

**STATE PERSPECTIVES ON
CUTTING METHANE POLLUTION**

HEARING
BEFORE THE
**SELECT COMMITTEE ON THE
CLIMATE CRISIS**
HOUSE OF REPRESENTATIVES
ONE HUNDRED SEVENTEENTH CONGRESS
SECOND SESSION

HEARING HELD
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STATE PERSPECTIVES ON CUTTING METHANE POLLUTION

TUESDAY, JUNE 14, 2022

HOUSE OF REPRESENTATIVES,
SELECT COMMITTEE ON THE CLIMATE CRISIS,
Washington, DC.

The committee met, pursuant to call, at 1:04 p.m., in Room 1334, Longworth House Office Building, Hon. Kathy Castor [chairwoman of the committee] presiding.

Present: Representatives Castor, Bonamici, Brownley, Huffman, McEachin, Escobar, Graves, Palmer, Carter, Miller, and Crenshaw. Ms. CASTOR. The committee will come to order.

Welcome to the Select Committee on the Climate Crisis hearing on “State Perspectives on Cutting Methane Pollution.”

Without objection, the Chair is authorized to declare a recess of the committee at any time.

And as a reminder, members participating in a hearing remotely should be visible on the camera throughout the hearing.

For members participating in person, masks are optional.

As with in-person meetings, members are responsible for controlling their own microphones. Members can be muted by staff only to avoid inadvertent background noise.

And as a reminder, statements, documents, or motions must be submitted to the electronic repository, to sccc.repository@mail.house.gov.

Finally, members or witnesses experiencing technical problems should inform the committee staff immediately.

Well, good afternoon, everyone, and thank you for joining this hybrid hearing.

Before we begin, we are all deeply saddened by the loss of our dear colleague Representative Sean Casten’s daughter Gwen yesterday. So I would like to ask for a moment of prayer or silent reflection to lift up Representative Casten and his family.

[Moment of silence.]

Ms. CASTOR. Thank you.

So in the hearing today we will examine state perspectives on cutting harmful methane pollution from oil and gas infrastructure and how Federal standards, policies, and investments can complement state initiatives.

I will now recognize myself for 5 minutes for an opening statement.

We are so excited today to have two distinguished guests for this important hearing. We are going to learn directly from Governor Michelle Lujan Grisham, one of our former colleagues, the Governor of New Mexico, and Governor Mark Gordon of Wyoming.

Thank you both for being here to share your unique perspectives on climate solutions.

We often focus on carbon dioxide as the main driver of the climate crisis, but it is also critical that we address methane, the second-largest source of heat-trapping pollution. Methane is a potent greenhouse gas and is responsible for about 30 percent of global warming in the modern era. And while it leaves the atmosphere faster than CO₂, it traps 87 times as much heat while it lingers.

Last year, the Intergovernmental Panel on Climate Change urged us to work to reduce this super-pollutant. And while the Biden administration, Congress, and many states have adopted policies to reduce methane pollution and energy waste, methane levels have jumped dramatically over the last decade and emissions remain at the highest levels on record.

Fortunately, there are cost-effective ways to dramatically reduce methane pollution from the oil and gas sector, which remains the largest industrial methane source in the United States.

Fossil fuels were responsible for approximately 80 percent of the increase in methane emissions between 2006 and 2017 across North America, according to an analysis from NASA and Stanford, and methane can escape at nearly every stage during the production, transmission, and distribution of oil and gas.

And all of these leaks add up. Producers could have sold an additional 180 billion cubic meters of natural gas, the equivalent of the entire European market, if all leaks from global fossil fuel operations had been captured last year, according to the International Energy Agency.

And according to a separate analysis by the IEA, the oil and gas industry could slash its methane emissions in half at no net cost just by deploying existing technologies.

So taking these actions has broad support. Last year, we voted to require companies to regularly find and repair methane leaks. Major oil and gas companies supported the measure—but only 12 House Republicans voted for it, unfortunately.

Our friends across the aisle often call for expanding production of natural gas as a solution to the climate crisis. But unless harmful methane pollution is addressed, the climate impacts of gas can be worse than the coal it may replace.

Plugging methane leaks is low-hanging fruit, and it is good for producers' bottom line as well. And because of Putin's invasion of Ukraine, it is now a security imperative. Capturing wasted methane could meet more than half of President Biden's LNG commitment to Europe.

Stopping energy waste will help both everyday Americans and our allies abroad. It will also support good-paying jobs here in America. Those jobs include plugging and remediating abandoned wells, expanding leak detection and repair, and increasing maintenance and inspections.

According to the BlueGreen Alliance, unleashing this potential could create 50,000-plus jobs over the decade. Repairing and replacing leaking natural gas distribution lines could create 300,000 more jobs.

That win-win scenario is one of the reasons we invested \$4.7 billion to help states and Tribes plug and remediate abandoned oil and gas wells in the Bipartisan Infrastructure Law.

We also invested more for abandoned mine reclamation, for natural gas pipeline modernization, and to mitigate the environmental risks of undocumented orphan wells.

We are excited about the progress at the state level, Governors.

New Mexico now requires regular and frequent leak detection and repair, and a new measure will help eliminate routine venting and flaring across that state.

And in Wyoming, state officials stepped up after the Trump administration weakened Federal methane safeguards. They created state-level emissions limits and required leak detection and repair on new and modified sources.

But there is so much more to be done—and quickly—as the costly impacts of the climate crisis continue to grow and the window to act to avoid the worst impacts is rapidly closing.

We need robust Federal rules to find and repair leaks from both new and existing sources, including marginal wells, and we need to end routine venting and flaring, which wastes energy and harms the public health.

So we are looking forward to a robust discussion today.

At this time, I will recognize the Ranking Member, Mr. Graves, for a 5-minute opening statement.

[The statement of Ms. Castor follows:]

**Opening Statement of Chair Kathy Castor
Hearing on “State Perspectives on Cutting Methane Pollution”**

June 14, 2022

As prepared for delivery

I’m excited to recognize our two distinguished guests for this important hearing so we can learn from them: Governor Michelle Lujan Grisham, of New Mexico, and Governor Mark Gordon, of Wyoming. Thank you for being here to share your unique perspectives on climate solutions.

We often focus on carbon dioxide as the main driver of the climate crisis. But it’s also critical that we address methane, the second-largest source of heat-trapping pollution. Methane is a potent greenhouse gas and is responsible for about 30% of global warming in the modern era. And while it leaves the atmosphere faster than CO₂, it traps 87 times as much heat while it lingers. Last year, the Intergovernmental Panel on Climate Change urged us to work to reduce this super-pollutant. And while the Biden administration, Congress, and many states have adopted policies to reduce methane pollution and energy waste, methane levels have jumped dramatically over the past decade and emissions remain at the highest levels on record.

