Out of Gas: The Case Against LNG Exports to Europe

By “Coach Vance” Trefethen

***Resolved: The United States Federal Government should substantially reform its policy towards one or more countries in Europe***

This plan reverses a Biden Administration policy announced in March, 2022, regarding export of Liquefied Natural Gas (LNG) to Europe. The Russia/Ukraine war has disrupted many things in Europe, and in particular it calls into question western Europe’s heavy reliance on imports of fossil fuels (oil and natural gas) from Russia. Europe will either want to boycott such imports (to punish Russia) or Russia will block such exports (to punish Europe for opposing the war). Either way, Europe needs alternatives to Russian natural gas, because it’s essential to their economy. Pres. Biden and the European Union signed an agreement to have the US increase its exports of LNG to Europe to replace imports from Russia. Biden expects to do this by streamlining regulations to speed up LNG export licenses, among other things. The federal government, by itself, does not control who buys or sells natural gas in a free market, but it can influence the direction by the regulatory process. This case argues that increasing exports of LNG is both unnecessary (Europe can substitute with renewables and conservation) and unwise (LNG = pollution and exporting it out of the US increases the domestic price for American consumers).

OBSERVATION 1. DEFINITIONS 3

Significant 3

Policy 3

OBSERVATION 2. INHERENCY, or the conditions of the Status Quo. Some key FACTs 3

FACT 1. European natural gas crisis 3

War in Ukraine spikes prices and puts supplies of Russian gas at risk 3

FACT 2. We told you so 3

Pres. Trump warned against reliance on Russian natural gas several years ago 3

FACT 3. America to the rescue 4

Pres. Biden established a policy of increasing exports of Liquefied Natural Gas to Europe 4

OBSERVATION 3. The Plan, implemented by Congress and the President through any necessary constitutional means 4

OBSERVATION 4. ADVANTAGES 4

ADVANTAGE 1. Better for European consumers 4

Alternative sources and conservation will solve for dependence on Russia, and won’t burden consumers with high-cost imports 4

ADVANTAGE 2. Better for the US economy 5

Reducing LNG exports protects consumers against higher prices, saves jobs and promotes economic growth 5

ADVANTAGE 3. Reduced pollution 5

A. The Link: More pollution. The LNG export policy risks significantly higher levels of pollution long-term 5

B. Impact: Social costs. Exported LNG pollution creates billions of dollars in social costs 5

ADVANTAGE 4. Better solutions 5

US exports won’t solve Europe’s gas crisis, and they distract Europe from the real solution: Conservation 5

2A Evidence: Cancel LNG Europe Export Policy 6

DEFINITIONS & BACKGROUND 6

History & background of European natural gas crisis 6

INHERENCY 6

US energy industry is ready and willing to fulfill the Biden LNG export to Europe policy 6

US energy companies are going to ramp up LNG exports based on the Biden plan 6

A/T “Biden plan isn’t doing anything” – It is moving more LNG to Europe 7

Biden plan will increase LNG exports to Europe by 15 billion cubic meters 7

European Union imported 155 billion cubic meters of natural gas from Russia in 2021 (40% of its total consumption) 7

Details of the Biden LNG Europe export policy – the ones that pertain to US export policies 7

A/T “Won’t happen anyway because Europe lacks import terminals” – They’ll have more soon 8

A/T “Won’t happen short term – takes too long to ramp up” – But it will happen long term 8

HARMS / SIGNIFICANCE 8

Significance: The Biden US / EU natural gas agreement is “stunning” and “gigantic” 8

Germany’s natural gas shortage is its own fault: They canceled nuclear, chose to depend on Russia, and banned fracking 8

Natural gas isn’t “clean” nor low in emissions. Investment in more LNG will block transition to clean fuels 9

Increased US LNG exports = more pollution 9

Increased LNG exports to Europe = more pollution 9

Lots of ecosystem and human health risks and impacts to natural gas production and processing 10

LNG exports have high social costs 10

Government policy promoting LNG exports moves public investment away from transition to clean energy 10

Committing to expansion of LNG locks in fossil fuel dependence and blocks transition to clean energy 11

US LNG exports to Europe increase pollution by distracting us from clean energy solutions 11

Increased LNG export is moral and economic madness: It wrecks efforts to limit climate warming 11

Blocking increased LNG exports is good because they raise prices for natural gas inside the U.S. 11

LNG exports are the main driver of higher natural gas prices in the United States 12

SOLVENCY 12

Moving toward clean energy and conservation would reduce demand and avoid the need for increasing LNG capacity 12

Europe can solve without Biden: It will take years to expand US LNG export facilities. By then Europe will solve on their own 12

EU has clean energy alternatives to natural gas and plenty of money to fund them 13

“NOT” increasing LNG use is key to long-term stability 13

DISADVANTAGE RESPONSES 13

A/T “Germany funds Russia by buying their gas” – Solution is conservation, not increasing supply 13

A/T “Funding Russia without US LNG” – US LNG won’t break dependence on Russia. Key to that is reducing demand 13

A/T “Alternative to Russian gas is coal” – That might not be worse than US LNG 14

A/T “Nat. Gas shortages in Europe” – Conservation and clean energy can replace without new imports of LNG 14

A/T “Gas shortages in Europe” – US LNG won’t be available for years, and then it won’t be needed (and would be harmful to use) 14

The EU “Fit for 55” plan (already underway) will reduce demand for gas by 32-37% by 2030 15

Out of Gas: The Case Against LNG Exports to Europe

That’s why my partner and I are affirming that The United States Federal Government should substantially reform its policy towards one or more countries in Europe

OBSERVATION 1. DEFINITIONS

Significant

Merriam Webster Online Dictionary copyright 2022. <https://www.merriam-webster.com/dictionary/significant> (accessed 10 May 2022)

2a**:**having or likely to have [influence](https://www.merriam-webster.com/dictionary/influence#h1) or effect **:**[IMPORTANT](https://www.merriam-webster.com/dictionary/important)

Policy

Merriam Webster Online Dictionary copyright 2022. <https://www.merriam-webster.com/dictionary/policy> (accessed 10 May 2022)

a high-level overall plan embracing the general goals and acceptable procedures especially of a governmental body

OBSERVATION 2. INHERENCY, or the conditions of the Status Quo. Some key FACTs

FACT 1. European natural gas crisis

War in Ukraine spikes prices and puts supplies of Russian gas at risk

Nik Martin and Insa Wrede 2022 (journalists with Deutsche Welle, a German news agency) “Can Germany survive without Russian gas?” 29 March 2022 <https://www.dw.com/en/can-germany-survive-without-russian-gas/a-61294623> (accessed 26 May 2022)

A sudden disruption to the energy supply could also come from Russia, which last week announced that it would only accept [future payment for fossil fuels in rubles](https://www.dw.com/en/putins-gas-for-rubles-plan-set-to-worsen-eu-energy-crunch/a-61250164). However, European countries have signed contracts with Moscow to pay in euros and have rejected demands for a currency switch. Though Russia has so far met its contractual obligations, wholesale gas prices have risen again recently in anticipation that the Kremlin might be the one who switches off the taps.

