



Testimony of

**David E. Callahan, President
Marcellus Shale Coalition**

**Before the
Senate Environmental Resources and Energy Committee**

**Examining the Role of Liquefied Natural Gas in Strengthening
American Energy Security on the World Stage**

October 27, 2022

Good morning, Chairman Yaw, Chairwoman Comitta and members of the committee. My name is David Callahan, and I serve as President of the Marcellus Shale Coalition (MSC). The MSC is a state-wide trade association representing more than 130 energy companies from the upstream, midstream, and downstream sectors, and those who supply goods and services to the industry. Our members are fully committed to working with local, county, state and federal government officials to facilitate the safe development of natural gas resources in the Marcellus, Utica and related geologic formations. I appreciate the opportunity to be with you today and to share some thoughts on the role that American LNG – and especially Pennsylvania-produced LNG – can have on strengthening our nation’s energy and national security.

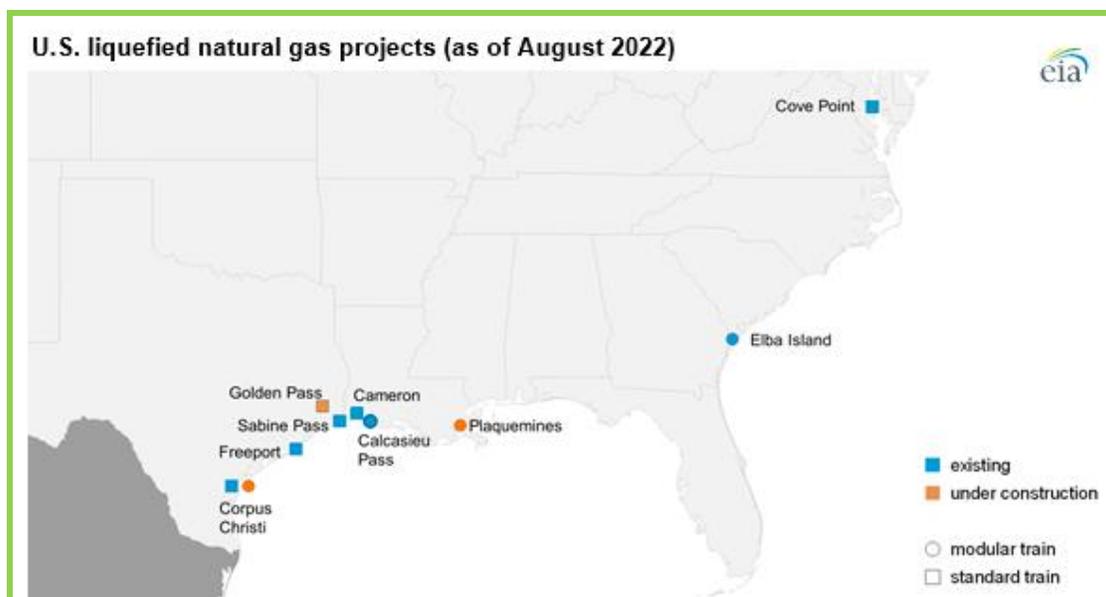
U.S. LNG Capacity

Before discussing the positive policy benefits of LNG exports, it is helpful to put our current domestic production and capacity to export into perspective.

In February 2016, the United States exported its first shipment of LNG from the lower forty-eight states, a reversal of a decades-long trend when the U.S. prepared to be a major importer of natural gas and began construction of import facilities along our various coasts. The abundance of shale gas reserves, such as the Marcellus and Utica shales, has reversed this trend 180 degrees. In many cases, existing import facilities have been retrofitted to export LNG.