Fortunately, there are cost-effective ways to dramatically reduce methane pollution from the oil and natural gas sector, which remains the largest industrial methane source in the United States. Fossil fuels were responsible for approximately 80% of the increase in methane emissions between 2006 and 2017 across North America, according to analysis from NASA and Stanford. And methane can escape at nearly every stage during the production, transmission, and distribution of oil and gas. These leaks add up. Producers could have sold an additional 180 billion cubic meters of natural gas—the equivalent of the entire European gas market—if all leaks from global fossil fuel operations had been captured last year, according to the International Energy Agency. And according to a separate IEA analysis, the oil and gas industry could slash its methane emissions in half at no net cost just by deploying existing technologies.

Taking these actions has broad support. Last year, we voted to require companies to regularly find and repair methane leaks. Major oil and gas companies supported the measure, but only 12 House Republicans voted for it. Our friends across the

aisle often call for expanding production of natural gas as a solution to the climate crisis, but unless harmful methane pollution is addressed, the climate impacts of gas can be worse than the coal it may replace.

Plugging methane leaks is low-hanging fruit and it is good for producers' bottom line. And because of Putin's invasion of Ukraine, it's now a security imperative as well. Capturing wasted methane could meet more than half of President Biden's LNG commitment to Europe. Stopping energy waste will help both everyday Americans and our allies abroad. It will also support good-paying jobs across America. Those jobs include plugging and remediating abandoned wells, expanding leak detection and repair, and increasing maintenance and inspections. According to BlueGreen Alliance, unleashing this potential could create 50,000-plus jobs over a decade. Repairing and replacing leaky natural gas distribution pipelines could create 300,000 more.

That "win-win" scenario is one of the reasons we invested \$4.7 billion to help states and tribes plug and remediate abandoned oil and gas wells in the Bipartisan Infrastructure Law. We also invested more for abandoned mine land reclamation, for natural gas pipeline modernization, and to mitigate the environmental risks of undocumented orphaned wells.

We're also excited about progress at the state level. New Mexico now requires regular and frequent leak detection and repair, and a new measure will help eliminate routine venting and flaring across the state. And in Wyoming, state officials stepped up after the Trump administration weakened federal methane safeguards, creating state-level emissions limits and requiring leak detection and repair on new and modified sources.

But there is so much more to be done—and quickly—as the costly impacts of the climate crisis continue to grow and the window to act to avoid the worst impacts is rapidly closing. We need robust federal rules to find and repair leaks from both new and existing sources, including marginal wells. And we need to end routine venting and flaring, which wastes energy and harms public health.

I look forward to today's discussion.

Mr. GRAVES. Thank you, Madam Chair.

Governors, thank you for being here.

Governor Grisham, great to see you again.

The Chair made a really important point. Methane emissions is actually an energy source. Methane is something that can be captured and sold. And I think one of the important things to keep in mind is that the more that we can do to capture this, it really aligns the incentives for energy producers.

Let me say that again. If you can capture methane, there is actually an energy market for it, and so incentives are aligned.

One of the problems with methane capture has been the ability to actually build infrastructure to be able to get this product to market, things like pipelines in some cases that have been prohibited or banned as we move forward. The Chair noted that there have been Republicans that voted against methane regulations in the United States.

And let's put all this in perspective, and I think it is one of the greatest areas where we don't see eye to eye.

Coal production, for example, in China, it has about a 33 percent greater emissions profile than U.S. coal. We can sit here and say, well, we want to stop and ban all U.S. coal.

Well, the reality is that our Governors today that are here both have significant coal reserves. They produce it cleaner than anywhere else. As long as there is global demand, why not produce it in areas where we have lower emissions and we can do it cleaner?

Do I fully agree that we need to be moving in a direction of lower emissions and cleaner energy solutions? Absolutely. But we can't be irrational to what is happening with global markets.

Something we talked about at the last hearing, and I think it is important to bring up right now, U.S. natural gas compared to

Russian gas. We were fighting the administration's efforts to become more dependent upon Russian energy.

Unfortunately, we failed there. But, for example, Russian gas has about a 41 percent higher emissions profile in Europe than U.S. gas.

And so we can sit here and continue and try and deploy these strategies that think that everything is going to be powered by renewable energy technologies overnight; or we can be rational and actually base our energy strategy on the predictions of the Biden administration that show that natural gas demand for developing countries is going to increase 44 to 80 percent over the next 30 years.

We can be rational and recognize that natural gas demand in developed countries is going to increase somewhere between 31 and 58 percent over the next 30 years while we continue to work toward deploying renewable energy resources.

Look, let me be clear. Let me be clear. Continuing to build upon the successes of our Governors that are here today in deploying methane-reduction strategies that allow for U.S. energy to be competitive in global markets is something that we should all agree with, that we should all be supporting.

Something else that we should all be agreeing upon and supporting is working on our regulatory structure in the United States. Instead of having roughly four different authorities that are tied back to methane and regulations, instead let's look at a more efficient regulatory strategy that actually results in affordable methane capture that allows us to be able to get this to market and be able to continue the trajectory that the United States has led over the last about 17 years, which is leading the world in reducing global emissions.

Unfortunately, we saw a significant turn last year with the Biden administration where emissions went from a decline, an average of about 2.5 percent a year, to increasing 6.3 percent under the Biden administration in 1 year.

And, unfortunately, it appears, at least the beginning of this year, we continue to be on an upward trajectory. So higher emissions, unaffordable energy costs, and greater dependence upon foreign sources.

Look, in closing, I just want to make note, we have watched this administration come out and say: hey, we are going to go ask for Saudi Arabia, ask for Iran, ask for Venezuela, and in some cases just recently even asking China to meet the energy demands of the United States.

We produce it cleaner, we produce it safer in the United States than anywhere else in the world.

We need to be learning from states like Governor Gordon and Governor Grisham, we need to be learning from them, learning from their efforts to deploy emissions reduction, methane capture strategies in their states, and build upon those successes across the United States and across the globe.

We can bring down the cost of energy. We can increase our energy security, and we can reduce global emissions by employing strategies that actually make sense and meet the affordability test.

Thank you, Madam Chair. Yield back.

Ms. CASTOR. Well, next we will introduce our witnesses. We do anticipate learning a lot from them today.

We have the Honorable Michelle Lujan Grisham. She is the 32nd Governor of the great State of New Mexico, the first Democratic Latina to be elected Governor in U.S. history. She was elected in 2018, after having previously served here with us in the House of Representatives from the First Congressional District, served here from 2013 till the time she was elected Governor.

Also, the Honorable Mark Gordon is the 33rd Governor of Wyoming, elected in 2018. Governor Gordon previously served as the Wyoming State Treasurer beginning in October 2012 until January 2019 when he was sworn in as Governor.

