



The Honorable Elizabeth Warren  
United States Senator, Massachusetts  
309 Hart Senate Office Building  
Washington, DC 20510

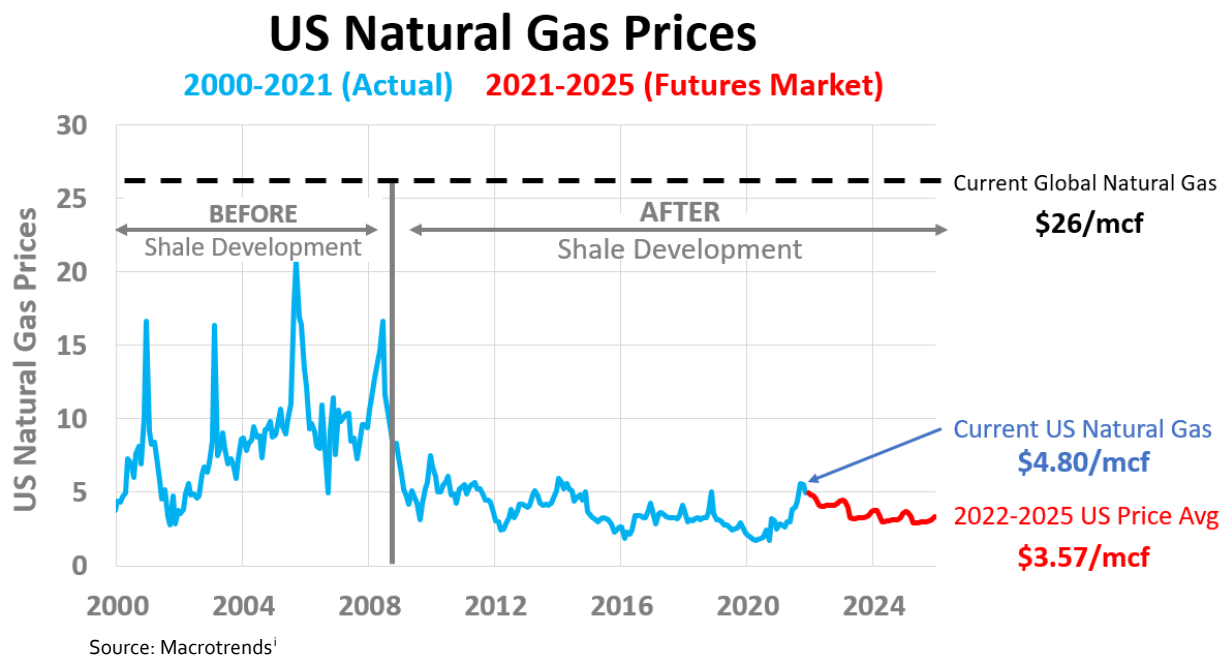
December 7, 2021

Dear Senator Warren:

We strongly agree with the goal of keeping energy affordable and reliable for citizens of the United States. EQT Corporation (EQT) has worked toward this goal for decades. We disagree, however, with claims that the increase in natural gas prices relative to 2020 levels is attributable to a combination of "corporate greed" and the export of liquefied natural gas (LNG).

The average price of natural gas for 2021 is significantly below the 20-year average of approximately \$5.70 per Mcf. Yes, the price of natural gas has increased rapidly relative to 2020 as the economic engines of the world have reignited, but natural gas prices in 2020 were the lowest in over two decades, a year during which we exported LNG.

In fact, because of the shale gas boom and companies like EQT, the United States consumer has benefited from, and continues to benefit from, some of the lowest natural gas prices in the world.



In addition, as you will see in the responses below, no executive of EQT has, or has had in the last decade, any compensation tied to LNG exports.

I am writing to you not just because these allegations are without merit, but more so because they foster a narrative that politicizes natural gas and associated infrastructure in a manner that runs counter to one of our key collective goals, one we know you share – addressing climate change.