FACT 2. We told you so

Pres. Trump warned against reliance on Russian natural gas several years ago

[MATTHEW KARNITSCHNIG](https://www.politico.eu/author/matthew-karnitschnig/) 2020. (journalist) “Germany blames Trump in pursuit of Nord Stream 2 pipeline” POLITICO <https://www.politico.eu/article/germany-plays-trump-card-in-pursuit-of-russian-nord-stream-2-pipeline-dream/> (accessed 26 May 2022)

Though Trump’s antics, strange relationship with his [German heritage](https://www.cnn.com/2017/11/28/politics/trump-family-heritage/index.html) and generally outrageous behavior might make it tempting to dismiss anything he says or does, he’s hardly alone in opposing Germany’s pipeline deal with Russia, which would allow Moscow to circumvent Ukraine and other countries in Eastern Europe and deliver gas directly to Germany under the Baltic. Critics warn the deal, the second such pipeline linking Russia and Germany, would make Europe too reliant on Russian gas supplies and bolster Moscow’s leverage in its dealings with the region. Countries from the Baltics to Poland to Slovakia have been urging Berlin to abandon the project for years.

FACT 3. America to the rescue

Pres. Biden established a policy of increasing exports of Liquefied Natural Gas to Europe

Jonathan Mingle 2022 (journalist) 21 Apr 2022 “How U.S. Gas Exports to Europe Could Lock in Future Emissions” published by YALE SCHOOL OF THE ENVIRONMENT <https://e360.yale.edu/features/how-u.s.-gas-exports-to-europe-could-lock-in-future-emissions> (accessed 26 May 2022)

On March 25, a month after Russia launched its invasion, President Biden met with European Commission President Ursula von der Leyen in Brussels and jointly [announced](https://www.whitehouse.gov/briefing-room/statements-releases/2022/03/25/joint-statement-between-the-united-states-and-the-european-commission-on-european-energy-security/) a new initiative to help Europe reduce its reliance on Russian fossil fuels. Their plan calls for boosting exports of liquefied natural gas (LNG) from the U.S. to the European Union by 15 billion cubic meters this year and as much as 50 billion cubic meters — a third of what Europe currently buys from Russia — by 2030.

**END QUOTE. Because we don’t view it as America’s responsibility to fix a mess we warned Europe not to get into, we offer…**

OBSERVATION 3. The Plan, implemented by Congress and the President through any necessary constitutional means

1. The U.S. LNG export initiative for the European Union is canceled.

2. Enforcement and funding through existing agencies, existing budgets and general federal revenues.

3. Plan takes effect the day after an Affirmative ballot.

4. All Affirmative speeches may clarify.

OBSERVATION 4. ADVANTAGES

ADVANTAGE 1. Better for European consumers

Alternative sources and conservation will solve for dependence on Russia, and won’t burden consumers with high-cost imports

Sarah Brown, Bram Claeys, Domien Vangenechten and Lovisolo 2022 (Brown – Senior energy and climate analyst at Ember, a global energy think tank . Claeys – Senior Advisor at Regulatory Assistance Project, an energy research group. Vangenechten – Policy Advisor on industrial transition at E3G, a global energy research think tank. Lovisolo –policy advisor on Renewable Energy Systems at Bellona Foundation, independent non-profit organisation) 23 Mar 2022 “EU can stop Russian gas imports by 2025” <https://www.e3g.org/publications/eu-can-stop-russian-gas-imports-by-2025/> (accessed 26 May 2022) (brackets added)

Our analysis also identifies that security of supply and reduction of Russian gas dependence do not require the construction of new EU gas import infrastructure such as LNG terminals. The 51 bcm [billion cubic meters] of alternatively sourced gas imports can be channelled via existing, underutilised assets. [**END QUOTE**] It is also less than the 60 bcm stipulated in REPowerEU. In this context, it is important that actions to bring in alternative fossil gas supply anticipate the temporary nature of this step, as ramping up clean measures will fast erode gas demand. [**THEY GO ON TO CONCLUDE QUOTE:]** Between the ”Fit for 55“ package, expected to deliver 100 bcm in gas savings by 2030, and our analysis demonstrating that a 69 bcm reduction can already be achieved by 2025, the “substitution effect” away from Russian gas to other imports sources will likely evaporate fast after 2025. This means there is no justification for the EU to lock in high price fossil gas contracts beyond this time horizon and new infrastructure would be unlikely to come online before then. If fossil fuel commitments extend beyond this, they risk burdening consumers with high-cost imports and simply replacing one fossil fuel dependency with another.

ADVANTAGE 2. Better for the US economy

Reducing LNG exports protects consumers against higher prices, saves jobs and promotes economic growth

Justin Gerdes 2021 (energy journalist) 12 Oct 2021 “Opinion: LNG exports are backfiring on the US oil and gas industry” <https://www.energymonitor.ai/analysis/opinion-lng-exports-are-backfiring-on-the-us-oil-and-gas-industry> (accessed 26 May 2022)

As more natural gas heads overseas, prices in the US are trending higher. By the fall of 2021, “there was strong evidence that exports are the primary demand driver for U.S. gas and thus the increase in prices,” [writes](https://www.csis.org/analysis/gas-line-q3-2021) Nikos Tsafos, the James R Schlesinger Chair for Energy and Geopolitics at the Center for Strategic and International Studies in Washington, D.C. Large energy users are so concerned about rising natural gas prices, their trade group sent a [letter](https://www.ieca-us.com/wp-content/uploads/09.17.21_LNG-Letter-to-Secretary-Granholm-2.pdf) last month urging US Energy Secretary Jennifer Granholm “to take immediate action” to limit LNG exports. “Excessive LNG export volumes are inflationary and threaten the competitiveness of trillions of dollars of manufacturing capital assets, millions of jobs, and economic growth by driving up the cost of natural gas, natural gas liquids feedstock, and electricity,” wrote Paul N Cicio, CEO of Industrial Energy Consumers of America.