I want to say to both of you, thank you very much for being here today. We know that both of your states are struggling with costly climate impacts—in New Mexico wildfires, in Wyoming floods.

So we need to learn from you today, and our thoughts are with you as you continue to lift up the citizens of your states in dealing with those growing catastrophes.

Without objection, the witnesses' written statements will be made part of the record.

With that, Governor Lujan Grisham, you are now recognized for a 5-minute presentation. Welcome.

STATEMENTS OF THE HONORABLE MICHELLE LUJAN GRISHAM, GOVERNOR, NEW MEXICO; AND THE HONORABLE MARK GORDON, GOVERNOR, WYOMING

STATEMENT OF THE HONORABLE MICHELLE LUJAN GRISHAM

Governor LUJAN GRISHAM. Good afternoon, everyone.

Madam Chairwoman, nice to see you again. Ranking Member Graves. It is an honor to be before you and the entire special committee on climate. I appreciate the invitation to testify before you today.

As you heard in the introduction, I am currently the very proud Governor of New Mexico.

My goal is to discuss actions that New Mexico has taken to address the climate crisis with an emphasis on steps we are taking to minimize methane emissions that contribute to the global climate change, actions that are nationally leading models for Federal agencies and other states.

Now, as everyone I think on this committee knows, New Mexico is a major energy-producing state. We are, in fact, the second-largest onshore oil producer, a major natural gas producer, a major solar producer, and home to the largest wind power plant in North America.

New Mexico is also strongly committed to addressing the climate crisis. And one of my first actions as Governor was to set New Mexico on a path toward a greener future, signing an executive order directing the state to achieve statewide greenhouse gas reductions of at least 45 percent by 2030, increase renewable portfolio standards for electric vehicles, identify transmission corridors needed to transport renewable energy to market, and develop a statewide strategy to reduce oil and gas sector methane emissions.

Now, as a result of this work, we will reduce emissions by 31 million metric tons by 2030. Additional proposals under our development in transportation and infrastructure, power generation, agriculture and forestry, among others, will reduce emissions by an additional 17 million metric tons.

Now, while this is tremendous progress, we still need to develop strategies to find an additional 16 million metric tons of emissions to meet our greenhouse gas reduction obligations, which is why public and private innovations are key to everyone's success in closing the gap.

The industrial sector, including oil and gas, is New Mexico's largest source of greenhouse gas emissions, representing 53 percent of all emissions in the state. New Mexico has a long history of oil and gas production and recently became the second-highest oil-producing state behind Texas.

The oil and gas industry is both extremely important to New Mexico's economy and the state's largest source of climate pollution. Reducing natural gas waste from venting, flaring, and leaks is critical to meeting our climate targets.

New Mexico cannot reach its climate goals without tackling methane pollution. Given that reality, we have embarked on a comprehensive approach to reduce those emissions, which resulted in nationally leading regulations.

In 2021, the state finalized natural gas waste rules requiring that 98 percent of produced and transported gas be captured by the end of 2026. The rule establishes, first, baselines to reduce waste, then requires operators to meet those reduction targets. Importantly, the rules prohibit routine venting and flaring, with limited exceptions for emergencies and safety threats.

We also enacted a complementary rule that will reduce ozone pollution, the co-benefit of methane reductions. It is estimated to eliminate up to 426,000 tons of methane emissions annually. Now, that is equivalent to the power needed for 1.2 million homes per year.

These rules for new and existing sources apply to all wells, large or small, and they encourage innovation by the industry. They also require, as you heard frequently, detection and repair, which is important for fence line communities while creating job growth.

New Mexico's rules create a predictable and fair environment for industry that encourages innovation, eliminates waste, and removing the most potent emissions from the atmosphere and combating climate change. The rules are a model for the nation and other states, complementing each other without conflicts or gaps.

Further, these rules are a serious economic driver. There are now at least 12 firms in New Mexico who specialize in methane mitigation services or equipment manufacturing, and this is the sector where we think we will see thousands of new New Mexico jobs.

New Mexico shows what it looks like to be a climate leader and a major energy producer while growing and diversifying our economy.

Now, we know our work has impacts beyond our borders, but also recognize that we need to do more. We need to look no further than this state to see the devastating impacts climate change is already having on our state and communities.

Today, the two largest wildfires in New Mexico history continue to burn in our state, more than 70 straight days. The Hermits Peak Calf Canyon fire is now the largest burning in the United States. It has been burning since April, more than a month before the traditional start of fire season. These fires have been devastating, forever changing the lives and livelihoods of thousands of New Mexicans.

Sadly, extreme events like this are becoming the norm, and it is going to take all of us, across every level of government, to reverse these extreme impacts and address the climate crisis for ourselves and generations to come.

I thank you for the opportunity to testify before you today and answer questions.

[The statement of Governor Lujan Grisham follows:]

**Written Statement of Governor Michelle Lujan Grisham
State of New Mexico**

Hearing on “State Perspectives on Cutting Methane Pollution”

Before the

U.S. House Select Committee on the Climate Crisis

June 14, 2022

Good afternoon, Madam Chair and Members of the Committee. Thank you for inviting me to testify today. I am Governor Michelle Lujan Grisham from the State of New Mexico.

Today I will speak about New Mexico’s actions to address the climate crisis. I will discuss a broad range of policy, regulatory, and legislative actions we’ve taken, with emphasis on actions we’re taking to minimize methane emissions that contribute to global climate change. New Mexico’s climate actions, especially regarding methane, are nationally leading models for federal agencies and other states.

New Mexico is a major energy-producing state. We are the second-largest onshore oil producer, a major natural gas producer, and home to the largest wind power plant in North America. New Mexico is also strongly committed to addressing the climate crisis. Reducing greenhouse gas (GHG) emissions and keeping warming to less than or equal to 1.5 degrees Celsius is critical to the health and well-being of all New Mexicans—and everyone on the planet.

One of my first major actions as governor was to set New Mexico on a path toward a greener future when I signed Executive Order 2019–003 *Addressing Climate Change and Energy Waste Prevention* (“Executive Order”).¹ The Executive Order directed the state to join the U.S. Climate Alliance and achieve statewide GHG reductions of at least 45% by 2030 compared to 2005 levels. It also established an inter-agency Climate Change Task Force and directed actions including:

- Legislation to increase the New Mexico renewable portfolio standard and increase energy efficiency standards for electric utilities;
- Adoption of clean car standards;
- Adoption of building energy codes;
- Collaboration with the New Mexico Renewable Energy Transmission Authority (RETA) to identify transmission corridors needed to transport the state’s renewable energy to market; and
- Development of a statewide, enforceable regulatory framework to secure reductions in oil and gas sector methane emissions and to prevent waste from new and existing sources.