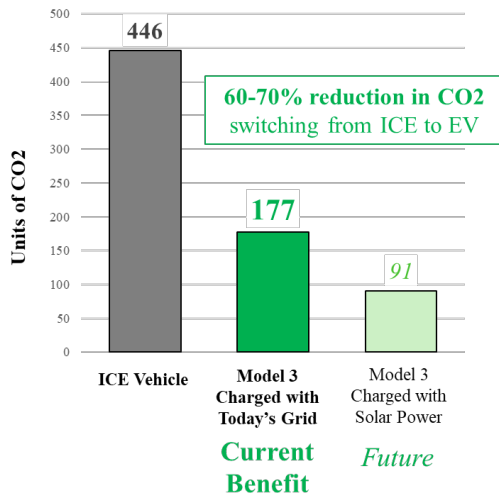
#### U.S. LNG is the Most Impactful Green Initiative on the Planet

To address climate change, we need to focus on the most impactful and fastest available opportunities for reducing existing emissions.

Electrification of vehicles is one such opportunity, and a popularly accepted one. But in reality, it is only a small piece of the puzzle, and not nearly as impactful as the opportunity presented by accelerating a global transition from coal to natural gas.

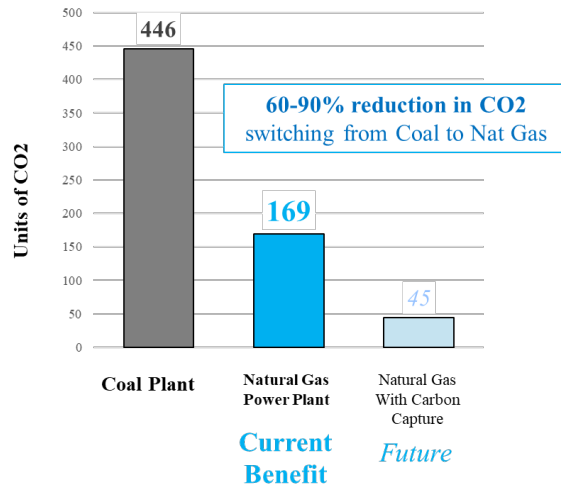
### ICE Vehicle to Tesla Model 3 Net CO2 Reduction

Source: Tesla Motors Sustainability Report



### Coal Plant to Nat Gas Plant Net CO2 Reduction

Source: EIA Electricity Generation in 2020



\* Coal plant baseline emissions set at 446 to replicate ICE vehicle baseline

As you can see from the above, the emissions reduction impact of switching from an Internal Combustion Engine (ICE) to a Tesla Model 3<sup>ii</sup> within the transportation sector is the same *on a percentage basis* as switching from coal to natural gas within the power sector. Whether you are swapping coal for natural gas, or swapping gasoline cars for electric vehicles, they reduce emissions by the same amount and have the same carbon footprint.

The difference, however, is the speed and scale at which these two solutions can be deployed.

Roughly one-third of the world is powered by coal<sup>iii</sup>, representing annual emissions of approximately 14.8 billion metric tons of carbon dioxide.<sup>iv</sup> Emissions associated with coal use for power generation emits the same amount as roughly 2.2 billion gasoline cars<sup>v</sup> (the world has an estimated 1.4 billion cars).<sup>vi</sup> In other words, the potential emissions reduction opportunity for coal-to-gas switching within the power sector is 50% greater than the potential emissions reduction opportunity from vehicle electrification within the transportation sector.

And importantly, with respect to replacing coal, the issue is almost exclusively an international one. Approximately 91% of coal-fired power generation occurs outside of the United States<sup>vii</sup>.

Two decades ago, coal was the primary power source of the United States<sup>viii</sup>. Over the last two decades, however, as a direct result of the shale gas boom, the United States has given the model for how the world can make the most meaningful contribution to addressing climate change: replacing coal consumption with natural gas.

This is the most impactful green initiative available in the world, and it is not even close.