ADVANTAGE 3. Reduced pollution

A. The Link: More pollution. The LNG export policy risks significantly higher levels of pollution long-term

Jonathan Mingle 2022 (journalist) 21 Apr 2022 “How U.S. Gas Exports to Europe Could Lock in Future Emissions” published by YALE SCHOOL OF THE ENVIRONMENT <https://e360.yale.edu/features/how-u.s.-gas-exports-to-europe-could-lock-in-future-emissions> (accessed 26 May 2022)

Biden administration officials have characterized the LNG surge as a stopgap measure to help Europe bridge these next few years until it can build more renewable energy and make its buildings and industries more energy efficient. But energy analysts say the announcement could signal a pivot toward greater support for expanding gas infrastructure, potentially locking in significant new sources of greenhouse gas emissions.

B. Impact: Social costs. Exported LNG pollution creates billions of dollars in social costs

Christina Swanson and Amanda Levin 2020 (both with Natural Resources Defense Council. Swanson - Science Center. Levin - Climate and Clean Energy Program) Dec 2020 “SAILING TO NOWHERE: LIQUEFIED NATURAL GAS IS NOT AN EFFECTIVE CLIMATE STRATEGY” <https://www.nrdc.org/sites/default/files/sailing-nowhere-liquefied-natural-gas-report.pdf> (accessed 26 May 2022)

The estimated social cost for the climate-driven human harm and environmental damage—a cost borne by the public—from U.S. LNG exports was $8.1 billion in 2019. By 2030, when U.S. LNG exports are projected to be three times higher, the total social cost will be $30.5 billion per year.

ADVANTAGE 4. Better solutions

US exports won’t solve Europe’s gas crisis, and they distract Europe from the real solution: Conservation

Jonathan Mingle 2022 (journalist) 21 Apr 2022 “How U.S. Gas Exports to Europe Could Lock in Future Emissions” published by YALE SCHOOL OF THE ENVIRONMENT <https://e360.yale.edu/features/how-u.s.-gas-exports-to-europe-could-lock-in-future-emissions> (accessed 26 May 2022)

Some energy experts caution that expanding LNG infrastructure would be a distraction from more durable solutions to promote energy security in both the U.S. and the EU. Rather than boosting supply by building LNG projects that could become stranded assets, they say, countries should focus on energy efficiency and other ways to reduce demand for gas. Even with new terminals, LNG from the U.S. won’t be able to replace the massive volume of gas that Europe imports from Russia, either today or in 10 years, said Maria Pastukhova, a Berlin-based senior policy advisor with E3G. “That’s why the focus on demand is so crucial.”

2A Evidence: Cancel LNG Europe Export Policy

DEFINITIONS & BACKGROUND

History & background of European natural gas crisis

Sarah Brown, Bram Claeys, Domien Vangenechten and Lovisolo 2022 (Brown – Senior energy and climate analyst at Ember, a global energy think tank . Claeys – Senior Advisor at Regulatory Assistance Project, an energy research group. Vangenechten – Policy Advisor on industrial transition at E3G, a global energy research think tank. Lovisolo –policy advisor on Renewable Energy Systems at Bellona Foundation, independent non-profit organisation) 23 Mar 2022 “EU can stop Russian gas imports by 2025” https://9tj4025ol53byww26jdkao0x-wpengine.netdna-ssl.com/wp-content/uploads/Briefing\_EU-can-stop-Russian-gas-imports-by-2025.pdf (accessed 26 May 2022)

The current crisis has multiple origins. Already in summer 2021, gas prices in Europe were surging due to low reserves after the winter of 2020-2021 and fast economic recovery after the COVID downturn in 2020. The skyrocketing gas prices also drove up electricity prices. To a lesser extent, increased CO2 prices and unusually low renewables output also played a role.11 This comes amid a tight LNG market, in which 70% of LNG supply is tied up by long-term contracts.12 Many in Europe have for years looked at the degree of dependence on gas from Russia as an over-reliance, strictly from the point of view that single point risks on any energy system are best avoided if possible. The Russian invasion of Ukraine and the role of fossil fuel exports in funding the Russian political elite and its aggressions, have converted this into a strong imperative to cut dependence on Russian gas.

INHERENCY

US energy industry is ready and willing to fulfill the Biden LNG export to Europe policy

Jonathan Mingle 2022 (journalist) 21 Apr 2022 “How U.S. Gas Exports to Europe Could Lock in Future Emissions” published by YALE SCHOOL OF THE ENVIRONMENT <https://e360.yale.edu/features/how-u.s.-gas-exports-to-europe-could-lock-in-future-emissions> (accessed 26 May 2022)

Industry trade associations such as the American Petroleum Institute and the Center for Liquefied Natural Gas were quick to celebrate the Biden-EU deal and to use it to amplify their longstanding push for more natural gas infrastructure and fewer regulatory hurdles. “We stand ready to work with the administration to follow this announcement with meaningful policy actions to support global energy security,” Mike Sommers, CEO of the American Petroleum Institute, said in a statement, “including further addressing the backlog of LNG permits, reforming the permitting process, and advancing more natural gas pipeline infrastructure.”

US energy companies are going to ramp up LNG exports based on the Biden plan

Jonathan Mingle 2022 (journalist) 27 Apr 2022 “The Folly of Ramping Up American Gas Exports to Europe” <https://www.motherjones.com/politics/2022/04/biden-liquified-natural-gas-lng-exports-europe-russia-ukraine/> (accessed 27 May 2022)

Industry trade associations such as the American Petroleum Institute and the Center for Liquefied Natural Gas were quick to celebrate the Biden-EU deal and to use it to amplify their longstanding push for more natural gas infrastructure and fewer regulatory hurdles. “We stand ready to work with the administration to follow this announcement with meaningful policy actions to support global energy security,” Mike Sommers, CEO of the American Petroleum Institute, said in a statement, “including further addressing the backlog of LNG permits, reforming the permitting process, and advancing more natural gas pipeline infrastructure.”