All the specific policy directives I just mentioned have been accomplished and are in the implementation stage. In 2019 I signed the Energy Transition Act (ETA), enacting an 80% renewable portfolio standard and a 100% zero-carbon standard by 2050 for all electricity providers in the state. Importantly, the ETA also provides tens of millions of dollars of transition assistance for impacted communities and

¹ Executive Order 2019–003 *Addressing Climate Change and Energy Waste Prevention* https://www.governor.state.nm.us/wp-content/uploads/2019/01/EO_2019-003.pdf.

workers affected by the coal-to-clean transition. We also have adopted clean car standards and updated our statewide building energy codes. RETA completed an electric transmission study in 2020 and updated it in 2022,² and last year in a public-private partnership with Pattern Energy, brought the 155-mile high-voltage Western Spirit transmission line into commercial operation.

In 2020, a study from Colorado State University analyzed New Mexico's GHG emissions in detail, giving us the best estimates to date of our recent and projected emissions.³ In 2018, New Mexico emitted approximately 113.6 million metric tons (MMT) of GHG emissions—an amount equal to approximately 1.8% of total U.S. GHG emissions (6,457 MMT). The emissions are generated by the industrial sector (including oil and gas) at 53%, transportation sector (14%), electricity generation (11%), other industry (7%), agriculture (7%), natural and working lands (5%), and commercial and residential users (3%).

Our GHG inventory informed additional policies and investments. In a rural state like New Mexico, we know we must take continued action to reduce emissions from the transportation industry. We have made quick progress deploying additional electric vehicle (EV) charging infrastructure statewide, making EV use easier and more accessible. Visitors to New Mexico can now pick up a rented EV at the Albuquerque Sunport and drive to ski in Taos, explore the Navajo Code Talkers Museum in Gallup, or hike in Caballo Lake State Park without worrying about running low on charge. In 2021, 69 new charging stations were installed across the state, bringing the total to 166 publicly available stations with 391 individual charging outlets. Also in 2021, NMED designated approximately \$7.4 million of Volkswagen settlement money for projects to reduce emissions from diesel-fueled vehicles. Finally, we will be investing an additional \$38 million over the next five years into our EV charging infrastructure thanks to the funding provided in the Bipartisan Infrastructure Law.

We did not stop with charging infrastructure investments; we also adopted a clean car rule to ensure that low and zero emission vehicles are available in New Mexico. Our clean car rule implements California's Advanced Clean Cars program beginning July 1, 2022. The regulations will reduce emissions of greenhouse gases and ozone- and smog-causing pollutants from new passenger cars, trucks, and SUVs starting in model year 2026. The clean car rule is projected to eliminate about 130,000 tons of greenhouse gases and over 1,700 tons of harmful ozone-forming air pollution in New Mexico by 2050. All while saving New Mexicans \$237 million in fuel and maintenance costs by 2050.

We have made solar more affordable and accessible through the Community Solar Act, which requires that each project must have a 30% carve-out of its capacity reserved for low-income customers and low-income service organizations. In the first two years of our new Solar Market Development Tax Credit, over 2,300 solar projects per year are providing more than 16 MWs of energy and have been installed in nearly every New Mexico county.

Our public engagement on climate is ramping up too. We have established a Technical Advisory Group of public members to advise our climate work and a comprehensive set of equity principles to guide all state agencies' climate work.

The 2021 report from the Climate Change Task Force provides additional details about our progress to date.⁴ Our current policies will reduce emissions by 31 million metric tons (MMT) of carbon dioxide equivalent (CO₂e) by 2030. Policies that we have planned will reduce emissions by an additional 17.3 MMT of CO₂e. While this is tremendous progress, we still need to develop policies and strategies to find an additional 16.4 MMT CO₂e of emission reductions to meet our GHG reduction obligations.

The industrial sector, which includes oil and gas production, is the largest source of greenhouse gas emissions in New Mexico—representing approximately 53% of all GHG emissions in the state. A substantial portion of those emissions are methane, which the U.S. Environmental Protection Agency estimates is 25 times more potent than carbon dioxide. However, methane is a short-lived GHG in the atmosphere, so reducing methane concentrations now can slow temperature rise through mid-century.

New Mexico has a long oil and gas production history, starting in the 1920s. The state's two major basins are the San Juan Basin, which is predominantly a natural gas-production region located in the northwest section of the state, and the Dela-

² <https://nmreta.com/nm-reta-transmission-study/>.

³ Sharad Bharadwaj, et al., "New Mexico Greenhouse Gas (GHG) Emissions Inventory and Forecast" (Prepared for the Center for the New Energy Economy at Colorado State University by Energy and Environmental Economics, Inc., October 27, 2020), <https://cnee.colostate.edu/repowering-western-economy>.

⁴ Available at <https://www.climateaction.nm.gov/>.

ware Basin—which is part of the Permian Basin and is an oil-production region in the southeast portion of the state with large volumes of associated natural gas.

Today, the Permian Basin that stretches under southeastern New Mexico and into Texas is the largest oil producing area in the United States. New Mexico oil production has increased by over 700% in the past 10 years, making our state the 2nd highest oil producing state behind Texas. These dramatic increases are largely the result of shale development through horizontal drilling and hydraulic fracturing. This production has resulted in record-high revenues for the state of New Mexico, which we've invested in priorities like free college for all New Mexicans, expanded access to early childhood education, and raises for our educators.

The oil and gas industry is extremely important to New Mexico's economy and is also the state's largest source of climate pollution. Reducing natural gas waste from venting, flaring, and leaks, as well as ozone precursors is mission-critical to meeting New Mexico's climate targets. In short, New Mexico cannot reach its GHG reduction goals without tackling methane pollution. Given that reality, we embarked on a conscientious and comprehensive approach to reduce those emissions. The result was a framework of nationally leading regulations.

Both the New Mexico Environment Department (NMED) and the Energy, Minerals and Natural Resources Department (EMNRD) regulate aspects of the oil and gas sector. NMED regulates air pollution under the state Air Quality Control Act, while EMNRD regulates the waste of a resource (natural gas) under the state Oil and Gas Act. Finalized in 2021, EMNRD's natural gas waste rules require that 98% of natural gas produced and transported be captured by the end of 2026, preventing it from entering the atmosphere and contributing to a warming climate. Meanwhile, NMED's rule adopted this spring will not only curb harmful air pollutants from the oil and gas industry but eliminate up to 426,000 tons of methane emissions annually.

The agencies approached their respective rulemakings in a collaborative manner. They each committed to two years of stakeholder engagement before formally proposing draft rules. Even during the COVID-19 pandemic, we succeeded in doing this preparatory work through virtual meetings and negotiations. We also went beyond the legally required public notices to ensure that by the time we started the formal rulemaking process we had resolved as many concerns as possible from industry, non-governmental organizations, and other members of the public. This commitment to engagement and transparency throughout the process fostered a sense of ownership and helped build consensus among a broad range of stakeholders, including tribal governments, non-governmental organizations, industry and the public.

