Aegon Asset Management

CONSEQUENCES OF RUSSIA'S INVASION OF UKRAINE ON GLOBAL LNG MARKETS

By Phil Wrenn, senior research analyst, fixed income

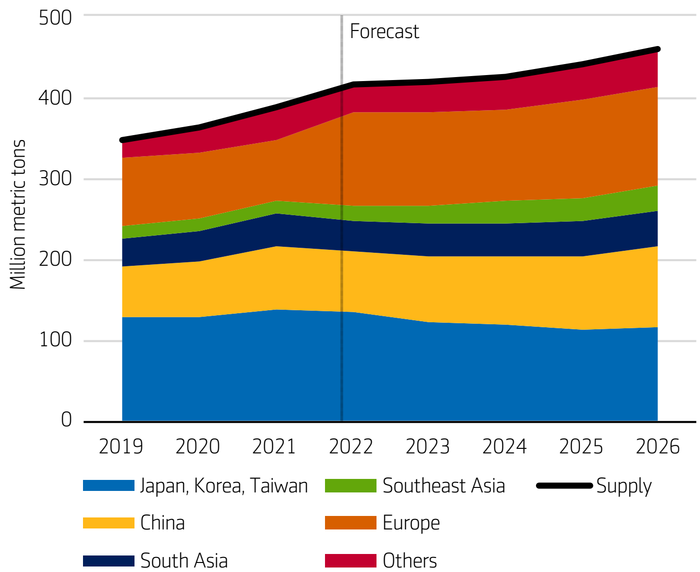
Russia's war with Ukraine has led to a substantial demand shock from European countries for liquid natural gas (LNG) imports as the EU seeks to reduce its imports of Russian gas by two-thirds. They hope to offset the shortfall primarily by increasing LNG imports by around 36.5 million metric tons (mmt), or 50%, in 2022. Historically, Asia has played the largest role in the 375 mmt trade of LNG imported in 2021, with China accounting for 21% of demand, followed by Japan at 19% and South Korea at 12%.

However, demand momentum has shifted strongly toward European buyers who are trying to wean the EU off of Russian gas and secure supply. As a result, US LNG netbacks* for Europe's benchmark Dutch Title Transfer Facility will likely hold a premium over the Japan-Korea Marker spot price and attract more LNG to Europe. With limited new meaningful LNG supply capacity not expected until 2025/2026, the market is likely to remain tight and, as a result, Europe will have to outcompete Asian buyers on price.

The LNG spot market has also seen many Asian buyers exit due to higher prices. Asia's drop in demand is particularly stark in China, where volumes were down around 30% during May 2022 compared to the prior year, due in part to its COVID-19 resurgence and corresponding lockdowns, but also as some Chinese LNG importers diverted cargos to Europe to capture the price arbitrage. However, Chinese pipeline natural gas imports were up 26% in May 2022 compared the same period the previous year, with plans to expand pipeline capacity with Russia. In addition, China's plans for a green hydrogen strategy by 2025 illustrates that the country, which historically has been the largest buyer of LNG imports, is potentially pivoting away from the expensive LNG market. Japan, which in the past has received around 10% of its LNG imports from Russia, proposed a draft energy plan that indicates the percent of natural gas in the power mix will fall to 20% in 2030 from 37% as the country increases its renewable and nuclear mix over the next eight years.

Emerging markets in south and southeast Asia are viewed as key destinations to drive incremental LNG demand through 2040. However, current LNG prices have become uneconomical for many of these countries and could lead to continued reliance on cheaper, more carbon intensive fuel sources or increasing government invention. For example, already this year Bangladesh has undergone some gas-to-oil switching in energy production, Pakistan has had difficulties in sourcing cargos as LNG is diverted to higher priced markets and India is ramping up domestic coal and gas production to deal with unaffordable imports. These buyers could potentially be further crowded out of the market and ultimately negatively impact long-term LNG growth given the greater competition from Europe and Northeast Asia and ensuing price dynamics.

Exhibit 1: Global LNG supply and demand



Source: BloombergNEF. Note: 'Others' includes Middle East, Americas, Africa, other markets, bunkering and operational/voyage LNG losses (such as boil-off). Demand is based on normal weather (10-year average) and current futures prices.

Europe's thirst for LNG has resulted in average imports of 14.9 billion cubic feet per day (bcf/d), which is 5.9 bcf/d (66%) higher than the annual average during 2021 and 4.7 bcf/d higher than 2019's pre-COVID levels. Europe has 14 countries with regasification facilities; however utilization rates vary across the region. Most LNG terminals in northwest Europe are operating at full or peak capacity, while LNG facilities in southern Europe are operating around at 58% as these facilities are less integrated with Europe's greater pipeline grid and can only serve local and regional markets.

*Netbacks are calculated by taking the net revenues from downstream sales of LNG/natural gas in a destination market, less all costs associated with delivering natural gas from one point to another.

To alleviate some of its import constraints, Europe is pursuing a multi-pronged strategy of onshore regasification projects, as well as floating storage and regasification units (FSRUs), which are essentially LNG import terminals built on a ship. Land-based regasification facilities generally take three to four years to design and build, whereas FSRUs generally require a timeline of 12–24 months for deployment.