A/T “Biden plan isn’t doing anything” – It is moving more LNG to Europe

Nicholas Kumleben 2022 ( senior analyst at GreenMantle, a macroeconomic and geopolitical advisory firm, where he leads global energy research) FOREIGN POLICY 3 Feb 2022 “Biden’s LNG Plans Can’t Save Europe This Winter” https://foreignpolicy.com/2022/02/03/energy-crisis-lng-natural-gas-europe-russia-gazprom/?gclid=CjwKCAjw7cGUBhA9EiwArBAvor-7ewyGLZNkv7kFmcRXGjn2NqINWUs757AvBn7woE28R7S-7QdFUxoCnFgQAvD\_BwE



Biden plan will increase LNG exports to Europe by 15 billion cubic meters

Sara Schonhardt and Scott Waldman 2022 (journalists) 25 Mar 2022 SCIENTIFIC AMERICAN “The U.S. Will Increase Natural Gas Exports to Europe to Replace Russian Fuel” <https://www.scientificamerican.com/article/the-u-s-will-increase-natural-gas-exports-to-europe-to-replace-russian-fuel/> (accessed 27 May 2022)

The White House announced this morning that the U.S. will rapidly increase exports of liquefied natural gas to Europe as Germany and other E.U. nations try to diminish their dependence on Russian fossil fuels. The move will ramp up LNG shipments carried by seagoing tankers by 15 billion cubic meters this year, according to a [fact sheet](https://www.whitehouse.gov/briefing-room/statements-releases/2022/03/25/fact-sheet-united-states-and-european-commission-announce-task-force-to-reduce-europes-dependence-on-russian-fossil-fuels/) released by the White House. As a comparison, the United States sent 22 bcm of LNG to Europe last year, the highest ever traded between the two continents.

European Union imported 155 billion cubic meters of natural gas from Russia in 2021 (40% of its total consumption)

International Energy Agency 2022 (international organization with representatives form the governments of 31 member countries and 8 association countries) 3 Mar 2022 “How Europe can cut natural gas imports from Russia significantly within a year” <https://www.iea.org/news/how-europe-can-cut-natural-gas-imports-from-russia-significantly-within-a-year> (accessed 26 May 2022)

In 2021, the European Union imported 155 billion cubic metres of natural gas from Russia, accounting for around 45% of EU gas imports and close to 40% of its total gas consumption. Progress towards Europe’s net zero ambitions will bring down its use and imports of gas over time, but today’s crisis raises the specific question about imports from Russia and what more can be done in the immediate future to bring them down.

Details of the Biden LNG Europe export policy – the ones that pertain to US export policies

Joint Statement between the United States and the European Commission on European Energy Security2022. (published by the White House, office of the US President) 25 March 2022 <https://www.whitehouse.gov/briefing-room/statements-releases/2022/03/25/joint-statement-between-the-united-states-and-the-european-commission-on-european-energy-security/> (accessed 26 May 2022) (brackets added)

The United States will strive to ensure, including working with international partners, additional liquified natural gas (LNG) volumes for the EU market of at least 15 bcm [billion cubic meters] in 2022 with expected increases going forward.
**END QUOTE. THEY GO ON LATER IN THE CONTEXT QUOTE:**
The United States commits to maintaining an enabling regulatory environment with procedures to review and expeditiously act upon applications to permit any additional export LNG capacities that would be needed to meet this emergency energy security objective and support the RePowerEU goals, affirming the joint resolve to terminate EU dependence on Russian fossil fuels by 2027.

A/T “Won’t happen anyway because Europe lacks import terminals” – They’ll have more soon

NEW YORK TIMES 2022. (journalist Clifford Kraus) 25 Mar 2022 “Why the U.S. Can’t Quickly Wean Europe From Russian Gas” <https://www.nytimes.com/2022/03/25/business/energy-environment/biden-europe-lng-natural-gas.html> (accessed 27 May 2022)

Some European countries, including Germany, have until recently been uninterested in building L.N.G. terminals because it was far cheaper to import gas by pipeline from Russia. Germany is [now reviving plans to build its first L.N.G. import terminal](https://www.nytimes.com/2022/02/14/world/europe/germany-energy-russia-gas-pipeline.html) on its northern coast.

A/T “Won’t happen short term – takes too long to ramp up” – But it will happen long term

NEW YORK TIMES 2022. (journalist Clifford Kraus) 25 Mar 2022 “Why the U.S. Can’t Quickly Wean Europe From Russian Gas” <https://www.nytimes.com/2022/03/25/business/energy-environment/biden-europe-lng-natural-gas.html> (accessed 27 May 2022)

“In the near term there are really no good options, other than begging an Asian buyer or two to give up their L.N.G. tanker for Europe,” said Robert McNally, who was an energy adviser to former President George W. Bush. But he added that once sufficient gas terminals were built, the United States could become the “arsenal for energy” that helps Europe break its dependence on Russia.

HARMS / SIGNIFICANCE

Significance: The Biden US / EU natural gas agreement is “stunning” and “gigantic”

Shawn Tully 2022 (journalist) 26 Mar 2022 “A new EU partnership could triple U.S. exports of liquified natural gas” FORTUNE <https://fortune.com/2022/03/26/eu-us-partnership-liquified-natural-gas-export-lng/> (accessed 27 May 2022)

On March 25, President Biden and European Commission head Ursula von der Leyen took the stage in Brussels to announce a stunning trans-Atlantic pact to accomplish what many doubted the world would ever see: A [firm commitment to dump Russian natural gas](https://fortune.com/2022/03/25/us-promised-send-lng-europe-more-natural-gas-wean-russia-fuel/). The new plan follows an EU proposal titled REPowerEU, unveiled two weeks earlier, that for the first time advocated a total break with the bloc's largest foreign energy supplier by far in protest for Putin's assault on Ukraine. But the new U.S.-EU agreement is a watershed because it specifies where the gigantic volumes needed to replace Russian shipments would come from. The accord effectively marshals the U.S. to supplant Russia as the biggest single exporter of the gas that furnishes 20% of the member nations' electricity, and almost 40% of home-heating fuel.

