

Reconciling EU Energy Security with Climate Policies: Rethinking European Gas Markets

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Co-funded by the
Erasmus+ Programme
of the European Union

In response to Putin's invasion of Ukraine and the global energy crisis that worsened in its wake, the EU has decided to end its dependence on Russian fossil fuels while firmly reinvigorating its climate leadership. European policymakers, alongside the private sector, are struggling with the complexity of energy systems and governance, facing difficult investment decisions that will affect our energy infrastructure for years to come.

Against this backdrop, some have raised concern that such efforts might lead the EU to deviate from its green post-pandemic recovery agenda, threatening the EU's climate leadership in the process.

On the one hand, certain short and medium-term measures proposed to increase the EU's energy security (e.g., gas-to-coal switches, higher LNG imports) risk watering down the European Green Deal (EGD). On the other, the objectives of the EGD actually go hand-in-hand with EU energy security, as replacing Russian imports should be made complementary to a general phasing out of fossil fuels over the coming decades. Thus, while the EU can and should secure its energy security while sticking to its climate goals, in the immediate circumstances of the war (and with an increasing weaponisation of energy – and food – by Putin) this is easier said than done; yet by no means impossible.

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This paper was produced in the context of the project "Revitalising the Study of EU Single Market Integration in a Turbulent Age – VISTA", supported by the Jean Monnet Network. Views expressed in the article are the authors' alone.

Finding alternatives to Russian gas is the main problem for Europe.¹ With REPowerEU, the Commission attributes to liquefied natural gas (LNG) a key role in the short-term, which could replace up to a third (50 billion cubic metres, bcm) of Russian gas by 2022. Since late 2021, the EU has been working with other gas producing countries to secure non-Russian supplies. The US has become the major LNG supplier for the EU in 2021, thereby becoming instrumental for its energy security. This was mainly driven by market forces, as high gas prices in the EU have allowed the rerouting of US cargoes from Asia to Europe. Both the EU and the US have highlighted their willingness to expand this cooperation further – aiming at an additional 15 bcm of US LNG in 2022.²

Yet, supply constraints and infrastructure bottlenecks may hinder EU diversification plans.³ To overcome some of these barriers, European countries will need to invest

in infrastructure and projects (e.g., an interconnection between Spain and France, regassification terminals and pipelines) and in stronger political and technical coordination. This will require governments to agree on transnational investments and to make individual concessions to allow the EU energy market to work properly.⁴

Additionally, the EU should work with producing countries to add gas supply rather than buying existing cargoes that would have otherwise been sold elsewhere, as the latter option would only exacerbate supply shortages putting the EU in competition with other importers, outbidding poorer countries and hence penalising them while potentially slowing their climate ambitions (e.g., coal-to-gas switches).⁵ In order to encourage non-Russian producers to increase their investments on the supply side, moreover, the EU should in principle present itself as a credible demand hub in the medium term – following a similar tone to that one used in the context of the March 2022 EU–US Joint Statement.⁶

¹ In 2021, the EU imported around 140 bcm of gas by pipeline and around 15 bcm of LNG from Russia, representing around 40 per cent of total EU gas imports.

² European Commission and USA, *Joint Statement between the European Commission and the United States on European Energy Security*, 25 March 2022, https://ec.europa.eu/commission/presscorner/detail/en/STATEMENT_22_2041.

³ Margherita Bianchi and Pier Paolo Raimondi, “Russian Energy Exports and the Conflict in Ukraine: What Options for Italy and the EU?”, in *IAI Commentaries*, No. 22|13 (March 2022), <https://www.iai.it/en/node/14859>; Alex Blackburne and Camilla Naschert, “Europe’s LNG Push Challenged as Import Terminals Stretched to the Limit”, in *S&P Global*, 21 March 2022, <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/69417543>.

⁴ Simone Tagliapietra, “REPowerEU: Will EU Countries Really Make It Work?”, in *Bruegel Blog*, 18 May 2022, <https://www.bruegel.org/?p=48659>.

⁵ Faseeh Mangi and Stephen Stapczynski, “Pakistan’s Energy Crunch Spurs ‘Barter’ Trade for Afghani Coal”, in *Bloomberg*, 28 March 2022, <https://www.bloomberg.com/news/articles/2022-03-28/pakistan-s-energy-crunch-spurs-barter-trade-for-afghani-coal>.

⁶ The March 2022 EU–US joint statement affirms that “The European Commission will also support long-term contracting mechanisms and partner with the U.S. to encourage relevant contracting to support final investment decisions on both LNG export and import infrastructure”. European Commission and USA, *Joint Statement between the European Commission and the United States on European Energy Security*, cit.

This scenario seems to clash with EU's net-zero vision and the expected trajectory of European gas demand. Importing significant quantities of non-Russian gas raises questions over future EU gas needs, the length of contracts for alternative gas import volumes and the looming risk of carbon lock-in effects. Indeed, with the uptake of cleaner options and efficiency measures, European gas demand is expected to decline post-2030. Moreover, in the context of REPowerEU, the EU has reiterated its commitment to decarbonisation, energy efficiency and savings: this plan will further reduce unabated gas demand in the long-term.⁷

Nonetheless, European gas import could increase in the medium term (up to 2030) as EU domestic production is set to decline further, potentially exacerbating the overreliance on imports. Furthermore, electricity is expected to meet 53 per cent of the EU's total energy demand by 2050 in a net-zero scenario,⁸ leaving room for (decarbonised) gases – especially in those sectors where electricity is not an option (i.e., the “hard-to-abate” sectors such as cement, steel, heavy transport) – intensifying uncertainty on future European gas demand and needs.

