Elston

Elston Insights

6th May 2022

Remapping Europe’s energy supply

- Weaning Europe off Russian oil & gas has become a political goal
- For key EU economies, it could prove to be a challenge
- The process will take time and money and will result in higher prices

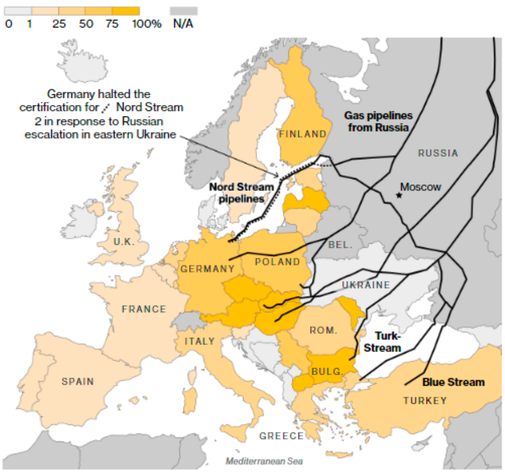
As a result of the Russia/Ukraine war, there is a political goal to reduce European dependency on Russian oil and gas supplies and to reduce the indirect financing of the Russian economy.

We explore this topic further in conversation with [Nadia Kazakova of Renaissance Energy Advisors](#).

How dependent is Europe?

The level of energy dependency varies from country to country. France for example has extensive Nuclear energy, so it’s dependency is lower. Former Comecon (Eastern bloc) countries that are now EU members – such as Poland, Czech Republic, Slovakia, and Hungary – have much higher levels of energy dependency as their energy systems were integrated into the broader Soviet energy system. Their gas distribution was integrated with Soviet gas export pipelines. Their oil refineries were (and are) connected to oil export pipelines. Whilst the ownership of Eastern Europe’s energy infrastructure changed in the 1990s, the physical configuration did not.

Fig.1. Share of Natural Gas imports from Russia, 2020

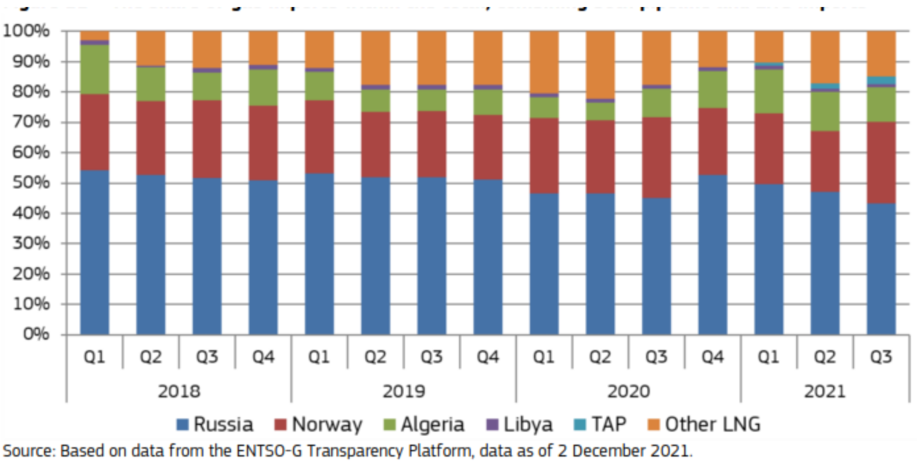


Sources: Eurostat, U.S. Energy Information Administration, Austria's Ministry of Climate Protection
Note: Data for 2020 are not available for the U.K. and Bosnia-Herzegovina, 2019 data are shown in those countries. Norway imported 10 million cubic meters of gas from Russia in 2020, but as a net exporter is not dependent on Russian imports.

Source: Bloomberg

In aggregate, Europe transfers approximately $1bn per day to Russia in payments for oil and gas, according to estimates from [Renaissance Energy Advisors](), and Europe depends on Russia for 40-50% of its energy imports.

