Institute for Energy Economics and Financial Analysis

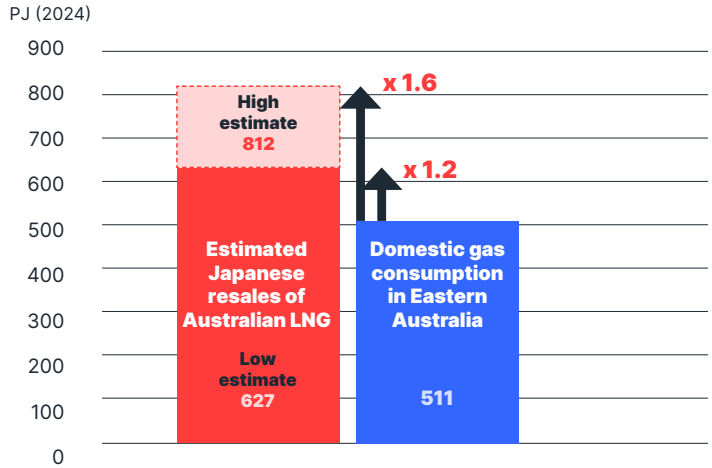
Briefing Note

May 2025

Amandine Denis-Ryan || CEO, IEEFA Australia
Josh Runciman || Lead Analyst, Australian Gas

How Japan cashes in on resales of Australian LNG at the expense of Australian gas users

- *Japan onsold at least 600 petajoules (PJ) of Australian LNG to overseas markets, and potentially 800PJ, in 2024, more than Eastern Australia's annual domestic gas consumption.*
- *In 2024, Australia was the largest source of Japanese-chartered LNG shipments sold to third countries, supplying 41% of cargos.*
- *Japanese resales of LNG from both Eastern and Western Australia are larger than the projected annual gas shortfalls in those regions in the coming years.*
- *Japanese resales are likely driving more than A$1 billion in profits for Japanese companies, raising questions about Japan's interests in Australia's energy policies.*



Japanese resales of Australian LNG are:

- **larger** than Eastern Australia's gas consumption
- larger than expected domestic **gas shortfalls**
- the **largest source** of Japanese LNG resales
- worth **$11bn+ in revenue** for Japanese companies