To ensure that we developed rules based on the best technical and scientific data available, NMED and EMNRD also jointly convened a Methane Advisory Panel (MAP). The group dove into the details of natural gas dehydration units, compressors and engines, and all aspects of technology related to leaks, venting, and flaring. Both agencies benefited from the MAP's technical report which formed the basis for both departments' rules.⁵

EMNRD's final rule requires 98% gas capture from production and midstream operations by the end of 2026. Starting in May 2021 and ending in May 2022, Phase 1 establishes meaningful baselines and enforceable goals to reduce natural gas waste. Beginning in June 2022, Phase 2 requires operators to meet the reduction targets established in Phase 1. Importantly, the rules prohibit routine venting and flaring and limit operational venting and flaring to tightly defined exceptions—and it all must be reported to EMNRD so that regulators and the public know exactly how many emissions are entering the atmosphere from the industry. The rules are technology-neutral, so as new emerging technologies evolve the rules will not need to be revised.

This spring, NMED's ozone precursor rules were enacted. These rules will reduce ozone pollution and toxic air contaminants, as well as ozone precursor pollutants—which has the co-benefit of reducing methane emissions. The environmental benefits are estimated to eliminate up to 426,000 tons of methane emissions annually, equivalent to the energy needed to power 1.2 million homes per year. These enforceable rules for new and existing sources apply to all wells, large or small, with appropriately scaled requirements. They encourage innovation by being technology-agnostic on emission controls and monitoring practices. They also require frequent leak detection and repair, which is important for fence line communities, while creating local jobs. Finally, there are emission reduction requirements for significant sources of methane, including storage tanks, pneumatic controllers and pumps, natural gas well liquid unloading, compressors, glycol dehydrators, pig launching and receiving,

⁵ <https://www.env.nm.gov/new-mexico-methane-strategy/methane-advisory-panel/>.

well workovers, and produced water management units. The rule also establishes a rebuttable presumption for industry to demonstrate its compliance when credible evidence from a third party is presented to the state that otherwise suggests a potential violation.

Together, New Mexico's rules work in concert with one another, providing a comprehensive regulatory framework while not being duplicative or mutually exclusive. The rules are nation leading by requiring enforceable emission reductions, encouraging innovation, and complementing each other without conflicts or gaps. The U.S. Environmental Protection Agency and Bureau of Land Management should model national efforts on New Mexico's success.

New Mexico shows what it looks like to be a climate leader and a major energy producer, while growing and diversifying our economy. Our efforts were on the world stage in November 2021, when I represented New Mexico at the United Nations Climate Change Conference in Glasgow, Scotland. I was honored to speak alongside President Joe Biden's top climate advisors, where I highlighted New Mexico's climate successes. In Scotland, we heard again and again that effective government at the sub-national level is often what initiates, influences, and steers global action. We know our work has impacts beyond our borders, but also recognize it is not done. Scientists call this the "decisive decade" for climate action.

And we need look no further than my own state to see the devastating impacts climate change is already having on our communities. Today, the two largest wildfires in New Mexico history continue burn in our state. One of these fires has been burning since April, more than a month before the traditional start of fire season. Firefighting costs alone for these fires are estimated at about \$230 million, and that's without the extensive work that must be done to repair and rebuild our communities, the surrounding forests, and the watersheds. But even more important than the cost, we've suffered tremendous losses. Family homes steeped in centuries of tradition went up in flames, and the lives of thousands of New Mexicans have been upended and forever changed.

We can't sit back and allow disasters like this to become the norm. We're doing everything we can in New Mexico to meet the climate crisis head-on. But it's going to take all of us, across every level of government, to reverse the extreme impacts we're already starting to see and address the climate crises for ourselves and the generations to come.

Thank you for the opportunity to testify today.

Ms. CASTOR. Thank you, Governor.

Next, Governor Gordon, you are recognized for 5 minutes to provide your testimony. Welcome.

STATEMENT OF THE HONORABLE MARK GORDON

Governor GORDON. Thank you and good afternoon, Chairwoman Castor, Ranking Member Graves, and members of the Select Committee on Climate. I am Mark Gordon, Governor of the great State of Wyoming, and I want to bring you greetings from the Equality State. Thank you for this opportunity and for your kind opening thoughts about what is going on in our state.

Although Governor Lujan Grisham and I are from different sides of the aisle, we are westerners and share a view that Governors and states are a key to managing methane emissions.

Like New Mexico, Wyoming has a long, productive history of oil and gas regulation. According to the U.S. Energy Information Administration, Wyoming is ranked ninth in natural gas production and accounts for about 4 percent of U.S.-marketed natural gas production. We produce more gas from Federal leases than any other state.

Policies like the ban on Federal oil and gas leasing are disproportionately harmful to Western states due to the amount of land and minerals held by the Federal Government and really for no effective reason. If the goal is to reduce greenhouse gas emissions, targeting the production of Federal fossil fuels only shifts production

to other countries, many of whom have far less stringent emission controls than the U.S., and in particular our Western states.

Revenue from fossil fuels in Wyoming funds our schools, healthcare, public safety, and other essential services. A University of Wyoming 2020 study estimated that eight Western states with Federal oil and gas leasing programs would have production value losses of \$872 million and tax revenue losses of \$345 million in the first year of the leasing moratorium.

While some may believe that keeping fossil fuels in the ground will reduce carbon dioxide in the atmosphere, I respectfully disagree. The issue, though urgent, is not that simple. Here in Wyoming, I have called for a net-negative CO₂ emission future using technologies such as carbon capture utilization and other technologies. I am committed that Wyoming will continue to take a lead in responsibly addressing climate concerns.

Wyoming does not need additional layers of Federal regulation to regulate methane emissions. Our regulatory process works and has buy-in from the Wyoming oil and gas industry. Our regulations are created, vetted, and voted on by the people in our state who work here and care about the health of their families and our environment.

Given the reality that fossil fuels will continue to be an essential component of energy consumption for years to come, it is vital to recognize what states such as Wyoming can do to minimize the footprint of energy sources. A 2021 study of the Georgia Institute of Technology concluded that Wyoming has the lowest fugitive methane emissions associated with production of natural gas in any Western state. Wyoming companies have earned that recognition.

Recently, Wyoming producer Jonah Energy announced its sole status of a gold standard ranking in the United Nations-sponsored Oil and Gas Methane Partnership 2.0. Wyoming is also a leader in responsibly sourced gas, or RSG, which includes environmental and community engagement attributes in addition to lower methane emissions.

Jonah Energy's RSG initiative, for example, includes the use of the latest technology, such as drones and continuous monitoring with testing for air emissions. Their gas operations also include 4,000 solar field units, thus reducing the amount of gas used in production.

