

Gulliver Unchained? Europe's Changing Relations with Oil and Gas Producers

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The European Commission once compared the EU, an economic giant dependent on multiple energy suppliers, to "Gulliver in chains."¹ One of the great promises of the European Green Deal, aside from lowering emissions, is to liberate Europe from these figurative chains of dependency. Yet, the war in Ukraine has punctuated this storyline. Russia's weaponization of gas exports compelled Europe to hastily pivot to alternative gas and oil suppliers. This shift has effectively "fast forwarded" the impact of the Green Deal on Russia, while muddying the outlook for other energy suppliers such as Azerbaijan and Algeria. The dynamic realignment of energy alliances underscores the need for a nuanced understanding of how geopolitical dynamics will unfold in the wake of the European Green Deal.

EUROPE'S GREEN DREAM

The unveiling of the European Green Deal in December 2019 marks a historic milestone in the history of the EU. It is comparable in significance to just a select few transformative projects, such as the completion of the internal market and introduction of the euro. The Green Deal is widely acknowledged to carry profound geopolitical consequences, in particular for Europe's relations with key energy suppliers such as Russia, Norway, or Algeria. However, in the first two years of the Green Deal, analyses of its geopolitical consequences came with a hefty dose of idealism.

Prior to the Ukraine war, the mainstream assumption was that the burden of adjustment from Europe's exit from fossil fuels would fall solely on Europe's external energy

partners. The EU would set the pace of decarbonization, freeing itself from the shackles of energy dependency, while its energy suppliers, in contrast, would lose their most crucial export market. Oil and gas exporters in Europe's neighborhood were assumed to be the most adversely affected by the EU's green turn, with some potentially experiencing economic and political destabilization, posing new security risks. Russia, on the other hand, was believed to be a short-term beneficiary of Europe's net-zero pursuit. As one influential analysis from February 2021 speculated: *"in the 2030 timeframe, Europe's main energy supplier, Russia, could even benefit from the European Green Deal, as a coal-to-gas switch is necessary to quickly curb EU energy sector emissions."*²

Europe's pursuit of net zero emissions also became a substitute for energy security policy. If Europe's appetite for oil and gas was going to structurally decline, the argument went, its supplies would be almost automatically guaranteed, and market power would perennially lie with the buyer. For some observers, energy security was simply a relic of the past. Reflecting this optimistic viewpoint, a January 2021 think tank paper stated, *"Europe's long-running energy diplomacy goal of diversifying gas supplies has largely been achieved ... and falling demand mean[s] that energy security goals are already being met."*³

A BELATED GEOPOLITICAL AWAKENING

The conflict in Ukraine has shattered that idealistic viewpoint, fundamentally reshaping Europe's stance on energy security. Upon assuming office, von der Leyen aimed to lead the first geopolitical Commission. However,

it was only with Russia's invasion of Ukraine that Europe truly experienced its geopolitical awakening, particularly within the energy realm. In the course of 2022, Moscow did the unthinkable: it nearly fully closed the gas spigots to Europe. This contributed to a substantial energy price shock which, according to IRENA, marked the worst energy crisis in 80 years, surpassing even the oil shocks of the 1970s.⁴

On the whole, Europe has successfully navigated the worst effects of Russia's weaponization of gas supplies. The EU is entering the 2023-24 heating season with robust fundamentals. By November 1, 2023, gas storage in the EU had reached a record 99.5 percent, with energy companies even storing excess reserves in Ukraine.⁵ Six new LNG terminals have started operating across Europe since Russia invaded Ukraine, and many more are planned.⁶ Despite a significant drop in gas prices from their peak in August 2022, Europe's gas demand has remained subdued.⁷

Yet, there is no room for complacency or triumphalism. Some of the EU's reduced gas demand is due to forced demand destruction, not voluntary savings. Gas markets will stay tight until 2025, when a wave of LNG is expected to come online. In the meantime, there are lingering risks to Europe's security of supply, including the threat of Russia severing its remaining pipeline gas exports to Europe (notably the routes via Ukraine and Turkey) or potential further sabotage of subsea gas pipelines (after the damaging of two Baltic pipelines, Nordstream in September 2022 and the Balticconnector in October 2023).