Germany’s natural gas shortage is its own fault: They canceled nuclear, chose to depend on Russia, and banned fracking

Vijaya Ramachandran 2022 (director for energy and development at the Breakthrough Institute) “Germany Should Look to Africa for Gas, Not Russia” 11 Mar 2022 FOREIGN POLICY <https://foreignpolicy.com/2022/03/11/germany-putin-russia-gas-energy-africa-development/?gclid=CjwKCAjwyryUBhBSEiwAGN5OCLaO-Hl6mX4Jq6Z5LNFuYkNMB_4AEQmEUWLR-h-FW9Sz74rngjijlxoChb4QAvD_BwE> (accessed 26 May 2022)

Germany is the linchpin. For the past several decades, successive governments in Berlin have pursued a policy of maximizing the country’s dependence on Russian oil and gas, not least by turning off all but two remaining nuclear reactors. Gas will likely remain a critical source of Germany’s energy for years—perhaps decades—to come. It accounts for 25 percent of the country’s total primary energy consumption, and imports make up 97 percent of supply. Russia is the main source, followed by the Netherlands and Norway. (Germany has substantial supplies of natural gas of its own that could be accessed by fracking, but Berlin has banned the technology.)

Natural gas isn’t “clean” nor low in emissions. Investment in more LNG will block transition to clean fuels

Christina Swanson and Amanda Levin 2020 (both with Natural Resources Defense Council. Swanson - Science Center. Levin - Climate and Clean Energy Program) Dec 2020 “SAILING TO NOWHERE: LIQUEFIED NATURAL GAS IS NOT AN EFFECTIVE CLIMATE STRATEGY” <https://www.nrdc.org/sites/default/files/sailing-nowhere-liquefied-natural-gas-report.pdf> (accessed 26 May 2022)

Overseas export of U.S.-produced liquefied natural gas (LNG), gas kept in a liquid form for ease of transport, is rapidly expanding. Historically, gas has been considered a “bridge fuel”—cleaner and with lower carbon dioxide emissions than coal or oil—and a potential tool to help address climate change. However, LNG is neither clean nor particularly low in emissions. In addition, the massive investments in new infrastructure to support this industry, including pipelines, liquefaction facilities, export terminals, and tankers, lock in fossil fuel dependence, making the transition to actual low-carbon and no-carbon energy even more difficult.

Increased US LNG exports = more pollution

Nicola Groom and Valedrie Volcovici 2022 (journalists with Reuters) 14 Apr 2022 “Analysis: Biden plan to aid Europe with LNG poses risk to US climate goals” <https://www.reuters.com/business/energy/biden-plan-aid-europe-with-lng-poses-risk-us-climate-goals-2022-04-14/> (accessed 27 May 2022)

While gas burns cleaner than oil or coal, it remains a climate menace because of its tendency to escape wells, pipelines, and other infrastructure as methane. Methane is many times more potent than carbon dioxide as a greenhouse gas. Exporting LNG yields more methane than consuming gas domestically because it requires a longer and more complex supply chain with more opportunities for leakage. It also leads to more carbon emissions from liquefaction, shipping, and regasification. "Once you start to travel the world in tankers, that's just a new operation. That's just more emissions period," said Debbie Gordon, a senior principal at the Rocky Mountain Institute’s climate program. “It's distance and lots of different handoffs.”

Increased LNG exports to Europe = more pollution

James Bruggers 2022 (journalist) 25 Mar 2022 “With Biden in Europe Promising to Expedite U.S. LNG Exports, Environmentalists on the Gulf Coast Say, Not So Fast” <https://insideclimatenews.org/news/25032022/biden-lng-europe-louisiana-texas/> (accessed 27 May 2022)

Commonwealth LNG is one of 19 proposals for new or expanded LNG export facilities along the Gulf Coast, the nation’s hotbed of current and potential export activity, according to the Environmental Integrity Project’s[Oil and Gas Watch](https://oilandgaswatch.org/) tracker project.  Nationally, the tracker identifies 27 new or expanding LNG terminal facilities that have been constructed or proposed, which collectively have the potential to emit as much as 117 million tons of carbon dioxide equivalent per year, said Alexandra Shaykevich, who assembled the tracker.  That’s as much as 23 million gasoline-powered cars per year, according to the Environmental Protection Agency, or nearly [all the cars](https://www.dmv.ca.gov/portal/file/department-of-motor-vehicles-statistics-pdf/) in California. More movement for the industry could be close at hand. The oil and gas industry and its supporters, Republicans and Democrats alike, are pressing for the United States to boost natural gas production and expedite the building of new LNG export facilities, in the wake of Russia’s invasion of Ukraine, which has upset global security and sparked a rethinking of U.S. and European energy policy.

Lots of ecosystem and human health risks and impacts to natural gas production and processing

Christina Swanson and Amanda Levin 2020 (both with Natural Resources Defense Council. Swanson - Science Center. Levin - Climate and Clean Energy Program) Dec 2020 “SAILING TO NOWHERE: LIQUEFIED NATURAL GAS IS NOT AN EFFECTIVE CLIMATE STRATEGY” <https://www.nrdc.org/sites/default/files/sailing-nowhere-liquefied-natural-gas-report.pdf> (accessed 26 May 2022)

Production, transport, and processing of gas pose a myriad of problems for the environment, human health, communities, and environmental justice. Gas production, which for the past decade has included extensive use of fracking, and processing can increase local air pollution and contaminate water supplies, both of which harm human health. Gas wells and pipelines harm local ecosystems, degrading habitat and disrupting wildlife movement and migration. Moreover, gas pipelines, compression and metering stations, storage facilities, and now liquefaction plants and export terminals are most often located in disadvantaged areas, adding new environmental stressors to those these frontline communities already face.

LNG exports have high social costs

Christina Swanson and Amanda Levin 2020 (both with Natural Resources Defense Council. Swanson - Science Center. Levin - Climate and Clean Energy Program) Dec 2020 “SAILING TO NOWHERE: LIQUEFIED NATURAL GAS IS NOT AN EFFECTIVE CLIMATE STRATEGY” <https://www.nrdc.org/sites/default/files/sailing-nowhere-liquefied-natural-gas-report.pdf> (accessed 26 May 2022) (accessed 27 May 2022)

LIQUEFIED NATURAL GAS EXPORTS HAVE HIGH SOCIAL COSTS
Because the damage done by climate change is spread across the globe, it can be challenging to estimate the monetary cost of GHG [greenhouse gas] emissions. But these costs are real: Increasing air and ocean temperatures and changes in rainfall patterns lead to extreme weather events, such as droughts, floods, and wildfires, that will (and already do) kill people and harm human health, reduce net agricultural production, cause property and infrastructure damage, and change energy system costs. Moreover, these “social costs” are currently paid predominantly by the public—as higher personal or government costs for health care, infrastructure repairs, or disaster recovery, for example—rather than by the emitter. While there is growing momentum among countries and businesses to put a price on carbon pollution as a means of bringing down GHG emissions and driving investment in cleaner options, there are few programs currently in place to pay for these external, social costs.