Another Wyoming company, Flowstate, uses artificial intelligence to detect leaks. And, in 2021, PureWest Energy became the first company in the United States to provide carbon-neutral RSG offering to its customers.

Hydrogen also holds a great potential to decarbonize natural gas. The School of Energy Resources at the University of Wyoming recently launched a Hydrogen Energy Research Center.

So, in conclusion, Madam Chairwoman and Minority Ranking Member, first, for those who argue that state-controlled flaring is not effective, less than 1 percent, actually 0.17 percent of the gas in Wyoming is currently being flared.

Second, Wyoming's history with orphaned wells is a success. Without Federal assistance since 2010, the Wyoming Oil and Gas Conservation Commission has identified approximately 6,020 or-

phaned wells, and in that time frame nearly 5,000 have been plugged using bonds posted by orphaned operators and a tax paid by the oil and gas industry. No taxpayer money was used.

So these conclude my remarks. And, again, Chairwoman Castor, Ranking Member Graves, and members of the Select Committee, thank you for this opportunity. I am pleased to answer any questions.

[The statement of Governor Gordon follows:]

**Written Testimony of Wyoming Governor Mark Gordon
Before the House Select Committee on the Climate Crisis
Hearing on “State Perspectives on Cutting Methane Pollution”**

June 14, 2022

Natural gas will continue to be used to fuel the Nation’s economy, and indeed is a necessary resource to meet decarbonization goals. Wyoming is a leader in the natural gas industry generally, and specifically with respect to low-carbon natural gas and responsibly sourced gas (RSG). This written testimony provides additional background on these and related matters.

Background on Wyoming’s Critical Role in Natural Gas Markets

Wyoming produces fourteen times more energy than it consumes and is the biggest net energy supplier among the states. In 2020, Wyoming was the ninth-largest natural gas producer, accounting for almost 4% of U.S. marketed gas production.¹ Wyoming produces more natural gas from federal leases than any other state.²

Mining and oil and gas extraction are the biggest contributors to Wyoming’s gross domestic product (GDP). Mineral royalties, severance payments, and related taxes typically provide a substantial portion of state revenues.³ In 2020, oil and natural gas production: (1) paid over \$247M in severance taxes, about 59% of all the severance taxes paid by all minerals; and (2) accounted for over 40% of the total property taxes levied in Wyoming and nearly 70% of the property taxes levied on all minerals in 2020. Midstream operations in Wyoming support 9,217 high-paying jobs and contribute an annual average to state GDP of \$609M.⁴ Crude and natural gas production is spread across the state, and each fossil fuel was produced alone or together in 21 of Wyoming’s 23 counties during 2021.⁵

Wyoming ranks among the top 10 states in both natural gas reserves and marketed natural gas production. Two-thirds of the state’s natural gas is produced on federal lands leased by energy companies. Production takes place throughout the state, but most of Wyoming’s natural gas has come from fields in the Green River Basin, located in the state’s southwest corner. Wyoming has 16 of the nation’s 100 largest natural gas fields, including the Pinedale and Jonah fields that rank among the top 10.⁶

During 2020: (1) 211 companies in Wyoming produced natural gas; and (2) 14,449 wells were producing gas. In 2019 Wyoming had 25 operating gas plants processing nearly 97% of the state’s gas production. There are currently about 100 companies operating 30,000 miles of pipelines in Wyoming, not including all gathering systems or all inactive or abandoned pipelines. Pipelines are located in all of Wyoming’s 23 counties and carry crude, natural gas, natural gas liquids, carbon dioxide (CO₂) and petroleum products.⁷

¹“Wyoming State Profile and Energy Estimates” (U.S. Energy Information Administration, March 18, 2021) (available at <https://www.eia.gov/state/?sid=WY>).

²“Wyoming State Profile and Energy Estimates: Profile Analysis (U.S. Energy Information Administration” March 18, 2021) (available at <https://www.eia.gov/state/analysis.php?sid=WY>).

³*Id.*

⁴“Oil & Gas Facts and Figures 2021” (Petroleum Association of Wyoming, 2021) (available at <https://pawyo.org/facts-figures/>).

⁵*Id.*

⁶*Id.*

⁷“Oil & Gas Facts and Figures 2021” (Petroleum Association of Wyoming, 2021) (available at <https://pawyo.org/facts-figures/>).

Wyoming is the third-largest producer of coalbed methane, behind Colorado and New Mexico. Coalbed methane accounts for about 7% of the state's natural gas production.⁸

Wyoming consumes about one-tenth of the natural gas it produces. Two-fifths of the state's gas consumption is used in the production and distribution of energy. The state's industrial sector accounts for another two-fifths of gas use, and the residential, commercial, and electric power sectors together account for the remaining one-fifth of natural gas consumption. Natural gas is Wyoming's most widely used home heating fuel, found in 6 out of 10 households.⁹

Most natural gas produced in the state is shipped out through interstate pipelines that cross into Utah, Nebraska, Colorado, and Montana, on its way to both Midwest and West Coast markets. Several interstate pipelines converge at Opal, Wyoming, a major interstate natural gas trading hub. Some of the natural gas that remains in the state is placed in underground storage. Wyoming has nine natural gas underground storage sites that can hold a combined 140 billion cubic feet of gas, which is about 1.5% of U.S. total storage capacity.¹⁰

Wyoming is Committed to CO₂ Capture

Fossil fuels should, and will, continue to be an important mix in providing a consistent, reliable source of energy for our country. Coal and other fossil fuels have become the scapegoat for climate change fears. That target is misplaced, burning coal and other fossil fuels is not the issue, the release of CO₂ in the atmosphere is the issue. That is where the target should be and we are committed to the use of carbon capture to keep an "all the above" energy strategy for our state and nation.

Wyoming law provides that regulated electric utility companies must establish goals for low carbon power generation through the use of carbon capture. We are working with those companies to see that carbon capture becomes a part of their planning process.

Additional Federal Regulation of Methane is Not Needed

Let me be very clear, Wyoming does not need, nor do we welcome, an additional layer of federal regulation to regulate methane emissions. Our regulatory process works and has buy-in from the Wyoming oil and gas industry.

In Wyoming, we manage our natural and mineral resources exceptionally well, providing for both environmental stewardship and energy production. Wyoming's statutory and regulatory framework encourages the responsible production of oil and gas resources. Throughout the past twenty-six years, Wyoming has been recognized as a national leader in regulating air emissions from oil and gas production. In that time, Wyoming has issued over 29,000 air quality permitting actions to control and minimize emissions. In 1997, absent an U.S. Environmental Protection Agency (EPA) permitting program or guidance, Wyoming Department of Environmental Quality's (DEQ) Air Quality Division established its oil and gas minor source guidance and permitting program. This air emissions program is consistent with Wyoming's legislative directive aimed at preventing, reducing, and eliminating pollution and retaining primacy over Wyoming's air quality resources.