THE DIVERSIFICATION OBSESSION

Europe's response to Russia's gas supply maneuvers, REPowerEU, rested on three pillars: diversification (chiefly via LNG), fuel-switching (mostly to renewables), and efficiency (mainly through electrification). The original plan was to wean Europe off from Russian fossil fuels by 2027. In practice, it was Moscow who decided on the pace of the energy decoupling by reducing pipeline gas supplies by more than 80% in 2022. As a result, Europe

has been forced to rely heavily on the first pillar of its strategy: diversification.

Contrary to conventional wisdom, relying solely on "diversification" is not a robust, long-term strategy for ensuring energy security. As Nikos Tsafos mused almost a decade ago: "diversification has become a shorthand for energy security, even though it is a poor barometer for it."⁸ Diversification has helped Europe to replace lost Russian gas, but only at a huge cost. Europe's gas import bill ran close to 400 billion in 2022, more than three times the level of 2021.⁹ Indirect costs and secondary effects (through inflation, government support, etc.) have been very high. While gas prices have decreased substantially since 2022, they remain above their historical averages, with TTF hovering around €50/MWh since March 2023, compared to a pre-crisis average of €20/MWh.

Diversification has also resulted in "problem shifting." In some ways, the EU has just traded one dependency for another. The EU still heavily relies on energy imports from autocratic states that are not necessarily geopolitical allies, especially in the Middle East and North Africa (see table in Annex 1). Ironically, the EU has also increased its imports of Russian LNG—even up to the extent that Russia has emerged as Europe's second biggest supplier of LNG this year behind the United States.¹⁰ By scooping up a lot of the world's LNG exports, European companies have also partly shifted their gas supply problems to third countries. Some developing countries with less deep pockets, like Pakistan and Bangladesh, have struggled to secure LNG imports.

THE FOSSIL-FUEL LOCK-IN TRAP

Evidence suggests that the war in Ukraine has accelerated the pace of the energy transition in Europe. Simultaneously, Europe's push for gas might stimulate investments that cement gas infrastructure, contradicting the Paris climate goals. Of particular concern is that certain European major companies (such as Total in France, Shell in the Netherlands, and ENI in Italy) have recently entered into long-term gas supply agreements with Qatar, extending beyond 2050. This

move is essentially a wager against the EU achieving its mid-century climate neutrality target.¹¹

Furthermore, the inherent characteristics of LNG, involving processing, cooling and shipping, suggest that its climate footprint may be higher than that of piped natural gas. Rystad argues that the average LNG imports to Europe have a CO₂ emission intensity that is more than 2.5 times higher than that from pipeline gas from Russia.¹² Reliance on LNG also introduces increased reliance on shale gas, which comes with its own environmental problems.

There have been many warnings that the dramatic push by European countries to compensate for lost Russian supplies of gas may end up creating a massive oversupply in gas infrastructure. This would either create a lock-in effect, undermining the 1.5°C goal, or result in massive stranded assets, that is, unrecoverable investments. Current expansion plans for LNG infrastructure would elevate the EU's import capacity to 136% of its existing maximum.¹³ An analysis from November 2022 projected a global oversupply of about 500 megatons of LNG by 2030, equivalent to five times the volume of gas as the EU imported from Russia in 2021.¹⁴

THE MIRAGE OF PIVOTING TO HYDROGEN

New investments in natural gas infrastructure, such as LNG terminals or natural gas pipelines, are frequently promoted as “hydrogen ready”, suggesting that they could eventually be converted to hydrogen. Nonetheless, skepticism surrounds the feasibility of these claims of “hydrogen compatibility.”¹⁵ The IEA contends that retrofitting LNG infrastructure to receive liquefied hydrogen or ammonia is “challenging.”¹⁶ Only if LNG import terminals are designed in an ammonia-ready fashion from the start, there is a possibility that they could be repurposed over time. Yet, the extent to which new investments align with this principle remains uncertain.

