



# Why the EU needs US liquefied natural gas

## About this brief

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The Atlantic Council Global Energy Center develops and promotes pragmatic and nonpartisan policy solutions designed to advance global energy security, enhance economic opportunity, and accelerate pathways to net-zero emissions.

## Introduction

Europe is facing tough choices as it confronts Russia’s unexpected reentry into European gas markets in the form of steadily increasing deliveries of liquefied natural gas (LNG). A fourteenth round of sanctions adopted in June are designed to help curb these supplies. At the same time, Europe risks gas shortages if there are no alternative LNG supplies on hand. This fraught situation puts pressure on the Joe Biden administration to resume issuing fresh permits for LNG projects intended for export to countries with which the United States does not have a free trade agreement (FTA). Currently, the United States has no FTA with any European country. And although a judge recently ordered the administration to resume permitting, it could appeal the decision, leaving the fate of additional projects in limbo.

### The EU’s gas balance: Stability or uncertainty?

For the EU, the question is always whether the glass is half full or half empty. As of April 2024, with high gas storage levels in most of the EU—Poland excepted—and with low gas prices and steady incoming flows of LNG, the EU’s energy supplies appear secure. This status has been due to factors such as demand destruction among industrial users in 2022 and 2023, and two consecutive mild winters.

However, demand destruction is no longer an option in this era of highly uncertain weather conditions. Global heating prompts massive vagaries in weather patterns, making it far from certain whether Europe—as a whole or just the EU—can take the stability of the past two years for granted. A recent white paper published by Argus noted that “unplanned supply disruptions or an unexpectedly strong rebound in demand have the potential to significantly alter the balance, particularly now that Europe has replaced Russian gas dependence with a reliance on LNG secured on the spot market.”<sup>1</sup>

### Europe’s dilemma: Energy security and Russian imports

Adding to the potential for greater destabilization in European energy markets are uncertainties in regional geopolitics and growth in global and EU gas demand. These factors could contribute to European backsliding on cutting Russian gas imports, a turn Europe cannot afford, as every dollar or euro spent on Russian gas supports its war in Ukraine.

Geopolitical uncertainties include an escalation of Russian aggression in Ukraine, Russian attacks on other European countries such as Moldova or the Baltic states, continued threats to shipping in the Red Sea, and the possibility, given Israeli-Iranian tensions, of renewed threats to energy shipping in the Gulf. In any of these scenarios, the ability for Russia to step in and revive gas exports to European countries desperate for energy supplies should not be ignored.

Another factor at play is the continued transit of Russian piped gas through Ukraine. In 2023, 15 billion cubic

meters (bcm) of Russian gas crossed Ukraine to reach EU customers and beyond. In 2024, about 12 bcm of Russian gas is expected to transit Ukraine. Ukrainian authorities have said the five-year agreement enabling this transport will not be renewed when it expires at the end of 2024. But this may not be their last word on the subject since the arrangement is financially advantageous for Ukraine as well as for those consumers who would have to switch from Russian piped supplies to LNG imports, likely at greater cost.

Also potentially impacting Russian piped gas exports to Europe is the growing market for LNG in South Asia, notably India, and throughout the Asia-Pacific region. While new LNG projects are coming online in Qatar and East Africa, US LNG still underpins current European energy security and remains the principal source for the next surge in global LNG output. US producers' ability to ship LNG to European markets without crossing dangerous waters remains a critical element in the continent's energy security. A continued pause on licensing new US LNG export capacity could lead Europe to depend again on Russia for gas supplies.

Beyond preventing an increase in Russian supplies, Europe must also replace the Russian gas that is still flowing into the EU at a current rate of around 40 bcm

to 50 bcm per year.<sup>2</sup> Doing so will require unfaltering conviction as the EU economy revives from the slumps induced by the Russian gas cutoffs and COVID-19. In 2023, the EU achieved a remarkable feat in reducing total gas consumption to 295 bcm due to demand destruction—this was a 24 percent reduction relative to the average consumption over the previous five years.<sup>3</sup> However, the International Energy Agency's World Energy Outlook, published in November 2023, anticipated that in 2030, the EU would require 305 bcm if countries continued with their stated policies (see table 1). With EU gas production continuing to fall, this would require importing 271 bcm. Under the “announced pledges” scenario, however, demand would decline to 260 bcm in 2030, which would require importing 228 bcm. It is probably not too cynical to argue that, in general, governments are more likely to deliver programs that confirm more formalized stated policies than to announced pledges that may or may not be accompanied by actions to ensure their delivery.