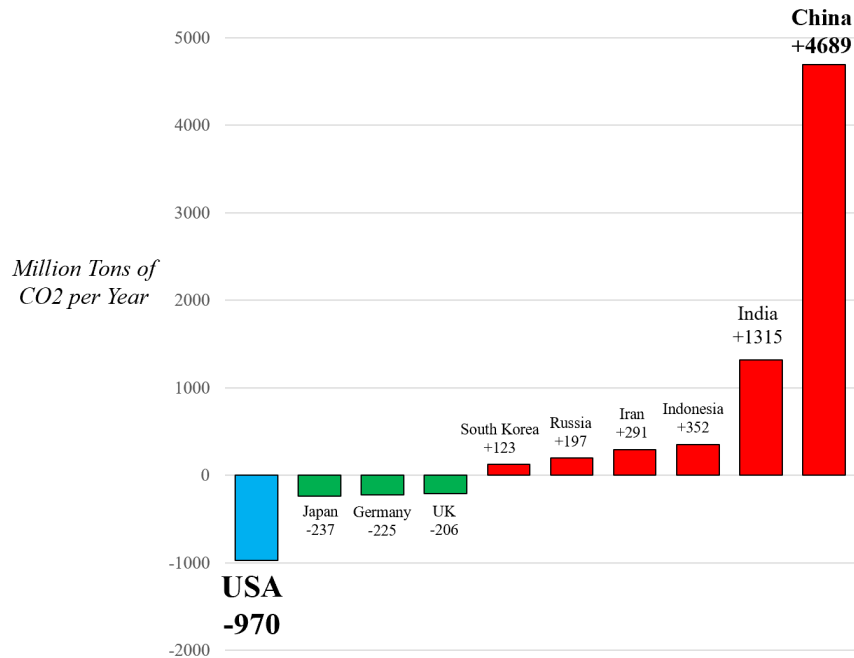
It is proven, it is actionable using today's technologies, and it can be executed rapidly. It is not a goal or a multi-decade net zero target, it has been tested and achieved in the United States. But it is only an opportunity for countries that have access to natural gas resources.

### The Unmatched Scale and Speed of Coal to Gas Switching to Address Emissions – The United States Model

During the shale gas boom of 2005 to 2019, the United States led the world in emissions reductions.<sup>ix</sup>

## 2005 to 2020 Change in CO2 Emissions

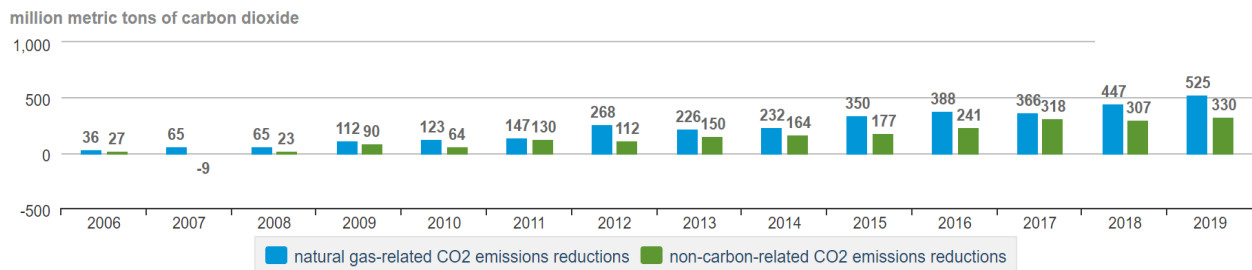
Annual Million Metric tons of CO2 Difference



Source: Our World in Data\*

In 2019, the United States emitted 970 million metric tons less than in 2005, with 525 million metric tons of that emissions reduction resulting from replacing coal with natural gas in power generation. Said another way: since 2005, in the United States, all emissions reduction efforts combined have had less impact than coal to gas switching alone.

### CO2 Emissions Reductions in Electricity Generation from Changes in Fuel Mix Since 2005<sup>xi</sup>



The emissions reduction from coal to gas switching seen in the United States between 2005 and 2019 is the equivalent of actually electrifying approximately 190 million cars, or roughly 70% of the total number of cars in the United States.<sup>xii</sup> We are currently *projected* to have *global* sales of 31.1 million electric vehicles *in 2030.*<sup>xiii</sup> Said another way: what the world expects to achieve in the electric vehicle market over the next 10 years would equate to just 15%<sup>1</sup> of what the natural gas industry has already achieved in the United States alone over the last 15 years.

Scale and speed.

