitigation. This may increase transportation costs, but it can improve supply stability. In the case of LPG, Japan has already benefited from the decline in prices due to the easing of US supply and demand, based on its experience in importing US products at a high rate and addressing handling challenges.

Moving forward, it is crucial to diversify supply networks, including the trans-Pacific route, to enable a quick response to unforeseen supply shortages. Furthermore, in anticipation of expanding imports of US light crude oil, it is necessary to address handling challenges by optimizing operating efficiency and product yields, as well as improving the flexibility of refinery processing capacity through modifications. By implementing these measures, it will be possible to further enhance the stability of crude oil supply.

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