Meanwhile, actual industrial use of gas is recovering in the EU. By January 2024, industrial gas demand in nine countries accounting for roughly 75 percent of the EU's industrial gas demand (Belgium, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Portugal, and Spain) had risen 17 percent over the previous twelve months.<sup>4</sup>

**Table 1. Europe and EU demand projections to 2050**

EUROPE	Actual 2010	Actual 2021	Actual 2022	SP* 2030	AP† 2030
Consumption	695	627	544	468	390
Production	341	239	248	196	162
Net imports	354	388	296	272	228
<b>EU</b>					
Consumption	446	413	358	305	248
Production	148	51	47	34	20
Net imports	298	362	311	271	228

Source: Oskaras Alšauskas et al., World Energy Outlook 2023, International Energy Agency, October 2023, <https://www.iea.org/news/the-energy-world-is-set-to-change-significantly-by-2030-based-on-today-s-policy-settings-alone>.

\*SP: Stated policies scenario, summarized by the IEA as “the prevailing direction of energy system progression, based on a detailed review of the current policy landscape.”

† AP: Announced pledges scenario, summarized by the IEA as that which “assumes that all climate commitments made by governments and industries around the world as of the end of August 2023 . . . will be met in full and on time.”

**Table 2. US and Russian LNG supplies to the EU by quarter (2023-24) and fiscal year (2021-2023)**

In million cubic meters

	1Q 2023	2Q 2023	3Q 2023	4Q 2023	1Q 2024
Russia LNG	5,036	4,601	3,879	4172	5839
US LNG	14,101	16,794	14,462	17,030	15,638
	FY 2021	FY 2022	FY 2023		
Russia LNG	13,298	18,552	17,689		
US LNG	20,957	54,831	62,388		

Source: George Zachmann et al., "European Natural Gas Imports," figure 5, Bruegel, April 9, 2024, <https://www.bruegel.org/dataset/european-natural-gas-imports>.

### The rise of Russian LNG—and the EU response

Even though Russia has suspended the bulk of its pipeline deliveries to Europe, Russian LNG supplies to Europe are growing. Russia delivered 13.30 bcm of LNG to the EU in 2021, 18.56 bcm in 2022, and 17.69 bcm in 2023, according to a study by Bruegel, a Brussels think tank (see table 2). In the first quarter of 2024, Russian LNG exports to Europe reached 7.34 bcm.

There are leading questions concerning both the pricing of gas and Russia's methods to gain market access. Much of the Russian LNG that reaches Europe is sold under long-term, take-or-pay contracts. The major companies involved, such as Shell and TotalEnergies, note that they are obligated to pay for contracted LNG deliveries even if they don't receive them. Also, a Reuters study found that Russia has been selling some of its LNG in Europe at below-market prices through independent traders.<sup>5</sup> Cargoes of Russian LNG were sold on the Spanish market in late 2023 at a discount of one euro per megawatt hour, equivalent to a 2.25 percent price cut. In early 2024, this discount was down to around 30 cents to 50 cents per megawatt hour.<sup>6</sup>

The EU's response has been cautious. The European Commission aims to curb Russian LNG with its fourteenth round of sanctions against Russia. They do not prohibit imports of LNG for EU use; rather, they are intended to

block reexport from EU ports. This blocking would hurt Moscow's finances since much of its LNG sales to Pacific markets transit through ports in Belgium, France, and Spain.

The European Parliament would like the Commission to take a more assertive approach that better reflects the balance between EU vulnerability and Russia's weakness. Russian LNG deliveries to the EU accounted for around 5 percent of all EU gas imports in 2023, while they accounted for almost half of Russia's LNG exports that year. Some EU member states—notably Hungary and Slovakia—would almost certainly move to veto any outright ban on Russian LNG imports.

### Replacing Russian gas: What are Europe's options?

To resolve Europe's dilemma, it must have a clear alternative for immediate and long-term gas supplies from producers capable of outcompeting Russian gas. Surveying the possibilities points to a single source as the most promising reliable gas provider: The United States. Other options come with near-term supply limitations.

- **Europe:** Producers in Europe are limited in how much additional gas they can provide. The most important source is Norway, which has already helped bolster continental energy security considerably. It boosted production from 114.3 bcm in 2021 to 122.8 bcm in

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2022. In 2023, production fell to around 117.3 bcm. Current Norwegian policy aims to maintain production at roughly this level for the next four or five years until new production can kick in. This suggests that Europe should not expect to receive additional gas supplies from Norway in the near term as European demand for gas recovers from the near-termination of Russian pipeline supply.