<sup>1</sup> 2.77 metric tons of emissions reduction per year per ICE to Tesla Model 3 multiplied by 31.1 million ICE to EV switches equals 84 million metric tons, or ~15% of the 525 million metric tons attributable to coal to gas switching in the United States as of 2019 versus 2005 levels.

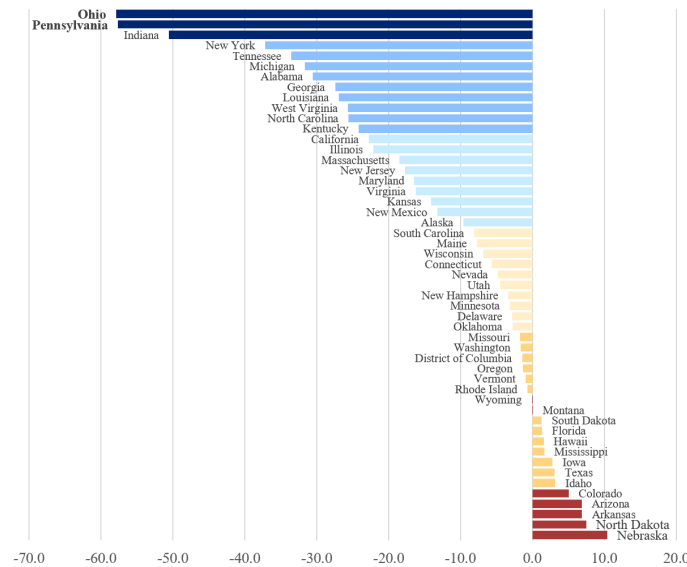
## The United States Model of Coal to Gas Switching

The largest contributor to the shale gas boom was Pennsylvania, where EQT is headquartered and operates. From 2000 to 2019, natural gas production from the Commonwealth of Pennsylvania increased from 0.5 Bcf/d to 19.6 Bcf/d.<sup>xiv</sup> Proponents of the “keep it in the ground” movement would likely assume that Pennsylvania’s emissions would have increased significantly with that production – but they would be wrong.

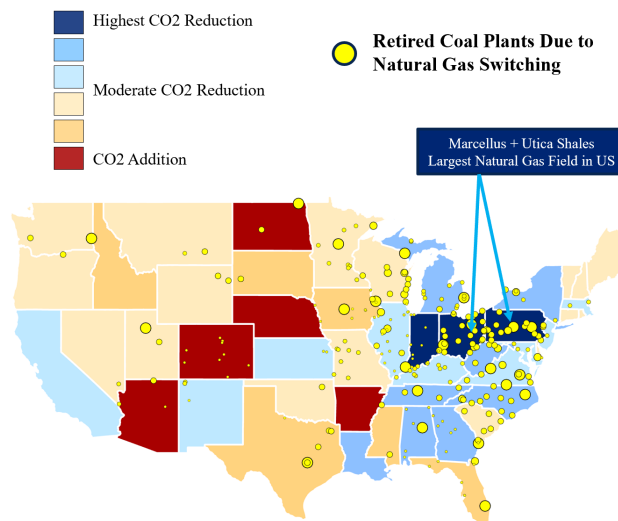
Pennsylvania had the second largest reduction in emissions of any state in the country from 2005 to 2019. In fact, during this period that it became the second largest natural gas producing state in the country<sup>xv</sup>, the Commonwealth of Pennsylvania reduced its emissions by roughly three times that of Massachusetts and more than two times that of California.<sup>xvi</sup> Same with Ohio<sup>xvii</sup>, another state in which we operate. And West Virginia, the third state in which we operate, reduced its emissions more than California.<sup>xviii</sup> And these are *absolute* numbers. So, the state of West Virginia, with its 1.8 million citizens, decreased its emissions *in total* by more than the state of California, with its 40 million citizens.