Introduction

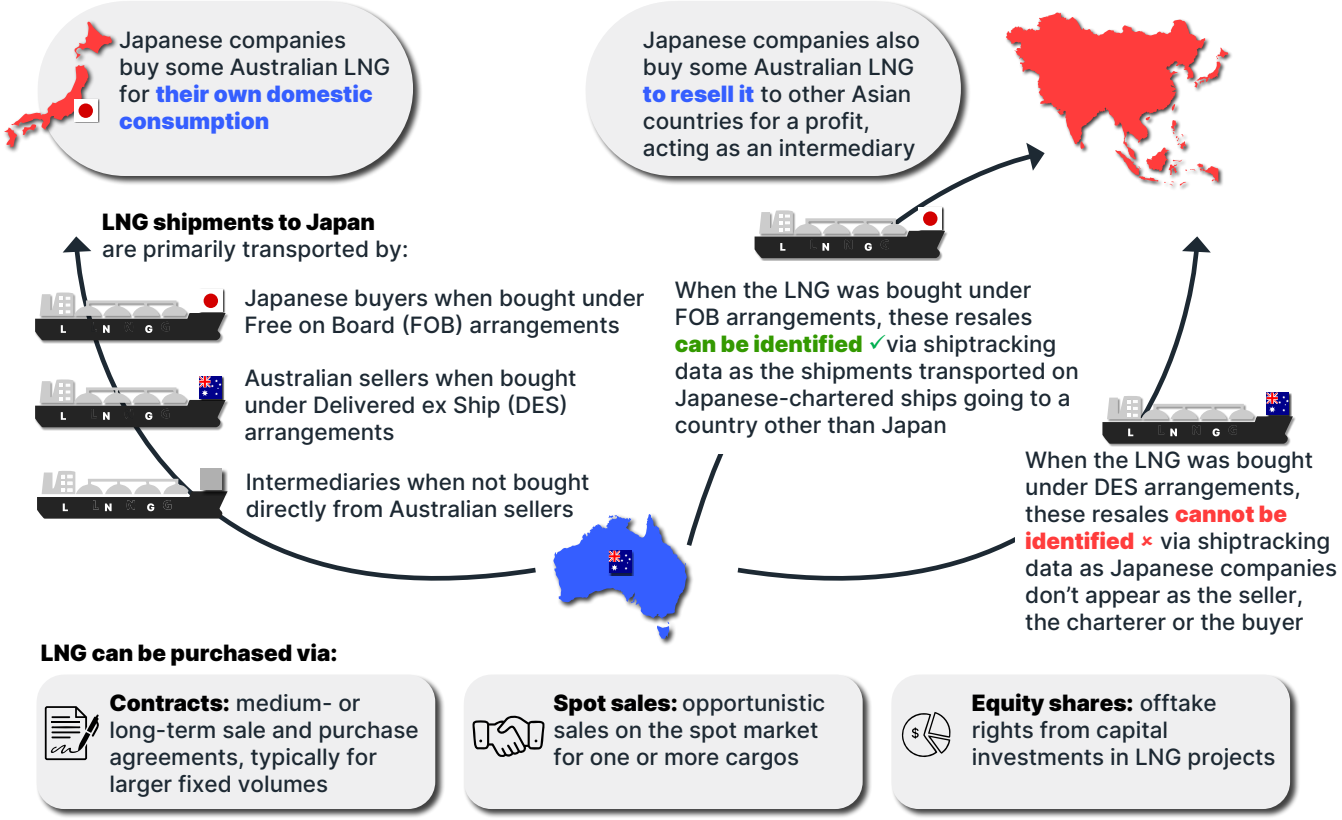
Japan has historically been the world's largest buyer of liquefied natural gas (LNG). However, as domestic demand declines, Japanese companies are increasingly focusing their attention on reselling LNG overseas. IEEFA has previously highlighted that the growing scale of those resales means Japan appears to have resold more LNG overseas than it imports from Australia for the fourth year in a row.

The data on LNG resales by Japanese companies is from a government survey of 30 LNG companies, conducted by the Japan Organization for Metals and Energy Security (JOGMEC). While the survey includes an overall figure of resales to third countries, it does not provide details on the source of the LNG or which countries buy it. The data may also include some double-counting "where multiple companies were involved in the same cargo in the process of resale".

In this report IEEFA uses shiptracking services and other detailed data sources to investigate how much of Japanese LNG resales are likely to be sourced from Australia. LNG shiptracking services monitor the location and direction (among other data points) of LNG cargos. These services often provide information about the seller at the cargo's origin, the buyer at its final destination, and the vessel charterer, noting there is some uncertainty in the data provided.

Figure 1 below illustrates the principal scenarios for Japanese purchases of Australian LNG, and explains some of the key data points used in this report.