Government policy promoting LNG exports moves public investment away from transition to clean energy

Jonathan Mingle 2022 (journalist) 21 Apr 2022 “How U.S. Gas Exports to Europe Could Lock in Future Emissions” published by YALE SCHOOL OF THE ENVIRONMENT <https://e360.yale.edu/features/how-u.s.-gas-exports-to-europe-could-lock-in-future-emissions> (accessed 26 May 2022) (brackets added)

Proposed LNG export infrastructure won’t be sending gas to Europe any time soon. But a push from governments could change that. Energy analysts say that if policymakers pivot toward supporting new gas infrastructure, that could stymie investments in clean energy and energy efficiency in both the U.S. and Europe. [energy think tank senior policy advisor Maria] Pastukhova worries that governments might provide loan guarantees and pressure their development banks to facilitate [new LNG project investments](https://www.njspotlightnews.org/2022/03/lng-liquefied-natural-gas-gibbstown-terminal-gloucester-county-pennsylvania-plant/), which are fraught with risks because of the mismatched timelines of 20-year-contracts required by investors in LNG terminals and looming 2030 international emissions reduction deadlines. “If this happens and governments give in to the push by industry, we end up with public finance sunk into assets that are stranded from the beginning, leaving much less space to invest in the accelerated energy transition,” Pastukhova said. “And we really need every cent of this public finance for that transition.”

Committing to expansion of LNG locks in fossil fuel dependence and blocks transition to clean energy

Christina Swanson and Amanda Levin 2020 (both with Natural Resources Defense Council. Swanson - Science Center. Levin - Climate and Clean Energy Program) Dec 2020 “SAILING TO NOWHERE: LIQUEFIED NATURAL GAS IS NOT AN EFFECTIVE CLIMATE STRATEGY” <https://www.nrdc.org/sites/default/files/sailing-nowhere-liquefied-natural-gas-report.pdf> (accessed 26 May 2022)

Finally, the expanded production, export, and use of LNG will require large amounts of massive, long-lived, and single-purpose infrastructure such as pipelines, liquefaction plants, LNG terminals, and tankers, as well as gas-fired power plants.19 These types of investments lock in fossil fuel dependence and the associated emissions, making the transition to clean energy even more difficult.

US LNG exports to Europe increase pollution by distracting us from clean energy solutions

Sara Schonhardt and Scott Waldman 2022 (journalists) 25 Mar 2022 “Biden increases LNG exports as Europe faces energy crisis” <https://www.eenews.net/articles/biden-increases-lng-exports-as-europe-faces-energy-crisis/> (accessed 27 May 2022)

Green groups are concerned that officials from the U.S. and E.U. are largely focused on increased LNG exports as a response to Russia’s war. The years it will take to develop new fossil fuel export infrastructure would be better used to build clean energy sources, said Mitch Jones, managing director of policy at Food & Water Watch. “President Biden should firmly reject any plans to fast track gas export terminals here in the United States,” he said in a statement. “Corporate polluters are brazenly seizing on this crisis to secure decades of dependence on dirty energy, which will further devastate frontline communities and abandon any hopes for bold climate action.”

Increased LNG export is moral and economic madness: It wrecks efforts to limit climate warming

Jonathan Mingle 2022 (journalist) 21 Apr 2022 “How U.S. Gas Exports to Europe Could Lock in Future Emissions” published by YALE SCHOOL OF THE ENVIRONMENT <https://e360.yale.edu/features/how-u.s.-gas-exports-to-europe-could-lock-in-future-emissions> (accessed 26 May 2022)

Climate advocates are pushing the Biden administration to explain how it intends to reconcile that call to action — and its own climate [targets](https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/) of halving greenhouse gas emissions over the next decade — with the plan to boost gas exports out to 2030. The Intergovernmental Panel on Climate Change’s most recent report makes it clear that no new fossil fuel infrastructure can be built if the world is to stay under 1.5 degrees Celsius of warming. Investing in any new fossil fuel development, said United Nations Secretary-General Antonio Guterres on the day of the report’s release, “is moral and economic madness.”

Blocking increased LNG exports is good because they raise prices for natural gas inside the U.S.

Jacob Dick 2022 (journalist) Are U.S. LNG Exports Leading to Higher Prices? Yes, Say Consumer Advocates 26 Jan 2022 <https://www.naturalgasintel.com/are-u-s-lng-exports-leading-to-higher-prices-yes-say-consumer-advocates/> (accessed 26 May 2022)

Framed around projections that U.S. consumers could be hit with higher heating bills this year, advocacy groups are renewing the message that expanding U.S. liquefied natural gas (LNG) exports are part of the problem. The nonprofit Institute for Energy Economics and Financial Analysis (IEEFA) is highlighting natural gas price fluctuations from last year in a new analysis exploring whether exports are exposing average Americans to higher prices. IEEFA researches options and advocates for an acceleration in the transition of the U.S. energy economy. IEEFA’s Clark Williams-Derry, energy finance analyst, said the Henry Hub natural gas price spikes last year showed how gas exports will [“bite” consumers](https://www.naturalgasintel.com/winter-heating-costs-for-u-s-natural-gas-expected-to-rise-sharply/), even when domestic production is up and consumption is down. “LNG exports just about doubled from 2019 to 2021, and that is what created the supply tightness in the market that has lifted prices and made U.S. consumers pay higher prices for natural gas and, as a consequence, electricity,” Williams-Derry said. LNG exports during the first 10 months of last year outpaced the previous year by 30%. Williams-Derry pointed to Henry Hub spot prices averaging $3.91/MMBtu in 2021 as evidence of problems to come.

LNG exports are the main driver of higher natural gas prices in the United States

Justin Gerdes 2021 (energy journalist) 12 Oct 2021 “Opinion: LNG exports are backfiring on the US oil and gas industry” <https://www.energymonitor.ai/analysis/opinion-lng-exports-are-backfiring-on-the-us-oil-and-gas-industry> (accessed 26 May 2022)

“If this dynamic persists, US LNG exports will no longer be an outlet for excess domestic production gas but, rather, a possible driver of higher prices in a system where production growth is slow,” says Tsafos. “With domestic demand and domestic production flat on a yearly basis, it is exports that are proving the most enduring source of incremental demand – and thus a main driver of higher natural gas prices in the United States as the country heads into winter.”