### 2000 – 2018 Change in Yearly CO2 Emissions

Pennsylvania + Ohio are leading the US in absolute emissions reductions



### CO2 Emission Reductions 2005 – 2018 by State



Source: U.S Energy Information Administration (March 2021).<sup>xix</sup>

In fact, the states of Pennsylvania, Ohio and West Virginia have collectively reduced their emissions from 2005 to 2019 by roughly the same amount as Germany’s Energiewende project,<sup>2</sup> which is the most aggressive and costly renewables project on the planet, with the average power bill for German citizens increasing by approximately 30% more than United States citizens during the same period.<sup>xx</sup>

There are two critical takeaways from this analysis. First, the emissions associated with the production of natural gas are dwarfed by the emissions reduction of switching from the consumption of coal to gas. Even though we produced more natural gas in Appalachia – meaningfully more – our emissions decreased, as that production allowed for coal-to-gas switching.

And second, as demonstrated by the map above, there are three prerequisites to achieving the types of results seen by the substantial majority of the top quartile emissions reducers in the United States: (i) identification of a demand area reliant on a higher emissions-intensive energy source (coal in this example), (ii) identification of available supply of a lower emissions-intensive energy source capable of economically meeting that demand (shale gas in this example) and (iii) connecting that supply to the demand (pipelines in this example).

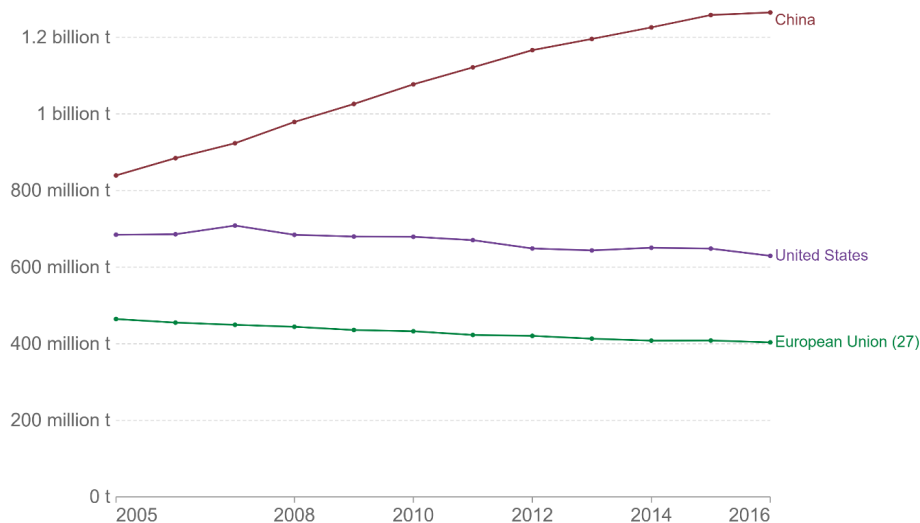
One might also challenge the above emissions reduction argument as being based only on carbon dioxide emissions, and counter that methane emissions are more problematic from a global warming perspective. We agree with the importance of reducing methane emissions,<sup>3</sup> but methane emissions are not synonymous with natural gas.

Since 2005,<sup>4</sup> while the United States has roughly doubled its natural gas production<sup>xxi</sup>, its methane emissions *decreased* by an amount in line with the decrease in methane emissions seen in the European Union. Why? Because (i) the industry has adapted to less methane-intensive operations and (ii) coal mining itself emits significant amounts of methane, which emissions were substantially reduced as a result of the nearly 50% reduction in coal production made possible by natural gas eroding its demand.<sup>xxii</sup>

Meanwhile, China, which produced only 3% of the world’s natural gas but the majority of the world’s coal<sup>xxiii</sup>, saw its methane emissions increase by an amount roughly equivalent to adding a second Europe to the world.

### Methane emissions

Methane (CH<sub>4</sub>) emissions are measured in tonnes of carbon dioxide equivalents (CO<sub>2</sub>e) based on a 100-year global warming potential value.



Source: CAIT Climate Data Explorer via Climate Watch  
Note: Emissions from land use change and forestry are included.

OurWorldInData.org/co2-and-other-greenhouse-gas-emissions • CC BY

Source: Our World in Data<sup>xxiv</sup>

<sup>2</sup> And as I make this point, let me be clear: We are not advocating *against* renewables, we are advocating *for* addressing climate change.

<sup>3</sup> EQT has a stated goal reducing its methane emissions intensity by 65% below 2018 levels by 2025.

<sup>4</sup> 2016 being the last year with comparative world data from www.ourworldindata.org.