Figure 1: Principal scenarios for Japanese purchases of Australian LNG

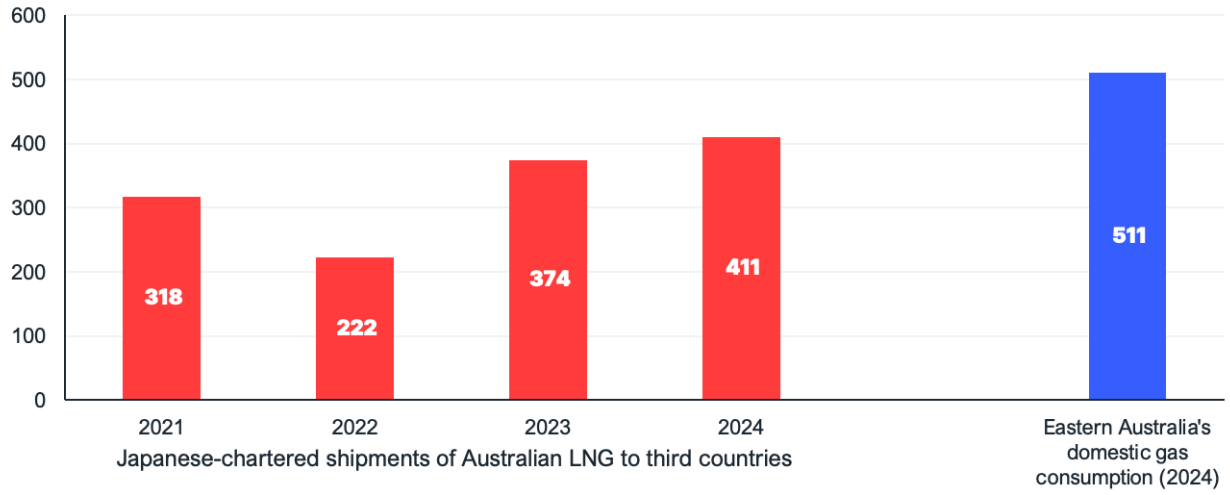


Known resales amount to about 400PJ a year

As a starting point, IEEFA analysed Australian LNG shipments transported on vessels chartered by Japanese companies and sold to buyers outside Japan. This does not provide a complete view of Japan's resales of Australian LNG, but it provides a minimum estimate based on existing shiptracking data.

We found that those Japanese-chartered LNG shipments amounted to 7.4 million tonnes (Mt) of LNG in 2024, equivalent to about 400 petajoules (PJ) (1Mt of LNG is equivalent to about 55.4PJ of gas). The volumes have grown steadily since 2021, with a drop in 2022 (Figure 2). This compares with 511PJ of domestic gas consumption in Eastern Australia in 2024 (excluding gas used for LNG production).

Figure 2: Japanese-chartered shipments of Australian LNG to third countries vs Eastern Australia gas consumption, PJ



Sources: Kpler data, AEMO, IEEFA

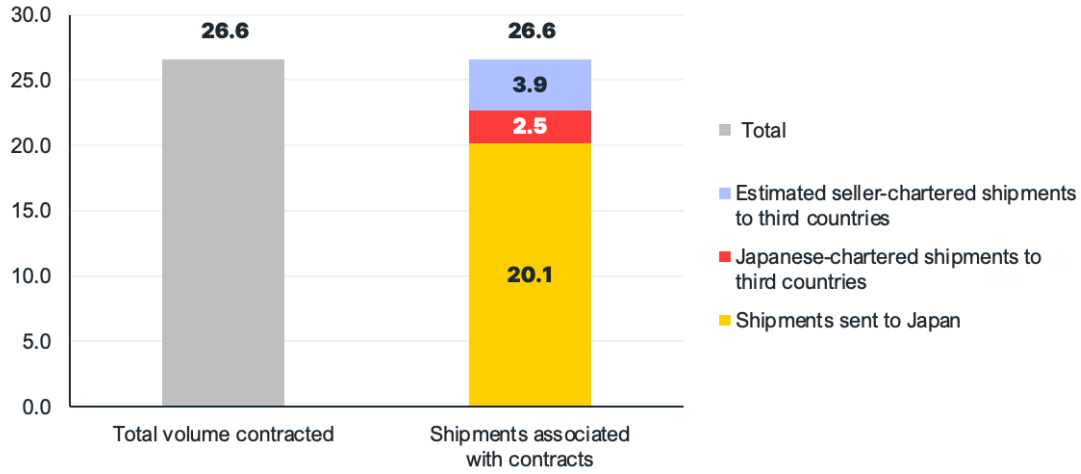
Actual resales likely exceed 600PJ a year

In cases where Australian LNG is resold to third parties and shipped under DES arrangements, the original Australian seller would be listed as the charterer, not the Japanese company. To estimate the volume of those resales, we have used two different methods for medium- and long-term contracts and for spot sales.