Fig.2. Share of combined gas and LNG imports to EU, by source



Source: EC Quarterly Report on European gas markets,4q21

Turning off the taps: the importance of transit

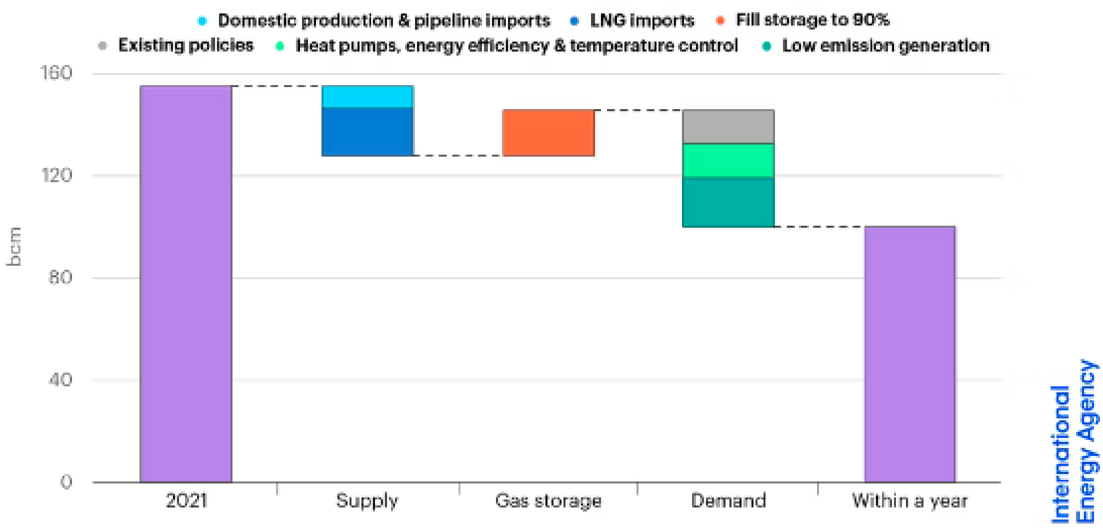
Russia supplies Europe with gas directly via pipeline from production fields to consumers in Europe. The "transit" countries host those pipelines and receive a transit fee. For Ukraine, that transit fee represents approximately $2bn per annum and was up for renewal in 2024.

Transit disputes plagued Russia/Ukraine relations prior to the 2014 change of regime. In 2005, shortly after a pro-western government came to power after the "Orange Revolution", a Russia/Ukraine gas transit dispute (with Ukraine alleging that Russia turned off the taps, and Russia alleging that Ukraine was siphoning off supplies), threatened Eastern European countries with a cold winter.

Partly in response to this, Russia and Germany worked together to create a new undersea export route that by-passed Eastern European countries – primarily Poland and Ukraine – where political relationships with Russia were strained. Germany's objectives was stable cost-efficient supply. Russia's objective was stable hard currency earnings. That project "Nord Stream and Nord Stream 2 was a response to that. Construction started in 2011 and the second line was due for approval in December 2021. Political pressure grew on Germany from the US that approval should be only granted if Ukrainian transit income was guaranteed. Following the outbreak of war, the opening of the pipelines has been cancelled as it would be supplying funds to the Russian state to wage war.

Instead Germany and the EU are now looking to substitute Russian gas – to the extent possible – with imported primarily US LNG. The target is to switch approximately 30 billion cubic meters to imported LNG. However that will require a huge increase in LNG impact capacity, that will take time to build.

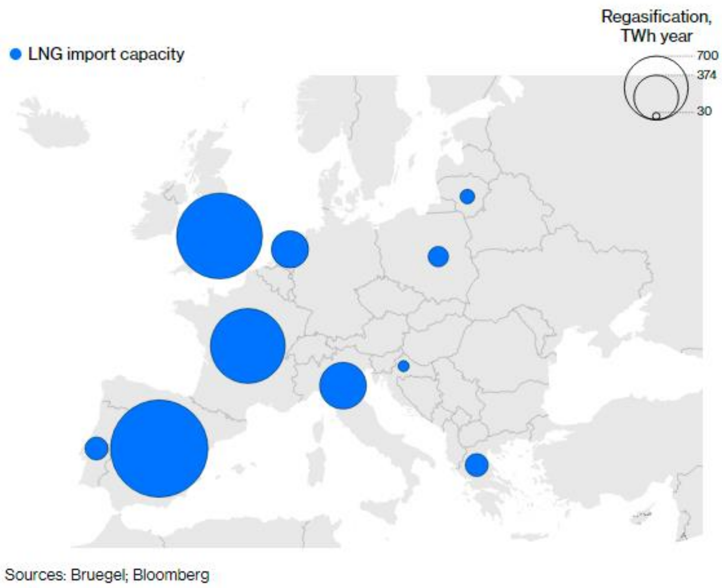
Fig.3. The plan to reduce Russian gas imports