SOLVENCY

Moving toward clean energy and conservation would reduce demand and avoid the need for increasing LNG capacity

Jonathan Mingle 2022 (journalist) 21 Apr 2022 “How U.S. Gas Exports to Europe Could Lock in Future Emissions” published by YALE SCHOOL OF THE ENVIRONMENT <https://e360.yale.edu/features/how-u.s.-gas-exports-to-europe-could-lock-in-future-emissions> (accessed 26 May 2022)

Research from Jesse Jenkins, an assistant professor and energy systems expert at Princeton University, suggests that while increasing and rerouting LNG shipments to Europe will help now, implementing the climate-focused elements of Biden’s long-stalled Build Back Better bill would enable more robust support for Europe’s struggle to wean itself off Russian gas over the next few years. Jenkins and colleagues modeled the impact of a clean energy investment package equivalent to that in the bill and found it would cut domestic gas use by 57 billion cubic meters by 2028. That, in turn, would free up U.S. natural gas supplies for export using existing LNG infrastructure — giving European policymakers the confidence to pivot away from Russian energy, while insulating U.S. consumers and businesses from global price shocks resulting from increased demand. Without such steps, high natural gas prices could make increasing LNG exports out to 2030 both economically and politically unsustainable. Part of the reason natural gas prices are surging now, Williams-Derry said, is the recent increase in LNG exports. “Ultimately we solve this on the demand side,” Jenkins said. “And we do it by making alternatives on the demand side better – cheaper, better, more convenient – in the context of a large investment package in clean energy, and in accelerating U.S. demand away from oil and gas. And in a context where the EU is doing the same thing.”

Europe can solve without Biden: It will take years to expand US LNG export facilities. By then Europe will solve on their own

Tim McDonnell 2022 (journalist) 25 Mar 2022 “The US wants to send more gas to Europe, but has almost none to spare” <https://qz.com/2146865/the-us-has-almost-no-gas-to-spare-for-europe/> (accessed 27 May 2022)

It takes years to build new LNG export infrastructure, so it’s not clear how the US can meet its near-term promise to Europe other than talking Asian customers like [China](https://qz.com/re/china/) and [Japan](https://qz.com/re/japan/) into [reselling some of their American LNG](https://twitter.com/SStapczynski/status/1506989280073494532) to Europe. Longer-term, European buyers are [already signing advance contracts](https://www.bloomberg.com/news/articles/2022-03-24/u-s-set-to-ink-lng-deals-with-europe-soon-bank-of-america-says?sref=P6xXtEaF) for US LNG that won’t be delivered until 2025 or later. Europe will also need to expand its import terminal infrastructure. No matter what happens in the coming weeks in the Ukraine conflict, Europe is preparing to make its shift away from Russian gas permanent.

EU has clean energy alternatives to natural gas and plenty of money to fund them

Sarah Brown, Bram Claeys, Domien Vangenechten and Lovisolo 2022 (Brown – Senior energy and climate analyst at Ember, a global energy think tank . Claeys – Senior Advisor at Regulatory Assistance Project, an energy research group. Vangenechten – Policy Advisor on industrial transition at E3G, a global energy research think tank. Lovisolo –policy advisor on Renewable Energy Systems at Bellona Foundation, independent non-profit organisation) 23 Mar 2022 “EU can stop Russian gas imports by 2025” https://9tj4025ol53byww26jdkao0x-wpengine.netdna-ssl.com/wp-content/uploads/Briefing\_EU-can-stop-Russian-gas-imports-by-2025.pdf (accessed 26 May 2022)

Compared to previous threats to EU fossil gas supply (2009, 2014), the EU has a much broader range of response measures available. Clean solutions are now mature and have become mass markets. Renewable energy costs have plummeted and the heat pump markets reached annual sales of about 1.8 million installations, which is 25% of the EU heating market. This momentum comes just as substantial financial resources – a response to COVID – are being injected into the economy via the EU’s Recovery and Resilience Facility (RRF).

“NOT” increasing LNG use is key to long-term stability

Sarah Brown, Bram Claeys, Domien Vangenechten and Lovisolo 2022 (Brown – Senior energy and climate analyst at Ember, a global energy think tank . Claeys – Senior Advisor at Regulatory Assistance Project, an energy research group. Vangenechten – Policy Advisor on industrial transition at E3G, a global energy research think tank. Lovisolo –policy advisor on Renewable Energy Systems at Bellona Foundation, independent non-profit organisation) 23 Mar 2022 “EU can stop Russian gas imports by 2025” https://9tj4025ol53byww26jdkao0x-wpengine.netdna-ssl.com/wp-content/uploads/Briefing\_EU-can-stop-Russian-gas-imports-by-2025.pdf (accessed 26 May 2022) (brackets added)

Over-reliance on fossil fuels, import dependence and international market volatility have contributed to the current geopolitical crisis. The effects of this are felt first and foremost by the most vulnerable in our societies. It is therefore of paramount importance to reduce our economies’ reliance on fossil fuels and avoid further lock-in, such as could be the result of rushed decisions to build new LNG-import terminals, speed up new gas transmission pipelines, or reconsider fossil fuel extraction in Europe or scaling it in partner countries.

DISADVANTAGE RESPONSES

A/T “Germany funds Russia by buying their gas” – Solution is conservation, not increasing supply

Jonathan Mingle 2022 (journalist) 21 Apr 2022 “How U.S. Gas Exports to Europe Could Lock in Future Emissions” published by YALE SCHOOL OF THE ENVIRONMENT <https://e360.yale.edu/features/how-u.s.-gas-exports-to-europe-could-lock-in-future-emissions> (accessed 26 May 2022)

 In early April, the EU’s top diplomat [said](https://www.euronews.com/my-europe/2022/04/06/eu-has-spent-35bn-on-russian-energy-and-just-1bn-on-aid-borrell) that since Russia’s invasion began, the EU has sent 35 billion euros to Russia for energy, while it has sent just 1 billion euros in aid to Ukraine. Experts say that the multiple imperatives of cutting emissions, supporting allies abroad, and achieving energy security at home, all point toward the same answer: using less natural gas. “There is this very traditional perception of energy security as security of supply,” Pastukhova said. “But what’s happening in energy markets is this emerging understanding that it’s about security of both supply and demand.”