Medium- and long-term contracts

Data on the total volume of LNG bought by Japanese companies under medium- and long-term contracts is available. By subtracting shipments sent to Japan and Japanese-chartered shipments to third countries, we were able to estimate the remaining volume of seller-chartered LNG shipments to third countries as 3.9Mt of LNG (Figure 3).

Figure 3: Destination and transport mode of Australian LNG contracted by Japanese companies, 2024 (Mt)



Source: ICIS data. Disclaimer: This information has been extracted from ICIS products or services. ICIS has not seen or reviewed any conclusions, recommendations or other views that may appear in this document. ICIS makes no warranties, express or implied, as to the accuracy, adequacy, timeliness, or completeness of its data or its fitness for any particular purpose. ICIS disclaims any and all liability relating to, or arising from, the use of its data and other content or to the fullest extent permissible by law.
Note: To be conservative, the analysis assumes that shipments sent to Japan and Japanese-chartered shipments sent to third countries which are not identified as either contracts or spot sales are contracts.

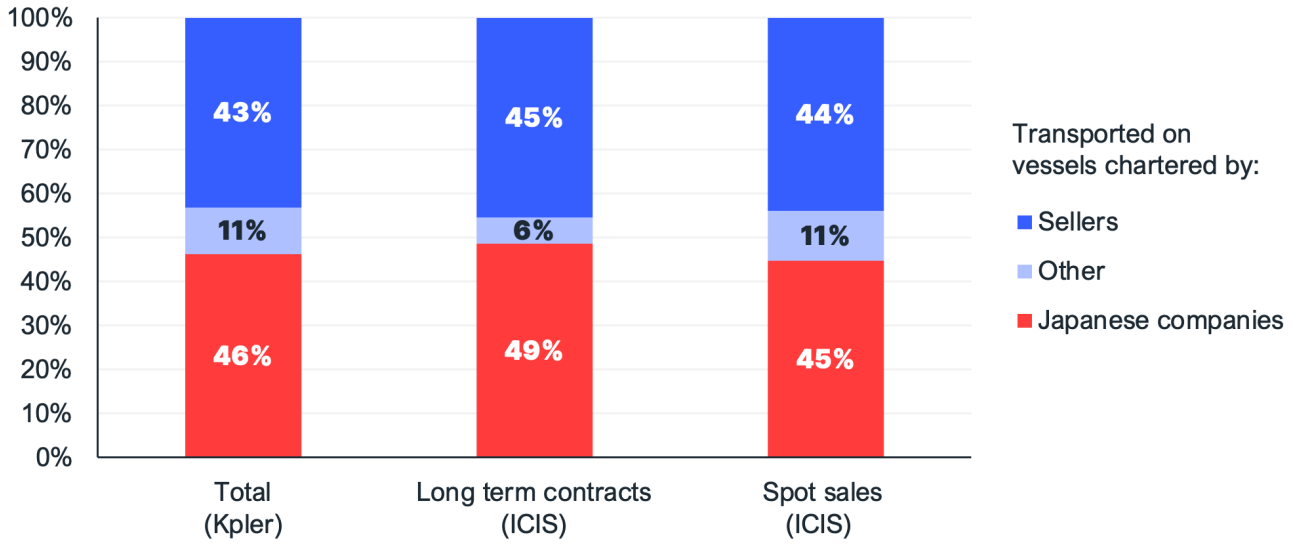
This result challenges the common understanding that medium- to long-term contracts under DES arrangements typically have destination restriction clauses constraining resales. Those clauses are usually included to limit the risk of competition from buyers, as well as potential additional costs, risks or disruptions associated with delivering the LNG to a different location. Diversion provisions may have been included in some of the contracts to counter those risks, potentially associated with conditions, additional costs or profit-sharing mechanisms.