Source: IEA

This is because Germany has limited and Eastern Europe has negligible LNG import and regasification capacity. They are used to having "gas on tap"[1]. It will take approximately four years to build more capacity. So in the meantime, and thereafter, Russia will nonetheless remain the material supplier.

Fig.4. Low LNG import capacity in countries used to "gas on tap"



Source: Bloomberg

[1] Nadia Kazakova, Renaissance Energy Advisors, see interview

Gas pricing and liberalisation

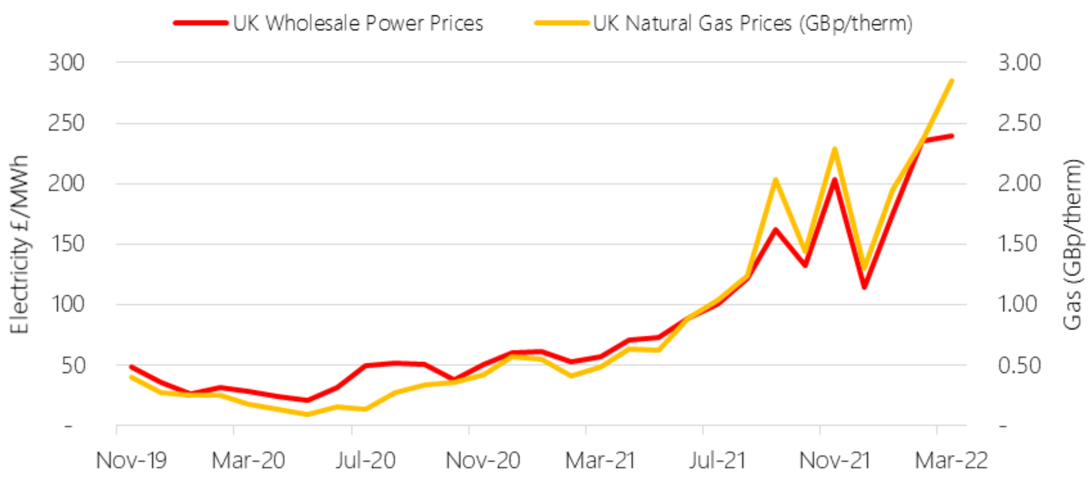
Russia supplied gas to former Eastern bloc countries at low (below spot market) rates, but on very long-term (e.g. 20-30 year) contracts, that were either indexed or moved broadly with oil price trends. This meant that countries in the former USSR and Comecon bloc would receive gas at below world market rates. This benefitted those countries (cheap heating), but also benefitted Russia (influence, and stable income).

When former Communist countries joined the EU and old contracts expired, new contracts were negotiated. This was often cause of friction.

The EU meanwhile as pushed for all gas contract within the EU to be linked to a gas spot market in a process known as "European gas market liberalisation" consistent with free-market principles. Russia lobbied against this as it would introduce increased volatility for its income – and increased volatility for commercial and residential users. The crisis has driven spot prices higher and ironically, the liberalisation of the gas market EU means that those increases are passed on to utilities (driving up power prices), commercial users (who now may have to cut back or ration energy) and to a lesser extent (owing to price caps), household users.

This means that volatility in the spot gas market, directly (and indirectly – through power prices and input costs) feeds through to inflation. This is why we look at wholesale gas and power prices as "live" indicators of supply-side inflation.