In July 2022, the U.S. became the largest exporter of natural gas in the world as the seventh export facility – Calcasieu Pass in Louisiana – came online¹. Three additional LNG export facilities are under construction, while several existing facilities are expanding their current capacity. These facilities are located generally along the Gulf Coast, with the exceptions of Elba Island off of Georgia, and Cove Point off of Maryland. The following graphic illustrates the location of these facilities:

¹ U.S. Energy Information Administration: Today In Energy (Sept. 6, 2022):
<https://www.eia.gov/todayinenergy/detail.php?id=53719&src=email>



Source: U.S. Energy Information Administration

Some statistics² may help to provide perspective on the share of U.S. natural gas production which is currently exported:

- The U.S. averaged about 11.1 billion cubic feet per day (Bcf/d) of exports in the first half of 2022³.
- In 2021, the U.S. produced approximately 94.6 Bcf/d.
- Pennsylvania produces approximately 20.4 Bcf/d, or roughly 22% of the nation's natural gas.
- Approximately 12% of domestic natural gas production is exported via LNG
- Since 2013, U.S. production has increased from 24.2 trillion cubic feet to 34.5 trillion cubic feet, or by approximately 28 Bcf/d.

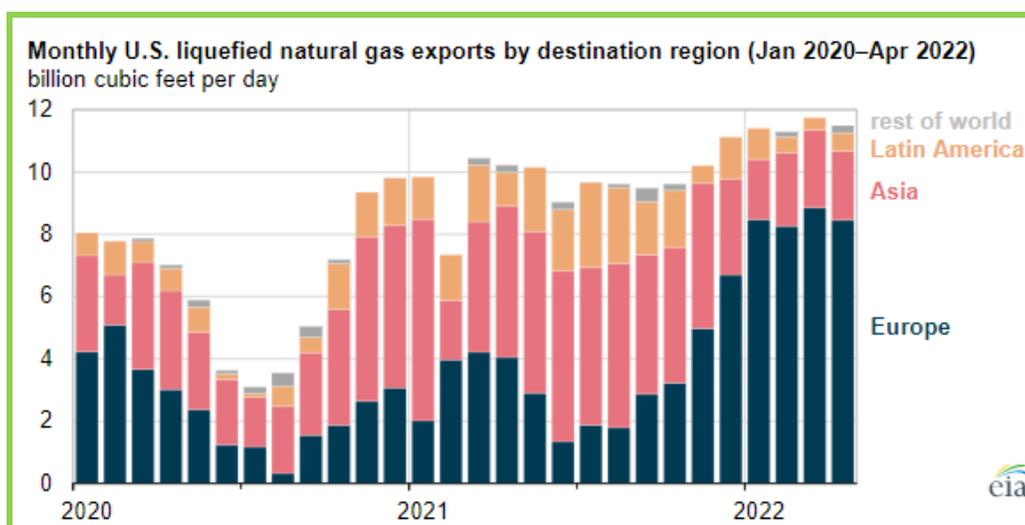
Put another way, the growth in U.S. production has outpaced our exports by 250%, demonstrating the capacity to meet both domestic energy needs and the needs of our foreign allies.

While Asia is a major destination for LNG exports, the European crisis has increased exports to that continent significantly, with many shipments originally destined for Asia being re-routed to European countries. The following graphic illustrates the destination of U.S. LNG exports:

² U.S. Energy Information Administration and PA Department of Environmental Protection

³ This amount is projected to increase to approximately 13 Bcf/d when the Freeport terminal returns to full capacity, and approximately 18.7 Bcf/d by 2025 when three new facilities are online:

<https://www.eia.gov/todayinenergy/detail.php?id=53719&src=email>



Source: U.S. Energy Information Administration

European Energy Crisis

While Russia’s unprovoked invasion and ongoing war against Ukraine has certainly exacerbated the energy crisis in Europe – thanks in large part to Russia’s manipulation of natural gas supplies throughout the region – we must not forget that this crisis was coming to a head well before armed conflict seemed imminent.