Spot sales

No data is available on the total volume of spot sales purchased by Japanese companies. As a result, the only way to estimate the volume of seller-chartered shipments to third countries resold by Japanese companies is by extrapolation.

We analysed the total flow of Australian LNG to Japan to identify how much LNG is transported by sellers (i.e. non-Japanese charterers), and whether this varies by type of purchase agreement (Figure 4). We found that across all types of sales, and consistently across the two main LNG market data services, about 43-45% of LNG shipments are transported on vessels chartered by sellers. The "other" category appears to be dominated by non-Japanese intermediaries.

Figure 4: Delivery mode for Australian LNG flowing to Japan, 2024 sales



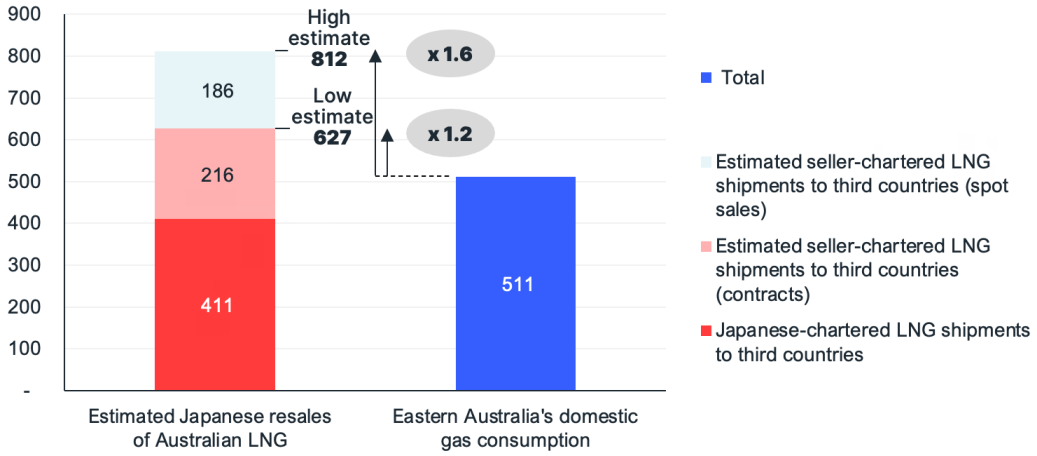
Sources: Kpler data, ICIS data (See Disclaimer below Figure 3).

Assuming a similar share of onsold Japanese LNG spot sales is transported on vessels chartered by sellers (44%), this would suggest it amounts to about 3.4Mt of LNG. This estimate is highly uncertain given it cannot be tested with actual data.

Total

In total, we estimate Japanese resales of Australian LNG likely amount to at least 11.3Mt and up to 14.7Mt, depending on whether estimated onsold seller-chartered spot sales are included. In PJ, this means Japanese resales of Australian LNG likely amount to at least 627PJ and up to 812PJ, or 1.2-1.6 times Eastern Australia's total domestic gas consumption (Figure 5).

Figure 5: Estimated Japanese resales of Australian LNG to third countries in 2024 vs Eastern Australia gas demand, PJ