⁷ European Commission, *REPowerEU: A Plan to Rapidly Reduce on Russian Fossil Fuels and Fast Forward the Green Transition*, 18 May 2022, https://ec.europa.eu/commission/presscorner/detail/en/IP_22_3131.

⁸ European Commission, *A Clean Planet for All. A European Strategic Long-Term Vision for a Prosperous, Modern, Competitive and Climate Neutral Economy (COM/2018/773)*, 28 November 2018, p. 9, <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=celex:52018DC0773>.

Articulating a realistic short-term energy security strategy within the EGD boundaries is therefore not easy. But the EU should not focus exclusively on quantity of supply but also on its quality (i.e., its climate contents). Given the limited contribution of electricity in certain sectors, the EU should concentrate on abating methane emission along the gas value chain in the short term and foster decarbonisation of gas in the longer run. Making methane performance standards for gas a crucial component for future gas contracts could help. At COP26, the EU, along with the US and many partner countries, launched the Global Methane Pledge, which seeks to cut methane emissions by 70 per cent by 2030 compared to 2020.⁹

The EU also has the tools to wisely deploy green strings attached for gas investments required to address the current supply shortages and to define the pathway for decarbonisation in the longer-term. The EU Methane Strategy could play a role in stimulating changes in producing countries that seek markets for their gas. Performance standards related to methane emissions could send important signals to exporting countries and energy companies. Policies and regulations will have a larger impact than voluntary, market-driven changes.¹⁰

⁹ European Commission, *Launch by United States, the European Union, and Partners of the Global Methane Pledge to Keep 1.5C Within Reach*, 2 November 2021, https://ec.europa.eu/commission/presscorner/detail/en/statement_21_5766.

¹⁰ Ben Cahill, Nikos Tsafos and Ian Barlow, “Methane Emissions and the Gas Ecosystem. Buyers, Sellers, and Banks”, in *CSIS Reports*,

In 2020, French Engie decided to halt negotiations over an LNG supply with the US company NextDecade following alleged pressure from the French government over environmental concerns – particularly methane emissions. The scenario has now radically changed as Europe struggles to find non-Russian gas. Nonetheless, the pathway seems to be correct if the EU wants to preserve its climate ambitions. In May 2022, Engie and NextDecade signed a 15-year sale and purchase agreement for 1.75 million tonnes per annum (Mtpa) of LNG. NextDecade affirms that it “aims to reduce CO₂ emissions [...] by more than 90 percent via carbon capture and storage”.¹¹

In order to conclude this kind of contracts, the EU should also work with producing countries to encourage the measurement, reporting, verification (MRV) of methane emissions from natural gas value chains (i.e., from production point to the point of use). Such an approach could be beneficial for the EU (balancing energy security and climate policies) and for producing countries as they could secure markets for their gas.

The EU has increasingly focused on the above measures as the present energy and climate crises unfolds. In December 2021, the Commission made a first-ever EU legislative proposal on

December 2021, <https://www.csis.org/node/63442>

¹¹ NextDecade, *NextDecade and ENGIE Execute 1.75 MTPA LNG Sale and Purchase Agreement*, 2 May 2022, <https://investors.next-decade.com/news-releases/news-release-details/nextdecade-and-engie-execute-175-mtpa-lng-sale-and-purchase>.

methane emission reduction in the energy sector, which will require the MRV of methane emissions, proposing strict rules to detect and repair methane leaks and to limit venting and flaring, as well as including more transparency from importers.¹²

The EU should thus engage in a diplomatic dialogue with partners with a view to introducing more stringent measures on its imports. The recent EU External Energy Strategy rightly addressed this issue affirming that it will “ensure that additional gas supplies [...] are coupled with targeted actions to tackle methane leaks and to address venting and flaring, creating additional liquidity on global markets, while ensuring significant climate benefits”.¹³

Meanwhile, the EU should work on the decarbonisation of gas in the longer term. For instance, it could aim for the signature of long-term contracts for increased imports (also beyond 2030) with investments in additional import capacities that are also hydrogen-compatible. The EU proposed the creation of a H2 partnership with a 5–10 year horizon to establish infrastructure and a sound environment for investments – which would indeed support the predictability and stability

¹² European Commission, *Commission Proposes New EU Framework to Decarbonise Gas Markets, Promote Hydrogen and Reduce Methane Emissions*, 15 December 2021, https://ec.europa.eu/commission/presscorner/detail/en/IP_21_6682.

¹³ European Commission, *EU External Energy Engagement in a Changing World (JOIN/2022/23)*, 18 May 2022, p. 4, <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=celex:52022JC0023>.

of investments and demand in the EU as well as stable investment conditions in partner countries.

In the midst of the energy crisis, Italy signed an agreement with Algeria for additional gas imports, also expressing its intention to work on hydrogen – along with renewables – in the North African country.¹⁴ While still in their infancy, these kind of approaches go in the right direction.

The EU needs to continue on this path, encouraging methane emission cuts domestically and from imports through its regulatory framework. It should further work with other countries within the Global Methane Pledge to promote emissions cuts and share regulatory and MRVs standards for gas imports. By doing so, the EU might emerge as a leading demand pole for low-carbon and decarbonised gases and encourage the formation of a worldwide demand base for these products.

This could contribute to accelerate the transition, abating emissions and providing adequate demand for gas suppliers to increase their investments in decarbonised energy products. These actions could be key (evidently alongside a wider and quicker uptake of renewables and cooperation on cleaner options), as the EU needs to manage an orderly transition also beyond its borders – starting with the Middle East and North Africa. Such reconfiguration could partly be used

to establish partnerships conducive to decarbonise the gas value chain and switch to clean molecules in the long run.

14 June 2022

¹⁴ Italian Government, *Prime Minister Draghi's Press Statement in Algiers*, 11 April 2022, <https://www.governo.it/en/node/19627>.

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