For several decades, European countries have decried the benefits of fossil fuels, and made broad, sweeping commitments to generate and use electricity only from what it regarded as renewable energy resources. Investments in natural gas, coal and nuclear energy were discouraged or even outright prohibited. Meanwhile, the undercurrent reality that Europe still needed *some* natural gas was addressed – quietly – as Europe continued to import over half the natural gas it continued to use from Russia. The United Kingdom⁴, for example, which banned natural gas drilling in its own territories, also never invested in natural gas storage as it was convinced that it could meet its energy needs through offshore wind. That was, until the wind stopped blowing. The U.K. is now lifting its self-imposed drilling ban and looking to develop its own shale gas resources.

Throughout much of Central Europe, policymakers have embraced definitions of “renewable energy” that strain credibility. As documented by the New York Times⁵, large swaths of old-growth forests – critical to both habitat preservation and carbon sequestration – are being clear cut, with the wood ground down to pellets for home heating and electricity generation.

⁴ Forbes.com: How Europe Triggered An Energy Crisis, And Now is Paying Dearly For It (Nov. 27, 2021)

⁵ New York Times: Europe is Sacrificing Its Ancient Forests for Energy:

<https://www.nytimes.com/interactive/2022/09/07/world/europe/eu-logging-wood-pellets.html> (Sept. 7, 2022)

Meanwhile, Europe continues to scramble to displace its dependence on Russian natural gas. Recent events have made clear that the choice for Europe needs to be replacing its *source* of natural gas – not shuttering its use of the fuel. Price spikes to consumers, rolling brownouts, and an unreliable electric grid have made it eminently clear that natural gas in abundance is needed. And natural gas from the U.S. is produced in a much more environmentally responsible way than Russia, with Russian gas having a methane intensity rate that is 65% higher than U.S. gas.⁶

Role of U.S. and Pennsylvania in Meeting LNG Needs

U.S. LNG must be a key component to meeting European need. Fortunately, we have the resources to meet this need. Again, context is important to understand how the U.S. and Pennsylvania fit into this equation. In 2021, the European Union imported⁷ 5.47 trillion cubic feet of natural gas from Russia, the equivalent of about 73% of Pennsylvania’s total production, or about 16% of total U.S. production.

So, the numbers work. Modest increases in Pennsylvania and U.S. production can meet this demand, neutralize Russia’s energy influence over a continent, and by extension, significantly strengthen our relationships with critical allies. But significant policy changes are needed if Pennsylvania is to meet this opportunity.

As noted recently in an article by Hart Energy⁸, “*regulatory burdens (in Pennsylvania) are creating a dislocation in the markets.*” As a result, there is a “*shift in capital away from Marcellus and Utica and down to the Gulf Coast.*”

The culprit, of course, is insufficient pipeline infrastructure to get natural gas to market. In the northeast, states such as New York and New Jersey have abused the 401-certification process – intended to make sure interstate pipelines safely crossed waterways – to stop multi-billion-dollar projects in their tracks. The Constitution and Penn East pipelines, intended to meet needs in Pennsylvania, New Jersey and New England, have been cancelled. The Mountain Valley Pipeline is 95% complete but remains years behind schedule and over budget, thanks to nuisance lawsuits and activist regulatory agencies. Here in Pennsylvania, the Administration has failed to advocate for natural gas infrastructure or prevail upon elected officials in neighboring states on the importance of domestic energy security. Domestic activist organizations, funded by deep-pocketed, anti-energy foundations right here in Pennsylvania, and with the support and prodding

⁶ International Energy Agency – 2020 Methane Intensity of Production

⁷ CNBC: Europe’s plans to replace Russian gas are deemed ‘wildly optimistic’ – and could hammer its economy: <https://www.cnbc.com/2022/06/29/europes-plans-to-replace-russian-gas-are-deemed-wildly-optimistic-and-could-hammer-its-economy.html#:~:text=In%202021%2C%20the%20EU%20imported,of%20natural%20gas%20from%20Russia> (June 29, 2022)

⁸ Hart Energy: US Gas Exports Primed to Soar, but Constrained Appalachia Can’t Meet the Moment: <https://www.hartenergy.com/exclusives/us-gas-exports-primed-soar-constrained-appalachia-cant-meet-moment-202490> (Oct. 13, 2022)

of Vladimir Putin⁹ and his Russian oligarchs, wage battle each day against natural gas development and the men and women it employs¹⁰. Investors, understandably, have looked elsewhere, such as the Gulf Coast.