## Opportunity: Applying the United States Model Internationally

Addressing global climate change would be much easier if every country, state, municipality, and company had the same resources available to them. But they do not. That the United States produces roughly one quarter of the world's natural gas<sup>xxv</sup> is not happenstance.

Climate change is a global issue, and each country has to reduce its emissions against the backdrop of the resources that it has available to it.

In privileged countries like the United States, we are at a point of optimization, one where we can (and are) investing in opportunities to address climate change that the vast majority of the world cannot afford. This is a good thing, and we are fundamentally in support of prioritizing these opportunities domestically and – where feasible - abroad.

However, the vast majority of countries in the world lack the resources or political will to be in the position in which the United States is blessed to be. And for this reason, we fundamentally oppose conflating our nation's ability to optimize its position in addressing climate change domestically with policies that would restrict the production of exportable resources like natural gas that could be used to assist other countries improve theirs. It runs counter to our efforts to address global climate change and is antithetical to our position of leadership in the world and our democratic values.<sup>5</sup>

In fact, to best address climate change, it is incumbent on countries like the United States to produce more natural gas that can be used by other countries – countries that do not have sufficient resources on their own – to assist them in their efforts to replace coal consumption.<sup>6</sup>

Just last month, China, the world's leading emitter (representing nearly one-third of total global emissions<sup>xxvi</sup>), announced that it was considering backtracking from its previous target for reaching peak carbon as a result of the energy crisis it is experiencing.

LNG is the answer. If there were sufficient LNG to address China's unmet energy demand, we would not be in a world where it is reconsidering its target. More importantly, with sufficient LNG, we could go beyond merely helping China stick to its current (or revised) target, we could accelerate it in the same way we accelerated ours, by replacing as much of their reliance on coal as possible with natural gas.

If we were to supply natural gas to replace only China's *planned or under construction* coal power plants<sup>7</sup> with natural gas plants, we could slash approximately 370 million metric tons of carbon dioxide.<sup>8xxvii</sup> This emissions reduction opportunity is roughly equivalent to the emissions reduction impact of the entire U.S. renewables sector.<sup>xxviii</sup>

To capture this opportunity, it would require the United States to increase natural gas production by roughly 25%, or approximately half the production increase seen between 2005 and 2020, when the United States saw declines in both carbon dioxide and methane emissions. This kind of production increase is only achievable in countries like the United States, Russia and Qatar, which actually have sufficient amounts of the natural gas resources available to them.

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<sup>5</sup> While this letter focuses on the emissions reduction opportunity of replacing coal with gas, it is important to note that both coal and oil exports play an important role in how we address climate change as well. A substantial portion of the world lives in energy poverty (<https://ourworldindata.org/energy-access#how-many-people-don-t-have-access-to-electricity>), and the probability of these countries leap-frogging numerous rungs on the energy ladder is extremely low. Just as natural gas is less emissions-intensive than coal, so is coal less emissions-intensive than wood and charcoal. As we are not supportive of policies of elimination being applied to natural gas, so too are we opposed to policies of elimination being applied to other exportable resources if they can be used to reduce global emissions. We leave it to policymakers to address a more fundamental question – whether or not to provide energy resources to the meaningful portion of the world that is in energy poverty, even if it means a net increase in emissions.

<sup>6</sup> The same can be said of companies that produce these lower emissions-intensive resources, which highlights a flaw in the framework around Scope 3 emissions and how they are being analyzed. While countries like the United States and companies like EQT can and should make meaningful efforts to reduce emissions, that should not be equated to a need to reduce the production of their energy product. Efforts can be made – like EQT is doing – to offset or reduce Scope 3 emissions as adjacencies to the core business, but as long as the potential for replacement of higher emissions-intensive energy sources exists, production of lower emissions energy sources should be promoted. This is especially true given that a vast number of energy producers (in particular producers of higher emissions-intensive energy resources) are not accountable to the proponents of Scope 3 net zero targets.

<sup>7</sup> Includes all announced generation, pre-permitted, permitted or under constructions as of 2020.