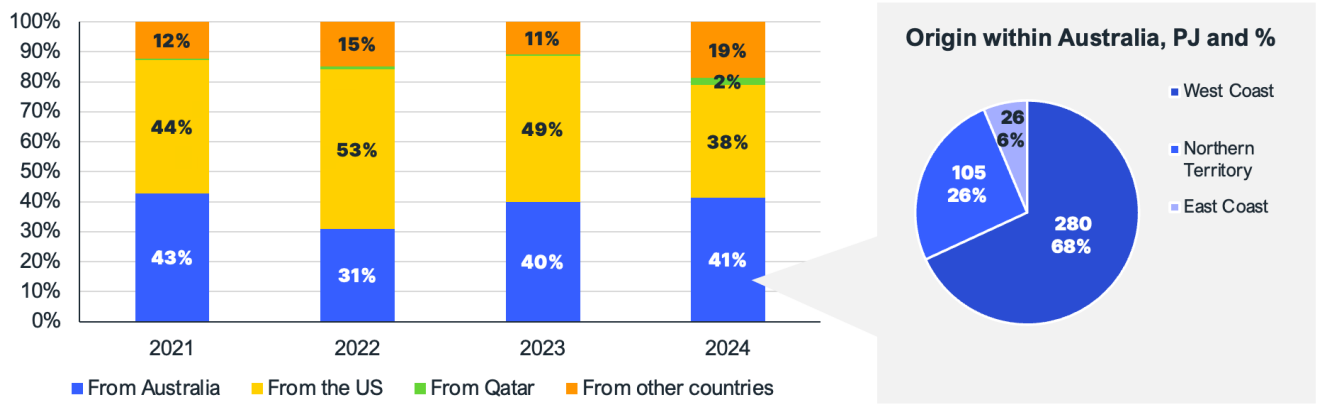
Sources: Kpler data, AEMO, IEEFA

Australia appears to be the largest supplier of LNG resold by Japan

To estimate the sources of LNG resold by Japan, we analysed international Japanese-chartered LNG shipments sold to countries other than Japan. We found that the LNG was generally mostly sourced from Australia and the US, with Australia becoming the largest supplier in 2024 (Figure 6, left).

Australia, the US and Qatar are the world's largest producers of LNG, and each produces similar volumes. However, Qatar supplies only a very small share of the LNG resold by Japanese companies. This is likely due to strong destination restrictions in Qatari LNG contracts.

Figure 6: Origins of Japanese-chartered LNG shipments sold to third countries



Source: Kpler data

This data provides an opportunity to sense-check our estimate for Japanese resales of Australian LNG. The latest Japanese government survey data identifies 38.25Mt of LNG resales to third countries for the Japanese fiscal year (FY) 2023. According to Kpler data, the volume of Japanese-chartered LNG shipments sold to third countries is nearly identical for FY2023 and the 2024 calendar year. As such, we use the FY2023 survey results as an estimate for 2024 volumes. By extrapolating the 41% of Japanese resales originating from Australia, this would mean 15.7Mt or 869PJ of Australian LNG was resold by Japanese companies in 2024. This is 7% higher than our top estimate, which suggests it is likely in the right order of magnitude given the possibility of some double-counting in the survey data.

Within Australia, the largest source of Japanese-chartered LNG shipments to third countries is the West Australian coast, in particular the Wheatstone, North-West Shelf and Gorgon projects with 280PJ (Figure 6, right). This is materially larger than the forecast gas shortages in Western Australia in the coming decade.

The Northern Territory is the second largest source, followed by the East Coast (Queensland) which provided 6% or 26PJ of Japanese-chartered LNG shipments sold to third countries.

We also calculated the volume of likely seller-chartered LNG shipments from Queensland to third countries coming from Japanese contracts, and found that they amount to an additional 26PJ (based on ICIS data). In total, this means Japanese resales of Queensland LNG amount to at least 52PJ, with 15PJ identified by ICIS as spot sales and the rest as contracts. While the volume sourced from Queensland is relatively small compared with total resales, it is significantly more than the annual forecast shortfalls in Eastern Australia's gas market in coming years. It is also significant compared with total Japanese LNG purchases from Queensland. Indeed, 52PJ is equivalent to about two thirds of the volume of LNG shipments from Queensland to Japan.