- **The Eastern Mediterranean:** This region, with considerable newly discovered fields, appears to provide an obvious solution, at least in the medium to long term. But Israel and Egypt are locked in a symbiotic relationship that excludes the development of significant new exports from the region. Indeed, Egypt is increasing its LNG *imports*—for domestic use.
- **North Africa:** Nor does North Africa offer much solace. Algerian supplies to Europe have been declining, not least due to rising domestic demand, and investments in boosting capacity will take years to yield concrete results—if at all. In Libya, the political situation prevents significant investment, so that maintenance, rather than expansion, becomes the aim of the production companies.
- **The Caspian region:** Increased pipeline supplies to the EU could come from farther afield in the Caspian region, which has significant resources, but it is highly uncertain that these supplies will be forthcoming in the volumes anticipated. Azerbaijan has already increased gas exports to Europe, but developing the two main potential sources of additional gas is a highly complex undertaking, requiring time and significant investments.

In theory, Turkmenistan could send gas at least as far as Turkey, freeing up Turkey-bound LNG for other European destinations. However, plans for Turkmen gas exports westward are far from firm.

- **Gulf states:** From the Gulf region, Qatar would have the greatest potential to export LNG to Europe, but much of Qatar’s LNG expansion drive is focused on South Asia and Asia-Pacific markets, leaving the United States as the only major producer that can replace the lion’s share of Russian gas in the next two to three years.

### ■ Europe’s need for US LNG

A surge in US supplies may well be necessary in 2025 should Russia’s gas transit agreement with Ukraine end. As long as it is clear that increased volumes of US LNG can make up for the loss of what will probably prove to be deliveries of around 12 bcm through Ukraine in 2024, the abandonment of this transit system should be manageable.

The United States supplied 153.8 bcm of LNG in the thirteen quarters from January 2021 to March 2024 (see table 2). This was a tribute to the resilience of the US LNG industry and to the swiftness with which European countries, such as Turkey and the United Kingdom, forged new supply chains.

This river of US LNG supplies has contributed significantly to European energy security and helped bring gas prices down after the full-scale Russian invasion of Ukraine and a subsequent Russian gas cutoff led to a surge in gas prices. The Dutch Title Transfer Facility (TTF), Europe’s principal gas price index, recorded an all-time high in August 2022 of €345 per megawatt

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hour (MWh), from between €60 and €90 in the month prior to the invasion on February 24, 2022. As of June 24, 2024, the Dutch TTF price was €34.025.

However, as demand in Europe—and Asian markets—grow, these customers will feel the pinch if pending approvals of US LNG export projects do not move forward. When the United States introduced a “temporary pause,” citing a need for the US Department of Energy to “update the underlying analyses for authorizations,” US export capacity was around 115 bcm with

around 88 bcm per annum (bcma) of additional capacity under construction.<sup>7</sup> However, the annual report of the International Group of Liquefied Natural Gas Importers (GIIGNL) has listed no less than seven projects due to come on line between 2027 and 2032, with a total capacity of 122 bcma, that it considers to be “the main projects without DOE authorizations impacted by the decision.”<sup>8</sup> It adds that this list is not exhaustive and at least one analyst has told the authors that US capacity impacted by the pause could total no less than 203 bcma.

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### Conclusion

In 2024, the gas market in Europe may seem calm, but the underlying threats are just as great. The continuing war in Ukraine, the Gaza conflict, and deep tensions throughout the Middle East mean the energy security environment is becoming increasingly volatile.

Europe will need gas imports from non-Russian sources for many years to come, well beyond replacing what should be the last tranche of Russian gas allowed to transit Ukraine. President Biden’s pause in approving new export-oriented LNG projects adds to European concerns. If the pause does not end quickly, as a judge recently ordered, then European gas consumers will be forced to look elsewhere as their economic recovery continues. A paucity of alternative suppliers keeps the door open for Russian LNG to meet Europe’s energy needs despite its noxious political connotations. Likewise, the pressure on Ukraine and the EU will grow to extend current transit arrangements for Russian pipeline deliveries to Europe.

The determination of US LNG producers to continue supplying the European market is not in question. Still, the pause on new permits means their ability to continue to supply the required volumes is in doubt, particularly as demand for LNG increases in South Asia and the Asia-Pacific. As Helen Thompson, a political economist at the University of Cambridge (UK), said in the *Financial Times* in April, “Europe’s present gas security at lower consumption relies on the American victory over Russia in the competition for the European gas market.”<sup>9</sup>

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### Endnotes

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