From the point of view of oil exporters, green hydrogen is often presented as opening a transition pathway for petrostates. After all, many countries in the MENA region have won the geological lottery twice: they boast large

fossil reserves as well as huge renewable potential. Yet, future export revenues for hydrogen are unlikely to ever match those of oil and gas.¹⁷ Moreover, efforts to repurpose natural gas import pipelines from Norway, North Africa or the Caspian region to carry hydrogen may conflict with current imports of natural gas since each of these import routes has gained in importance since Europe lost access to the majority of Russian piped gas in 2022.¹⁸

Moreover, there are doubts about how quickly the market can scale. The REPowerEU plan has set a very ambitious target of 20 Mt of green hydrogen consumption by 2030, half of which would be imported. Many experts doubt that this goal will be met. Reaching just 4 Mt would already require an 80 fold increase in green hydrogen production in six years' time.¹⁹ Moreover, there are currently far more hydrogen export projects than off-takers: less than one-third of the 16 Mt of planned hydrogen export projects has identified a potential off-taker.²⁰

CONCLUSION: LESSONS FOR ENERGY DIPLOMACY

After successfully managing the EU's energy crisis on a short-term, winter-by-winter basis, it is crucial for the EU to shift attention towards a longer, more strategic outlook. Three key lessons should inform that strategic thinking.

First, as the EU gradually emerges out of crisis management mode, it is time to start prioritizing decarbonization over diversification as a more sustainable and effective route to energy security. The 2021-2022 energy crisis was not related to the energy transition but to the Russian supply shock— which, in effect, constituted a gas embargo in slow motion. The impact of the crisis would have been much worse if it was not for Europe's ongoing green energy transition and, conversely, its impact would have been more muted if Europe had made more progress in shedding fossil fuels. Yet, much of Europe's initial response to the crisis was focused on diversifying to non-Russian suppliers of fossil fuels. At best, Europe's pivot to alternative oil and gas suppliers has provided only a short-term fix to its problems. At worst, it has locked in a huge supply

overhang that will either jeopardize the 1.5°C target or rattle producer countries and companies in the second half of this decade.

Second, recent events serve as a stark reminder that it is imperative for Europe to remain vigilant regarding oil and gas supply security *during* the energy transition. Having a 2050 net zero goal and a very strong intermediate emission reduction goal for 2030 (Fitfor55) is no substitute for a comprehensive and substantive energy security policy. The Green Deal should not foster the misconception of a permanent buyers' market. Oil and gas markets continue to be tense and volatile. For example, there is still a real risk that the Hamas-Israel war, occurring 50 years after the first oil shock, provokes a response from the Arab oil producing countries.²¹ This volatility is also becoming more visible on the LNG market, which has come to closely resemble the global oil market in the sense that remote events, such as a strike at an Australian LNG plant, can trigger sharp price reactions across international markets.

Third, it is clear that the energy transition is not going to strip energy from its geopolitical connotations. Europe will remain dependent on oil and gas imports for decades, and it will also remain entangled in international nuclear dependencies. In addition, it will become more dependent on the import of renewable fuels such as green hydrogen and ammonia as well as of critical materials such as lithium and cobalt. There is an important role for energy diplomacy to safeguard these energy needs in the future. Yet, these new dependencies are not going to lead to the same geopolitical patterns as those witnessed in the realm of oil and gas.

POLICY RECOMMENDATIONS

From this analysis, six policy recommendations can be derived:

1. ***The European Commission should model and manage the EU's external energy dependency.*** It should publish regular updates of its "EU reference scenario 2020", published in 2021, which outlines several key scenarios for reaching the 2050 climate neutrality goal.²² For each scenario, fossil fuel import needs should be modelled, not just for 2050, but also for 2030, 2040, and so on. The report should also closely track and monitor countries' and companies' plans for new fossil fuel infrastructure investments, and evaluate whether or not they align with the 2050 net zero scenarios. Periodic modelling of the EU's anticipated import needs could foster a more orderly transition by providing certainty and guidance to both domestic and international stakeholders involved in fossil fuel value chains.
2. ***The EU and its member states need to refocus away from gas diversification towards rapid and deep decarbonization as the best guarantee for energy security.*** Political attention and investment should focus on clean energy and demand reduction. We've seen progress in the wind, solar and transport sectors, but not all sectors are on track. Priority must be given to helping the battered wind energy sector, overcoming the slow progress in expanding and reinforcing grids, etc. At the same time, investments that lock-in fossil fuel assets should be critically assessed, as should claims about their "hydrogen readiness."
3. ***Europe should not support long-term gas supply contracts of more than 20 years for both climate and energy security reasons.*** New contracts should be carefully assessed against the EU's expected gas demand trajectory. In practice that means time-bound contracts with a duration of no more than 10-15 years are still possible. Yet, the EU and its member states should not support contracts with