<sup>8</sup> And as discussed above, this would also result in a reduction in global methane emissions, in particular if we used natural gas sourced from Appalachia, some of the lowest methane-intensive natural gas in the world.

What we definitely should *not* do is restrict U.S. LNG. If we do so, and the result is a reversion to coal, we forfeit the significant environmental benefits already afforded to the world by U.S. LNG (not to mention pour fuel on the fires of potential humanitarian crises in Europe and parts of Asia should a cold winter arise). In fact, to only maintain flat global emissions in a scenario where demand previously met by U.S. LNG is replaced by a combination of coal and renewables would require installation of at least approximately 16,000 industrial scale windfarms or approximately 12 million solar panels.

If we want to be a leader in addressing climate change, we need to be a leader on the global stage by providing others with access to our lower emissions-intensive energy resources. And that requires more LNG infrastructure, more pipeline infrastructure and more production of natural gas.

### **Unlocking the Largest Green Initiative in the World**

The United States has a vast amount of natural gas, more than any other country in the world. And the rest of the world is reliant on coal. We have the opportunity to achieve what we did in the United States at the global level if we can connect our clean resource to the global coal-users. To do this we need:

- Approvals for domestic pipelines directed towards U.S. demand centers (including New England) and LNG export facilities (which could include a reversal of the Everett, MA facility into LNG export);
- Approvals for new LNG export facilities at a pace five times faster than historical norms; and
- Coordination with international communities to encourage the replacement of their coal with U.S. LNG.

In terms of emissions reductions, a ramped LNG program in the United States would equate to electrifying approximately 5.1 million vehicles per year for each incremental Bcf of export replacing coal<sup>9</sup>, while simultaneously providing the world with reliable energy.

We at EQT are saying loud and clear that we are willing and able to supply the world with cheap and reliable natural gas, while simultaneously reducing emission levels at a pace the world has never seen. But we need your help to get it done. We are not looking for handouts, we are looking for permission and a clear signal of political support, one that will justify the billions of dollars that our industry will have to spend to make the largest green initiative in the world a reality.

### **Conclusion**

I know that ensuring American citizens have access to reliable, low-cost energy and meeting our global climate goals are both incredibly important to you, and I hope you understand that they are to me as well.

I am a 39-year-old native of Massachusetts who lives in the heart of where my company operates and wants to see a world where all people can flourish, the energy needs of others are responsibly met, and my Bostonian mother does not have to heat her home in the winter with heating oil.<sup>10</sup>

Sincerely,



Toby Z. Rice  
President and Chief Executive Officer

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<sup>9</sup> The average emissions reduction per Bcf of natural gas replacing coal is approximately 14.2 million tons and the average emissions reduction per vehicle electrification is approximately 2.77 tons.

<sup>10</sup> Heating oil has an emissions intensity roughly 30% greater than natural gas.

## Appendix Questions

**Question: For each of the last ten years, including 2021 to date, please provide the following information: a. The total amount of natural gas that your company has exported. b. The percentage of your company's total natural gas production that was exported.**

Prior to 2018, we did not export any of our natural gas production. Starting in 2018, we commenced sales to Canada of volumes representing approximately 3% or less of our total production per year.

**Question: For each of the last ten years, including 2021 to date, please provide the following information: a. Your company's average profit margin for exported natural gas. b. Your company's average profit margin for domestic sales of natural gas. c. The amount your company has invested in clean, renewable energy.**

From 2018 to date, only one year had profit margins on exported volumes exceeding those of domestic volumes (2018).

Profit margins for 2021 are 50% below peak levels over the last decade, despite expenses for 2021 being the lowest of the decade (driven by efficiency savings).

We have publicly announced that we have allocated \$75 million towards piloting emerging opportunities that can potentially play a significant role in our collective efforts to accelerate a sustainable path to a low carbon future (such as hydrogen and carbon capture), with the ability to scale meaningfully should these pilots demonstrate economic viability.

In addition, EQT has targeted being net zero on a Scope 1 and Scope 2 basis by 2025, which would make it one of, if not the first, major provider of traditional energy resources in the world to reach net zero.

**Question: Has your company considered cutting, suspending, or ending exports of natural gas to help ease spiking domestic prices?**

We have never considered cutting, suspending or ending exports of natural gas, if for no other reason than that we do not have the contractual ability to do so.