Wyoming's air permits are issued under its state implementation plan that the EPA has approved and codified into federal regulation. *See* 40 C.F.R. § 52.2620(c)(1) (2021).

EPA has long recognized that Wyoming is a leader in regulating air emissions from oil and gas production. In 2011, in response to the growth in hydraulically fractured natural gas wells, the EPA looked to Wyoming and Colorado as it developed its oil and gas new source performance standards for production equipment—commonly referred to as Quad O. EPA's rule recognized that some state permitting programs already regulated those wells and the rule took advantage of existing state compliance mechanisms.

Our history and experience have shown that the best regulatory process is at the state and local levels. We work closely with regulatory agencies such as the EPA, particularly since we have been delegated primacy over air. We earned that delegation and take that responsibility seriously. In short, let the states do their jobs.

⁸ "Wyoming State Profile and Energy Estimates: Profile Analysis" (U.S. Energy Information Administration, March 18, 2021) (available at <https://www.eia.gov/state/analysis.php?sid=WY>).

⁹ *Id.*

¹⁰ *Id.*

The Critical Role Played By Timely Federal Lease Sales

In order to develop fields responsibly, with minimal surface disturbance and the least amount of stranded oil and gas, leasing must be thoughtful, strategic, and forward-thinking. It may take a company several years and multiple sales for a successful bidder to gather enough leases to allow the organized development of the entire field to avoid waste and stranding assets. In Wyoming, much of the land is in what we call “the checkerboard,” where federal, private and state lands (or minerals) alternate section by section, much like a checkerboard. While it might look like a company is stockpiling leases, it is really attempting to gather enough leases to form a multi-section drilling spacing unit, working out pooling arrangements and verifying who gets rental and royalty payments. When you add the time necessary for environmental reviews and surface use agreements it is often years and the holding of many leases before the actual exploration can begin. Quarterly lease sales allow companies to keep working towards completing their development plans. A pause on leasing can set back development for years.

It is important to point out that the companies must pay the federal government while they hold the lease. Those payments come as bonus bids, rentals and royalty payments. Most companies do not have unlimited capital, thus they are not going to pay for leases that do not have the real potential for an eventual return. During the window when a company holds a lease, the lands remain available for other uses not incompatible with the ability to develop a lease.

Wyoming’s Leadership in Species and Habitat Protection

Wyoming has demonstrated unequaled leadership in mitigation efforts to protect species like Greater sage-grouse and vital habitat components such as migration routes have been established. Much of the work supporting these issues has been funded by the very industries hampered by the moratorium. NGOs, industry, local and state governments are cooperating for the greater good of the environment, society, and people’s well-being. But that progress is undermined when timely scheduled development is uncertain. Whole seasons, where development can occur, can be taken off-line, thereby further crippling activity in our state that will, in turn, imperil our local economy significantly and potentially catastrophically.

Wyoming’s oil and gas industry is an active participant in the protection and enhancement of wildlife. Projects sponsored by the industry have resulted in more and better habitat for species including mule deer, antelope and sage grouse. As the ability of these industries to develop oil and gas on federal lands decreases, so does their ability to contribute to habitat restoration and enhancement projects.

Wyoming is a Leader in Low-Carbon Intensity Natural Gas and RSG

Wyoming is a leader in responsible oil and gas development. The Wyoming Oil and Gas Conservation Commission (WOGCC) has stringent rules for flaring all wells (federal/fee/state). These are long-standing procedures that protect Wyoming’s environment. A small volume of flaring is allowed by rule if alternatives are determined to be uneconomical and for safety reasons during well drilling and completion activities. If operators believe it is necessary to flare volumes in excess of what is allowed by rule, they are required to apply for WOGCC approval. Part of this submission is a gas capture plan that details gas gathering systems, takeaway capacity, and gas treatment systems within the area, other producing and planned wells within the area, gas gathering companies operating within the area and information on the gas gathering line to which the operator proposes to connect. This information, along with detailed information concerning the well to be flared, is examined by the WOGCC as part of its consideration of approval for flaring. With these stringent rules on flaring, the total gas volumes flared in Wyoming for all wells is very small, less than one percent (0.17% in 2021) of all gas produced within the state in any given year.

The WOGCC also has a long-standing program to plug orphaned oil and gas wells. This program dates back to the early 1990s, and there are records of the WOGCC and the U.S. Geological Survey plugging orphan wells as early as the 1920s in Wyoming. Due to our efforts, there were minimal orphan wells in the state of Wyoming for many decades. However, in approximately 2010, several thousand coalbed methane wells were orphaned due to depressed gas prices. Since 2014 the WOGCC has conducted an accelerated orphan well plugging program to drastically reduce the number of orphan coalbed methane wells and plugged in excess of 1,000 wells in 2020. This plugging process was accomplished through the use of the bonds paid by those companies that abandoned the wells and a conservation fee that is paid by

the oil and gas industry. Except for some limited circumstances identified below, no taxpayer dollars have been used to permanently plug orphaned wells.

In 2018, the WOGCC partnered with the Bureau of Land Management's (BLM) Wyoming State Office to plug orphaned wells on federal mineral leases, building on the successful program on state and private land. These wells had been identified by the BLM in Wyoming as orphan, but since funding was not allocated to plug the wells, the BLM was not able to do anything with them. The BLM did have extra funding from other programs available, but was not able to work within the confines of the federal budgeting requirements to reallocate the funding to plug orphan wells. The WOGCC applied for a grant from the BLM to secure funding to plug the orphan federal wells. The WOGCC has extensive experience plugging thousands of orphan fee and state wells, thus bringing knowledge, experience and efficiency to the program by coordinating statewide bids for the plugging contractor, and BLM staff observed the plugging of the wells in the field. The WOGCC and BLM have successfully plugged 82 orphan federal wells and six abandoned produced water reservoirs in Wyoming for the two years this program existed.

The pace of plugging was picked up dramatically due to wise use of Coronavirus Aid, Relief, and Economic Security (CARES) Act funding. Under current requirements, today's wells are sufficiently bonded to assure plugging and appropriate abandonment activities. In the event plugging costs were to exceed the available bond, the WOGCC is authorized to utilize funds from conservation taxes paid by the oil and gas industry for the plugging of orphan/abandoned wells.

I recognize there are proposals currently being discussed for federal funding to plug more orphan/abandoned wells. While that would certainly be helpful, Wyoming is not betting on that outcome. Our program will continue, but it is important that the federal leasing program continues to provide a steady, consistent stream of federal leases along with leases on state and private lands. Without leases there are not any conservation taxes.

This aggressive program to plug wells means Wyoming does not have a significant problem with fugitive methane emissions, as discussed above.

