

# East and West, and South too

## After all, diversity is key to a stable energy supply

YANAGISAWA Akira

Executive Economist, The Energy Data and Modelling Center, The Institute of Energy Economics, Japan

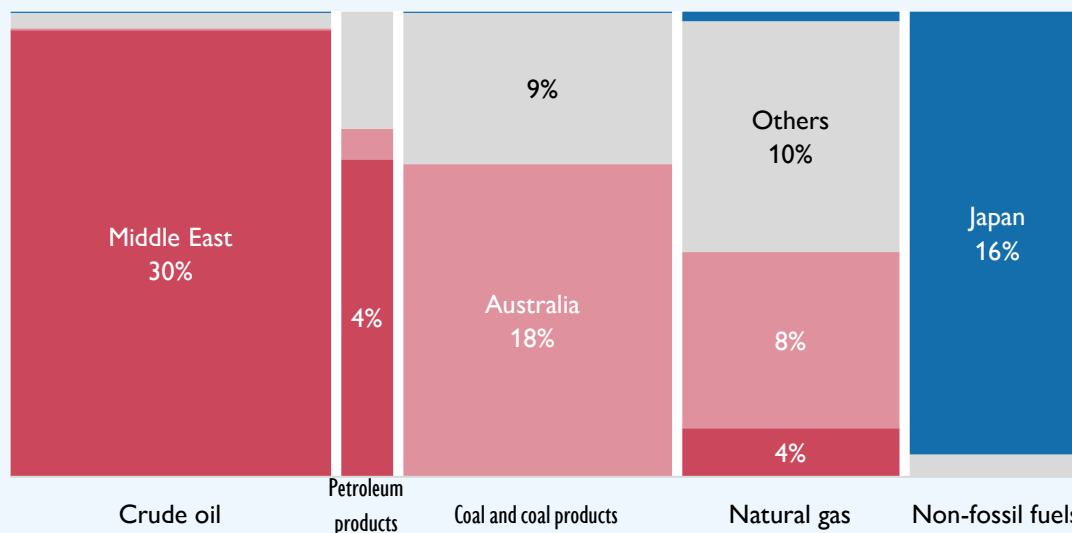
### Summary

The blockade of the Strait of Hormuz has presented Japan with a major challenge. The stockpiles expanded following the oil crises of the 1970s have provided some breathing space until a full-scale response can be mounted to the sharp decline in oil supplies from the Persian Gulf. However, the lessons of the oil crisis have not been fully applied when it comes to diversifying crude oil import sources. Japan's dependence on the Middle East for crude oil imports, which stood at 78% during the first oil crisis, has now reached 93%.

Whilst the import source of liquefied petroleum gas (LPG) has rapidly shifted from the Middle East to the United States, no such structural change has occurred in naphtha, which, like LPG, relies heavily on imports. For the time being, the pattern of relying heavily on the Middle East for oil supplies is unlikely to change, and we should continue to devote our efforts to strengthening relations with the region.

However, a different picture emerges when we look at total energy consumption. Japan's dependence on the Middle East for primary energy supplies has fallen from around 60% half a century ago to 36%. This has been largely due to the substitution of oil with natural gas and coal. The contribution of non-fossil fuels has not kept pace, partly due to the stagnation in nuclear following the Great East Japan Earthquake.

Figure 1 | Breakdown of Japan's primary energy supply by country and region [FY2024]



Japan's self-sufficiency rate is recovering significantly from its decline, whilst the United States has seen growth over the past decade thanks to the shale revolution. Australia is the largest supplier, accounting for over a quarter of Japan's energy consumption. As a developed nation, Australia has a stable political system, and its sea routes to Japan do not pass through the Strait of Hormuz or the Strait of Malacca. Nevertheless, this does not mean that the situation is entirely free of risk.

Diversity is key to ensuring a stable energy supply. Whilst we must develop a balanced mix of domestic energy sources such as solar photovoltaics, wind and nuclear, it is also essential to secure flexible and strategic supplies from the West (the Middle East), the East (the United States and Canada) and the South (Australia).