**Question: Have any of your top company executives, in the last decade, been awarded bonuses or other compensation based on increasing exports of natural gas? If so, please provide a list of all such executives and the bonuses or other compensation awarded.**

None of our top executives have been awarded bonuses or other compensation based on increasing exports of natural gas in the last decade.

**Question: What other actions has your company taken to help ease spiking domestic natural gas prices?**

We do not have the power to influence natural gas pricing to the upside or downside.



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- <sup>i</sup> <https://www.macrotrends.net>
- <sup>ii</sup> Tesla 2020 Impact Report: [https://www.tesla.com/ns\\_videos/2020-tesla-impact-report.pdf](https://www.tesla.com/ns_videos/2020-tesla-impact-report.pdf)
- <sup>iii</sup> <https://ourworldindata.org/electricity-mix>
- <sup>iv</sup> U.S. Energy Information Administration (EIA); World Energy Projection System (2021).
- <sup>v</sup> <https://www.iea.org/reports/global-energy-co2-status-report-2019/emissions>
- <sup>vi</sup> <https://drivetribe.com/p/how-many-cars-are-there-in-the-dqbpAzrATLOOSgDfRrgkQ?iid=ZtUJueaBRm6gLgMPmOb1OO>
- <sup>vii</sup> <https://www.nsenerybusiness.com/features/coal-fired-power-generating-countries/#>
- <sup>viii</sup> <https://ourworldindata.org/electricity-mix>
- <sup>ix</sup> <https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions>
- <sup>x</sup> <https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions>
- <sup>xi</sup> U.S. Energy Information Administration (September 2020).
- <sup>xii</sup> Tesla 2020 Impact Report: [https://www.tesla.com/ns\\_videos/2020-tesla-impact-report.pdf](https://www.tesla.com/ns_videos/2020-tesla-impact-report.pdf); <https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle>; <https://www.statista.com/statistics/183505/number-of-vehicles-in-the-united-states-since-1990/>
- <sup>xiii</sup> <https://www2.deloitte.com/us/en/insights/focus/future-of-mobility/electric-vehicle-trends-2030.html>
- <sup>xiv</sup> <https://www.eia.gov/dnav/ng/hist/n9050pa2a.htm>
- <sup>xv</sup> U.S. Energy Information Administration ([https://www.eia.gov/dnav/ng/ng\\_prod\\_sum\\_a\\_epgo\\_fgw\\_mmcfc\\_a.htm](https://www.eia.gov/dnav/ng/ng_prod_sum_a_epgo_fgw_mmcfc_a.htm))
- <sup>xvi</sup> U.S. Energy Information Administration (<https://www.eia.gov/environment/emissions/state/>)
- <sup>xvii</sup> U.S. Energy Information Administration (<https://www.eia.gov/environment/emissions/state/>)
- <sup>xviii</sup> U.S. Energy Information Administration (<https://www.eia.gov/environment/emissions/state/>)
- <sup>xix</sup> U.S. Energy Information Administration (March 2021).
- <sup>xx</sup> <https://www.cleanenergywire.org/factsheets/what-german-households-pay-power>; <https://www.statista.com/statistics/183700/us-average-retail-electricity-price-since-1990/>
- <sup>xxi</sup> <https://www.eia.gov/dnav/ng/hist/n9050us2a.htm>
- <sup>xxii</sup> <https://www.eia.gov/coal/annual/>
- <sup>xxiii</sup> <https://ourworldindata.org/grapher/coal-production-by-country>
- <sup>xxiv</sup> <https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions>
- <sup>xxv</sup> <https://ourworldindata.org/grapher/gas-production-by-country>
- <sup>xxvi</sup> <https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data#Country>
- <sup>xxvii</sup> <https://globalenergymonitor.org/projects/global-coal-plant-tracker/dashboard/>
- <sup>xxviii</sup> <https://cfpub.epa.gov/ghgdata/inventoryexplorer/#electricitygeneration/entiresector/allgas/category/all>;  
<https://www.eia.gov/energyexplained/electricity/electricity-in-the-us.php>