Assuming the delivery and ramp up of FSRUs in Germany, the Netherlands and Estonia by the end of 2022, new projects could add around 12.4 mmt of regasification capacity. Looking ahead, announced projects could add approximately 33 mmt of regasification capacity by the end of 2024 and increase to 72 mmt by 2028. Germany, which is most exposed to Russian gas and the potential for the Nord Stream pipeline to not come back online following its schedule maintenance, has several projects in the works. While the aggregate of this new capacity amounts to around 60% of its current supply from Russia, the timing for all these projects to be completed is by 2026 at the earliest.

From a new supply perspective, around 15 mmt is expected to come online globally in 2022, mostly within North America and to a lesser extent from additions in Indonesia and Mozambique. Supply disruptions from a fire at an LNG facility in the U.S., coupled with any unplanned outages due to maintenance or hurricane activity, could further stress the market in the near term. By 2025, more than 120 mmt of new global liquefaction capacity is planned to progressively come online, which should partially relieve tensions in the LNG market. Given the cost and long lead time for most LNG projects, some exporters have been developing modular LNG facilities offshore, which can be developed in around a year at a third of the cost of traditional facilities.

Near- and medium-term fundamentals suggest the LNG market will remain extremely tight and prices are likely to remain elevated. This is primarily driven by Europe further pivoting from its reliance on Russian gas and increases its share of LNG demand. Asian buyers will likely continue to be key consumers, particularly in the short-term as countries look to fill storage ahead of the upcoming winter. Long term demand from key markets like China and Japan face uncertainty given new policies to shift away from LNG. And emerging Asian countries, which are seen as a key demand engine through 2040, could exhibit sluggish growth should the LNG market remain highly competitive.

Disclosures

Unless otherwise noted, the information in this document has been derived from sources believed to be accurate at the time of publication.

This material is provided by Aegon Asset Management (Aegon AM) as general information and is intended exclusively for institutional, qualified, and wholesale investors, as well as professional clients (as defined by local laws and regulation) and other Aegon AM stakeholders.

This document is for informational purposes only in connection with the marketing and advertising of products and services, and is not investment research, advice or a recommendation. It shall not constitute an offer to sell or the solicitation to buy any investment nor shall any offer of products or services be made to any person in any jurisdiction where unlawful or unauthorized. Any opinions, estimates, or forecasts expressed are the current views of the author(s) at the time of publication and are subject to change without notice. The research taken into account in this document may or may not have been used for or be consistent with all Aegon AM investment strategies. References to securities, asset classes and financial markets are included for illustrative purposes only and should not be relied upon to assist or inform the making of any investment decisions. It has not been prepared in accordance with any legal requirements designed to promote the independence of investment research, and may have been acted upon by Aegon AM and Aegon AM staff for their own purposes.

The information contained in this material does not take into account any investor's investment objectives, particular needs, or financial situation. It should not be considered a comprehensive statement on any matter and should not be relied upon as such. Nothing in this material constitutes investment, legal, accounting or tax advice, or a representation that any investment or strategy is suitable or appropriate to any particular investor. Reliance upon information in this material is at the sole discretion of the recipient. Investors should consult their investment professional prior to making an investment decision. Aegon AM is under no obligation, expressed or implied, to update the information contained herein. Neither Aegon AM nor any of its affiliated entities are undertaking to provide impartial investment advice or give advice in a fiduciary capacity for purposes of any applicable US federal or state law or regulation. By receiving this communication, you agree with the intended purpose described above.

Past performance is not a guide to future performance. All investments contain risk and may lose value. This document contains "forward-looking statements" which are based on Aegon AM's beliefs, as well as on a number of assumptions concerning future events, based on information currently available. These statements involve certain risks, uncertainties and assumptions which are difficult to predict. Consequently, such statements cannot be guarantees of future performance, and actual outcomes and returns may differ materially from statements set forth herein.

The following Aegon affiliates are collectively referred to herein as Aegon Asset Management: Aegon USA Investment Management, LLC (Aegon AM US), Aegon USA Realty Advisors, LLC (Aegon RA), Aegon Asset Management UK plc (Aegon AM UK), and Aegon Investment Management B.V. (Aegon AM NL). Each of these Aegon Asset Management entities is a wholly owned subsidiary of Aegon N.V. In addition, Aegon Private Fund Management (Shanghai) Co., a partially owned affiliate, may also conduct certain business activities under the Aegon Asset Management brand.

Aegon AM UK is authorised and regulated by the Financial Conduct Authority (FRN: 144267) and is additionally a registered investment adviser with the United States (US) Securities and Exchange Commission (SEC). Aegon AM US and Aegon RA are both US SEC registered investment advisers. Aegon AM US is also registered as a Commodity Trading Advisor (CTA) with the Commodity Figures Trading Commission (CFTC) and is a member of the National Futures Association (NFA). Aegon AM NL is registered with the Netherlands Authority for the Financial Markets as a licensed fund management company and on the basis of its fund management license is also authorized to provide individual portfolio management and advisory services in certain jurisdictions. Aegon AM NL has also entered into a participating affiliate arrangement with Aegon AM US. Aegon Private Fund Management (Shanghai) Co., Ltd is regulated by the China Securities Regulatory Commission (CSRC) and the Asset Management Association of China (AMAC) for Qualified Investors only;

AdTrax: 4860161.2GBL