While several of these policy changes must be implemented at the federal level, we also need state elected officials – including a governor – that prioritizes the domestic energy needs of our society and is willing to advocate – rather than apologize – for it. To that end, I would be remiss if I did not thank those members of this committee, the General Assembly, and State Treasurer Stacy Garrity for your collective support and advocacy on behalf of your fellow Pennsylvanians. I also want to express our support and appreciation for this committee advancing House Bill 2458, sponsored by Representative Martina White, which will establish a task force to examine in detail the challenges and opportunities of exporting LNG from southeast Pennsylvania.

Positive Environmental Impacts

While much attention has understandably been focused upon displacing the dependency of European nations on Russian natural gas, increasing LNG exports to expand the use of natural gas in regions with little or no domestic production of their own can deliver historic environmental benefits to our planet in addition to strengthening our national security. You will hear a more detailed overview of these opportunities from my colleague with EQT¹¹.

The Jones Act

While not the direct focus of today’s hearing, it is worth noting that current U.S. policy is impeding our own efforts to meet domestic energy needs. A question that we often hear is why can’t we ship LNG from port to port to meet our nation’s own needs? Perhaps no region of the country illustrates this need greater than the Boston and greater New England market, which is often dependent upon LNG imports from the Caribbean and, in the not-too-distant past, Russia.

The answer lies in a federal law called the Jones Act¹², which requires that goods – such as LNG – transported from one U.S. port to another U.S. port must be carried on ships that are built, flagged and owned by a U.S. company, and are crewed by U.S. citizens. The rationale for the statute was to preserve the nation’s domestic shipbuilding capabilities; however, over time the vast majority of U.S. shipbuilding yards have closed as that work is performed overseas. As a result, there currently are no Jones Act-compliant LNG tankers in the world. While the solution to this particular challenge will not be found in our state General Assembly, this is an issue that

⁹ Washington Examiner: Putin hates Fracking. How Much Did He Support US and EU Fracking Foes? <https://www.washingtonexaminer.com/opinion/putin-hates-fracking-how-much-did-he-support-us-and-eu-fracking-foes> (March 23, 2022)

¹⁰ Groups Urge DEP to Deny Transco Permits for Natural Gas Pipeline: “The project ‘is yet another destructive pipeline project designated to line the fracking industry’s pockets’ – Clean Air Council <http://paenvironmentdaily.blogspot.com/2022/10/conservation-groups-urge-dep-to-deny.html> (Oct. 13, 2022)

¹¹ EQT: Unleashing U.S. LNG – The Largest Green Initiative on the Planet: https://www.eqt.com/wp-content/uploads/2022/03/LNG_Final.pdf

¹² Section 27 of the Marchant Marine Act of 1920 (46 USC Ch. 24)



Congress must ultimately address – as displacing foreign LNG imports to the U.S. from potentially hostile countries is certainly in our national interest.

Conclusion

LNG exports, fueled by abundant domestic natural gas resources here in Pennsylvania and elsewhere in the United States, are critical to strengthening our nation's economy, energy security and by extension, our national security. They are also complimentary to enhancing our shared environment, reducing emissions, and ensuring that the natural gas the world consumes is produced and transported in the most responsible manner possible.

The men and women who work within Pennsylvania's natural gas industry are up to the task. But we need your help, from advancing sound state regulatory policies that allow the predictable development of needed infrastructure, to continued advocacy with our neighboring states and federal policymakers on the role each of them must play. Today's hearing highlights this important topic, and we hope it is the first discussion in an ongoing conversation. We stand ready to partner with you in this effort.

Thank you and I look forward to your questions.