A/T “Funding Russia without US LNG” – US LNG won’t break dependence on Russia. Key to that is reducing demand

Jonathan Mingle 2022 (journalist) 27 Apr 2022 “The Folly of Ramping Up American Gas Exports to Europe” <https://www.motherjones.com/politics/2022/04/biden-liquified-natural-gas-lng-exports-europe-russia-ukraine/> (accessed 27 May 2022)

Even with new terminals, LNG from the US won’t be able to replace the massive volume of gas that Europe imports from Russia, either today or in 10 years, said Maria Pastukhova, a Berlin-based senior policy advisor with E3G. “That’s why the focus on demand is so crucial.”

A/T “Alternative to Russian gas is coal” – That might not be worse than US LNG

Christina Swanson and Amanda Levin 2020 (both with Natural Resources Defense Council. Swanson - Science Center. Levin - Climate and Clean Energy Program) Dec 2020 “SAILING TO NOWHERE: LIQUEFIED NATURAL GAS IS NOT AN EFFECTIVE CLIMATE STRATEGY” <https://www.nrdc.org/sites/default/files/sailing-nowhere-liquefied-natural-gas-report.pdf> (accessed 26 May 2022) (brackets added)

For example, studies from the National Energy Technology Laboratory (NETL) and Carnegie Mellon (see Appendix A for more on these and the other life-cycle studies reviewed for this report) found that using different analytical assumptions for methane leakage rates and power plant efficiency resulted in total GHG [greenhouse gas] emissions from exported LNG that were comparable to or even higher than those from coal in the short term. [**END QUOTE**] The Carnegie Mellon study estimated that the “breakeven” point at which U.S LNG exports emitted as much greenhouse gases as coal in the near-term time frame was a methane leakage rate of 3 percent. The 2014 NETL study reported an even lower break-even point of 1.4 to 1.9 percent methane leakage. These rates are solidly within the range measured for methane emissions from the North American gas production and processing industries. [**THEY GO ON LATER IN THE SAME CONTEXT QUOTE**:] Therefore, unless methane leakage rates are kept at very low levels, replacing coal-fired power plants with gas plants fueled by imported U.S. LNG may actually provide little or no climate benefit to either the importing countries or the world.

A/T “Nat. Gas shortages in Europe” – Conservation and clean energy can replace without new imports of LNG

Sarah Brown, Bram Claeys, Domien Vangenechten and Lovisolo 2022 (Brown – Senior energy and climate analyst at Ember, a global energy think tank . Claeys – Senior Advisor at Regulatory Assistance Project, an energy research group. Vangenechten – Policy Advisor on industrial transition at E3G, a global energy research think tank. Lovisolo –policy advisor on Renewable Energy Systems at Bellona Foundation, independent non-profit organisation) 23 Mar 2022 “EU can stop Russian gas imports by 2025” <https://www.e3g.org/publications/eu-can-stop-russian-gas-imports-by-2025/> (accessed 26 May 2022) (brackets added)

-Clean energy can replace two-thirds of Russian gas imports by 2025. Russian gas imports can be cut by 66% by delivering the EU’s Fit for 55 package and accelerating the deployment of renewable electricity, energy efficiency and electrification. This is equivalent to a reduction of 101 billion cubic meters. An urgent uplift in policy is now required to achieve the necessary level of implementation.
-New gas import infrastructure is not required. Security of supply and reduction of Russian gas dependence does not require the construction of new EU gas import infrastructure such as LNG terminals. 51 bcm [billion cubic meters] of alternatively sourced gas imports via existing assets is sufficient.

A/T “Gas shortages in Europe” – US LNG won’t be available for years, and then it won’t be needed (and would be harmful to use)

Jonathan Mingle 2022 (journalist) 27 Apr 2022 “The Folly of Ramping Up American Gas Exports to Europe” <https://www.motherjones.com/politics/2022/04/biden-liquified-natural-gas-lng-exports-europe-russia-ukraine/> (accessed 27 May 2022)

New LNG terminals—whether for export on the US Gulf Coast or for [import](https://nam12.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.bloomberg.com%2Fnews%2Farticles%2F2022-03-21%2Fpush-to-speed-up-german-lng-terminal-to-cut-russian-gas-reliance&data=04%7C01%7Cjeremy.deaton%40yale.edu%7C75325ef1da7e413f2c0008da1bd7e673%7Cdd8cbebb21394df8b4114e3e87abeb5c%7C0%7C0%7C637852911334034952%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=Z4MnF77KgVU5mFujOherHiHL5GIBhvm9IvCxEKLXxBM%3D&reserved=0) on Germany’s North Sea coast—would take several years and several billion dollars to build. Analysts say that by the time they are up and running, the geopolitical environment may look different, but climate change will be all the more urgent, and there will be powerful business incentives to keep the terminals operating. “Europe needs more US LNG to get through the next two winters, not incentivization to use gas for the next 20 years,” said Claire Healy, of the energy think tank E3G, in a statement. “It has turned a short-term energy crunch into a long-term crutch for American oil and gas producers.” Some energy experts caution that expanding LNG infrastructure would be a distraction from more durable solutions to promote energy security in both the US and the EU. Rather than boosting supply by building LNG projects that could become stranded assets, they say, countries should focus on energy efficiency and other ways to reduce demand for gas.

The EU “Fit for 55” plan (already underway) will reduce demand for gas by 32-37% by 2030

Sarah Brown, Bram Claeys, Domien Vangenechten and Lovisolo 2022 (Brown – Senior energy and climate analyst at Ember, a global energy think tank . Claeys – Senior Advisor at Regulatory Assistance Project, an energy research group. Vangenechten – Policy Advisor on industrial transition at E3G, a global energy research think tank. Lovisolo –policy advisor on Renewable Energy Systems at Bellona Foundation, independent non-profit organisation) 23 Mar 2022 “EU can stop Russian gas imports by 2025” <https://www.e3g.org/publications/eu-can-stop-russian-gas-imports-by-2025/> (accessed 26 May 2022)

In 2020, just under two-thirds of gas consumption was available for final end use, the rest was required for transformation and energy sector input. The relative share of gas available for final use has declined significantly over the last seven years, from 71% in 2014 to 64% in 2020, pointing at an overall efficiency loss in the EU gas sector. Final EU gas demand is expected to decrease by 32%-37% by 2030 as a result of “Fit For 55” climate targets.