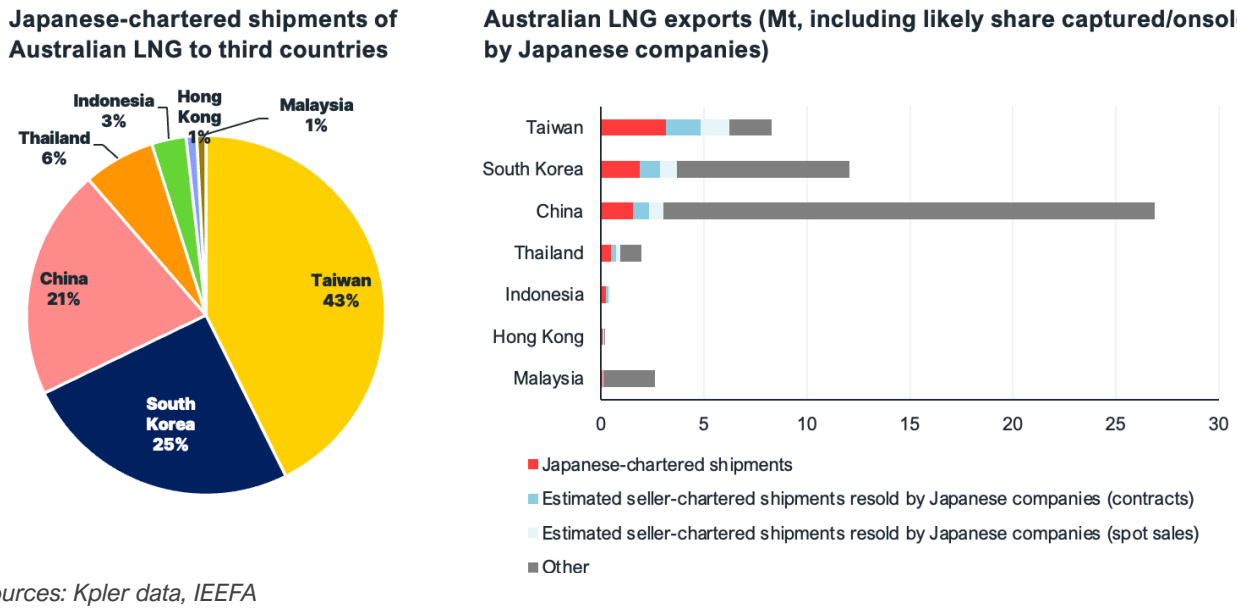
Japan mainly resells Australian LNG to premium markets

Similarly, we analysed the destinations of Japanese-chartered shipments of Australian LNG. We found that the main destinations are developed markets such as Taiwan and South Korea, which account for slightly more than two thirds of these shipments of Australian LNG (Figure 7, left).

Interestingly, assuming a similar portion of resales is transported on seller-chartered vessels independently of the destination, this would mean Japanese companies are responsible for up to three quarters of the sales of Australian LNG to Taiwan, and up to 30% of the sales to South Korea (Figure 7, right).

This should be concerning for Australian producers, for whom these are premium markets with high purchasing power and low credit risk. Based on Australian government estimates of market value in 2023, Taiwan and South Korea present the highest value of Australia's major LNG markets at A$979 and A$1,086 per tonne of LNG respectively compared with an average export value of A$921 per tonne.

Figure 7: Destination of Australian LNG shipments in 2024 (excluding Japan)