running times of 20 years or more because those would clash with the EU's climate targets. Moreover, given the expected oversupply from 2025 onward, Europe should refrain from signing onto long term contracts given that spot prices would fall significantly and EU buyers might get a better deal on the spot market than they would under any long term contracts.

4. ***The EU Energy Platform should be expanded beyond replenishing just a fraction of EU gas storage during the summer.*** There is a role for demand aggregation of natural gas in the current context to strengthen the EU's negotiating power and the overall security of supply situation. In that regard, a larger share of natural gas could be purchased under the Platform in the coming years. At the same time, it is also important for the platform to broaden its mandate to incorporate clean energy carriers and commodities (such as hydrogen, hydrogen derivatives, and critical raw materials). In hydrogen, for instance, EU member countries such as Belgium, Germany, and the Netherlands have mainly forged bilateral partnerships with third countries with little overall coordination.
5. ***EU energy diplomacy should prepare for the gas counter-shock coming after 2025.*** The oil shocks of the 1970s ushered in a fiscal crisis in countries dependent on fossil fuel export revenues in the 1980s and, some claim, contributed to the downfall of the USSR. In a similar vein, current projections show the LNG market will tilt into a structural oversupply in the second half of the 2020s. By 2025, it's not just LNG oversupply but also the culmination of several years of accelerated clean energy deployment (through renewables, heat pumps, efficiency measures) reducing EU gas demand which is likely to cause that counter-shock. The gas demand reduction the EU has achieved is set to become structural and by 2030 under REPowerEU measures EU gas demand overall would see a reduction of ca. 50%.²³ This could bring challenges to gas and oil producers, especially those with

small fiscal buffers. EU energy envoys should start dialogues with such producers to discuss ways how the EU could assist them to increase their resilience.






6. ***The EU's energy diplomacy needs to evolve along with the EU's changing energy mix.*** As the energy transition progresses, EU energy diplomacy should move down the value chain, from securing energy fuels (oil, gas, coal) to securing energy carriers (e.g., hydrogen, green ammonia), critical raw materials (e.g., lithium, copper, cobalt) as well as downstream products (e.g., electrolyzers, batteries, heat pumps). Navigating these new dependencies will require a novel approach and a reprioritization of different geographic regions. It offers a chance to rewrite the legacies of the extractive industries and the oil diplomacy of the past, and build up new relations with fuel and technology suppliers that benefit both sides.

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Annex 1

Why diversification is not the answer to the EU's energy security problems

Non-Russian gas suppliers	Geopolitical risks	Freedom House Index
 Algeria	Close ally of Russia (major arms deals). Gas transit via Morocco halted since Nov. 2021 due to political dispute over Western Sahara.	32 (#141)
 Azerbaijan	Sep. 2023: large-scale military offensive in Nagorno-Karabakh led to massive exodus of Armenians.	9 (#180)
 Qatar	Insists on long-term contracts (min. 20 years) and destination clauses. Linked to corruption scandal in European Parliament ("Qatargate").	25 (#153)
 Israel	Due to the Hamas-Israel conflict, Chevron temporarily shut the Tamar gas field and suspended exports through the EMG pipeline. EastMed gas pipeline project (with Greece and Cyprus) has created tensions with Turkey.	76 (#74)
 Egypt	Egypt's LNG export potential is curtailed due to high domestic demand and lower import volumes from Israel (cf. infra).	18 (#164)
 Nigeria	Proposed trans-Sahara gas pipeline through Sahel raises transit risk, especially since recent coup in Niger.	43 (#129)
 Mozambique	TotalEnergies planned LNG export project on hold since Islamist attack in April 2021.	43 (#126)



Endnotes

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