Fig.5. UK wholesale electricity and gas prices



Source: Elston research, Bloomberg data

How to reflect this in portfolios

The energy crisis won't be fixed in a hurry – particularly if physical infrastructure is to be built to accommodate greater LNG capacity. Alternative energy sources can help reduce dependency but are not as cheap as gas that was available on stable long-term contracts. This will take time to solve.

The negative impact of the energy crisis is clear: it is driving up manufacturing costs, fertilizer costs, transport costs, heating costs and effectively the cost relating to economic activity.

The energy crisis is positive for energy companies that extract oil & gas. There are three ways of getting exposure:

- For a concentrated allocation to energy-related companies, consider an Energy ETF such as SPDR MSCI World Energy UCITS ETF [ENGW] or iShares Oil & Gas Exploration & Production UCITS ETF [SPOG]. For direct exposure to the direct commodities, consider an Energy ETC such as WisdomTree Energy ETC [AIGE]. A concentrated approach also translates to a higher level of volatility, that is similar or higher than the volatility of world equities.
- For a diversified equity approach, using factor-based exposures, energy companies are typically value- or income- factor bias, so are incorporated into those equity factor exposure.
- For a broadly diversified approach to real assets, direct energy is included in our broader Liquid Real Assets index that represents diversified real asset return patterns with bond-like volatility.

Summary

Whilst the political change is clear and implementable, the actual economic change could prove a longer challenge.

For those wanting protection from energy inflation, owning energy exposures is the natural hedge.

Henry Cobbe, Elston Consulting

Find out more about our Liquid Real Assets Index

Insights webinar: Remapping Europe's energy supply

See all our Research Insights

Further reading

https://www.bloomberg.com/news/articles/2021-11-10/how-europe-has-become-so-dependent-on-putin-for-gas-quicktake

UK Parliamentary briefing note (2003)
https://publications.parliament.uk/pa/ld200304/ldselect/ldeucom/105/105.pdf

https://www.naturalgasworld.com/russian-gas-pipelines-and-the-eu-moving-from-a-love-hate-relationship-with-adults-in-the-room-ggp-75324

https://www.renaissance-energyadvisors.com/

Find out more

For more insights and information on research, portfolios and indices, visit:

www.elstonsolutions.co.uk or NH ETF<Go>

www.elstonsolutions.co.uk

ABOUT ELSTON

We research, design and build investment solutions with and for asset owners, managers and advisers.

Our Research & CPD focuses on multi-asset strategies, index funds and ETFs.

NOTICES

With reference to the European Union Directive 2014/65/EU on markets in financial instruments ("MiFID II"): this Report does not provide a recommendation for an action, provides information freely available for public consumption and does not therefore constitute "Research" as defined by MiFID II. This is because this report contains purely factual information on one or several financial instruments or issuers and does not explicitly or implicitly recommend or suggest an investment strategy. It does not therefore constitute an investment recommendation as defined within the meaning of Article 3(1)(35) of EU Markets Abuse Regulation ("MAR"), in conjunction with Article 3(1)(34) of MAR. For further information, please refer to ESMA guidance ESMA70-145-111 Version 12.

With reference to the European Union's Market Abuse Regulation (Regulation (EU) 596/2014): we warrant that the information in this report is presented objectively, and the following commercial interests are hereby disclosed: Elston Consulting Limited creates research portfolios and administers indices that may or may not be referenced in this report. If referenced, this is clearly designated and is to raise awareness and provide purely factual information as regards these portfolios and/or indices.

An "Index" is a Regulated Benchmark. An "Index Portfolio" is not a regulated benchmark but a research portfolio of index-tracking investments with a periodic rebalancing scheme.

All company, product and service names and trademarks used in this article are for identification purposes only and are the property of their respective owners, and their usage does not imply endorsement.

This document is not an advertisement or financial promotion. It is provided for informational purposes only and is not intended to be an offer or solicitation, or the basis for any contract to purchase or sell any security or other instrument, or for Elston Consulting Limited to enter into or arrange any type of transaction as a consequence of any information contained herein.

This document is issued by Elston Consulting Limited registered in England & Wales, registration number 07125478, registered office: 1 King William Street, London EC4N 7AF.