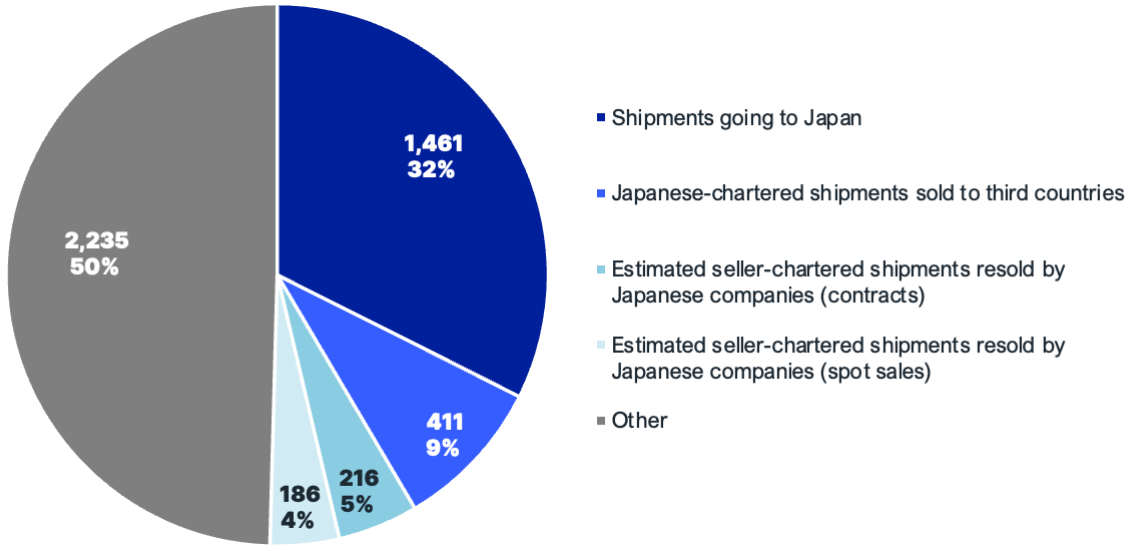
Sources: Kpler data, IEEFA

Resales of Australian LNG challenge Japan's energy security narrative

Japan has on several occasions stressed the importance of Australian LNG for its energy security, and tried to influence Australia's gas policies. This analysis challenges the Japanese government's messaging that it needs Australian LNG solely for energy security purposes.

Based on our estimates, Japan resells about half as much Australian LNG to third countries as it imports for its own consumption. This analysis also reveals that Japanese companies may be buying much more of Australia's LNG than previously understood. In addition to the 32% of LNG going to Japan, Japanese companies likely purchase between 14% and 18% of Australian LNG to resell to other countries. This would mean that Japan buys up to half of Australia's LNG (Figure 8).

Figure 8: Australian LNG exports and likely share bought by Japanese companies, 2024 (PJ)



Source: Kpler data, IEEFA

With such a large volume of Australian LNG likely being purchased and resold by Japan, the profit on those resales is likely a key driver for Japan's interest in the Australian energy market. This is confirmed by the fact that the total volume of Australian LNG shipments going to Japan (26.4 Mt) equals the total volume of contracts (26.6 Mt), showing resales are not driven by contract surpluses.

Based on Australian government estimates of the LNG market's value in 2023, IEEFA estimates the total market value of those resales is A$11 billion to A$14 billion. The profit margin Japanese companies make on those sales is unclear, with little information available publicly. Tokyo Gas generated 17% of its operating profits from overseas businesses in FY2022, with the company's LNG sales increasing nearly fourfold between 2017 and 2023. A 10% margin on Australian LNG resales would deliver more than A$1 billion in profits to Japanese companies.

Conclusion

It is time for the Australian government to scrutinise Japanese companies' resales of Australian LNG, how they affect Australia's gas markets and how they compete with Australian producers. It would also be worthwhile to examine the motives behind the Japanese government's persistent attempts to influence on Australian energy policy.

About IEEFA

The Institute for Energy Economics and Financial Analysis (IEEFA) examines issues related to energy markets, trends and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. www.ieefa.org

About the Authors

Amandine Denis-Ryan

Amandine is IEEFA Australia's CEO. She is a recognised expert in net-zero emissions transitions across the economy. She led the development of the first domestic net-zero emissions pathway for Australia and subsequent updates, which are considered to be the reference for Paris-aligned pathways and used by business, finance and government organisations. She has worked with and advised many organisations on the strategy, investment and risk implications of the energy transition. adenisryan@ieefa.org

Josh Runciman

Josh Runciman is IEEFA's Lead Analyst for Australian Gas. His work focuses on key issues in Australia's gas and LNG sector, including gas market policy. Prior to joining IEEFA, Josh was a Director on the Australian Competition and Consumer Commission's Gas Inquiry 2017-2030, where he worked on a range of issues, including supply adequacy, gas commodity and pipeline pricing, LNG netback pricing and retailer behaviour. jrunciman@ieefa.org