Concerning overall emissions from oil and gas operations, DEQ works closely with EPA to oversee and regulate emissions. For the most part, we have a cooperative relationship that recognizes our ability and knowledge to adequately address any emission concerns. This includes one of the most responsible programs for regulating volatile organic compounds that also results in reduced methane emissions.

According to a 2021 study by researchers at the Georgia Institute of Technology, natural gas consumed in Wyoming has the lowest estimated consumption-normalized production-stage methane emissions of any state in the western United States (see Figure 1).¹¹ This does not come as a surprise as Wyoming has "long [been] a leader in taking on oil and gas" air emission issues, including being an early mover among the states in addressing fugitive methane emissions.¹² In 2021 Jonah Energy announced its sole status of Gold Standard ranking in the United Nations-sponsored Oil and Gas Methane Partnership 2.0.¹³ More broadly, last year I directed the state to pursue a goal of net negative CO₂ emissions *and* continue to use fossil fuels, a task that the Wyoming Energy Authority (WEA) is leading through the development of appropriate strategies.

¹¹Burns, D. et. seq. "Attribution of Production-Stage Methane Emissions to Assess Spatial Variability in the Climate Intensity of US Natural Gas Consumption," 2021 Environ. Res. Lett. 16 044059, Fig. 3 (available at <https://iopscience.iop.org/article/10.1088/1748-9326/abef33>); see also "States Looking to Decarbonize May Need to Weigh Their Gas' Origin—Study," (S&P Global Market Intelligence, March 18, 2021) (available at <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/states-looking-to-decarbonize-may-need-to-weigh-their-gas-s-origin-8211-study-63228122>).

¹²"Leading States Tackling Fugitive Emissions Problem Head-On" (EDF Blog, April 10, 2014) (available at <https://blogs.edf.org/energyexchange/2014/04/10/leading-states-tackling-fugitive-emissions-problem-head-on/>).

¹³"Jonah, PureWest Both Reach Natural Gas Milestones" (Pinedale Roundup, Nov. 18, 2021) (available at <https://pinedaleroundup.com/article/jonah-purewest-both-reach-natural-gas-milestones>).

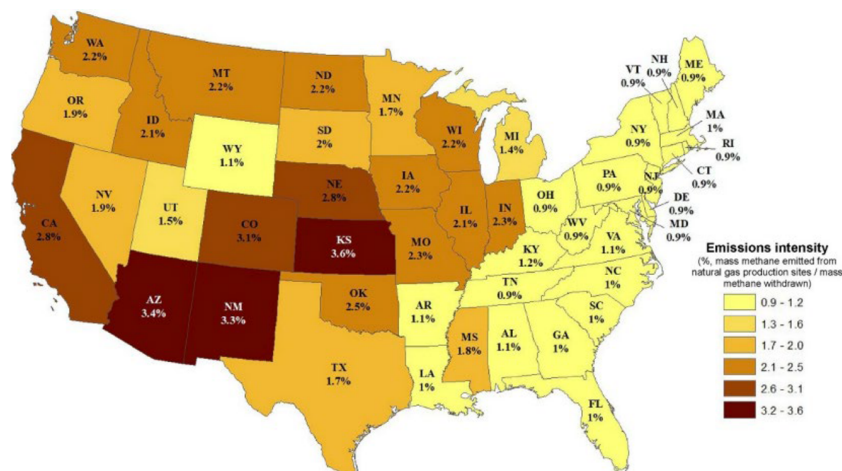


Fig. 1. Estimated consumption-normalized production-stage methane emissions for natural gas consumed in each state

Wyoming also is a leader in RSG. Jonah Energy has a RSG initiative, for example.¹⁴ And in 2021, PureWest Energy LLC, Wyoming's largest natural gas producer, became the first company in the United States to provide a carbon neutral RSG offering to customers.¹⁵

Wyoming also has several initiatives related to the production and utilization of hydrogen, including but not limited to blue hydrogen with natural gas as a feedstock as Wyoming is a leader in carbon capture & storage/carbon capture utilization & storage technologies, too.¹⁶ On March 17, 2021, for example, WEA opened a request for proposals for a hydrogen pilot project. Three finalists were subsequently approved for the "State of Wyoming Pilot Project: Design and/or Construction of a Pilot Project Demonstration 'Green' or 'Blue' Hydrogen Production and Use."¹⁷ On a related front, the School of Energy Resources (SER) at the University of Wyoming recently launched a Hydrogen Energy Research Center.¹⁸

Natural Gas is Necessary to Meet the Nation's Decarbonization Goals

In the United States, natural gas is envisioned to continue to play a vital role in meeting net-zero and related policy goals. According to the International Energy Agency (IEA), "[e]ven with falling battery costs, natural gas is currently the most viable near-term option in most parts of the United States for balancing renewable energy at scale and providing essential load-following services. While this raises the capacity value of natural gas power plants (reflected in the IEA's value-adjusted levelized cost of electricity generation), it does not automatically translate into increased natural gas use in power generation . . . [and] conventional gas power plants play an increasingly important role in providing system flexibility, while baseload

¹⁴ <https://www.jonahenergy.com/sustainability/responsibly-produced-gas/>.

¹⁵ "Private Wyoming Gas Producer Announces First US Carbon-Neutral RSG Offering" (Hart Energy, October 7, 2021) (available at <https://www.hartenergy.com/exclusives/private-wyoming-gas-producer-announces-first-us-carbon-neutral-rsg-offering-196627>).

¹⁶ With funding from the U.S. Department of Energy, one of the nation's leading CCS applied research projects—"Wyoming CarbonSAFE"—is based in Gillette, Wyoming. <https://www.uwoyo.edu/cegr/research-projects/wyoming-carbonsafe.html>. The Integrated Test Center—a leading research facility for CCUS technologies—is also located in Gillette. <https://www.wyomingitc.org/>. For these and other reasons, Wyoming truly is "CCUS ready." <https://www.wyoenergy.org/news/wyoming-is-ccus-ready/>.

¹⁷ <https://www.wyoenergy.org/news/awardees-for-the-hydrogen-pilot-project/>.

¹⁸ <https://www.uwoyo.edu/ser/research/centers-of-excellence/hydrogen-energy-research/index.html>.

generation is met by plants fitted with carbon capture, storage and utili[z]ation technology.”¹⁹

EIA recently “explore[d] [the] effects of not building future interstate natural gas pipelines” between 2024 and 2050, a possible outcome if either or both the Updated Policy Statement and Interim GHG Policy Statement are allowed to take effect. In that scenario, DOE projected in 2050 (and in comparison to the Reference Case of pipeline builds): (1) 5% less natural gas production; (2) 4% less natural gas consumption; (3) “the Henry Hub spot price . . . would be 11% higher”; (4) natural gas’s share of U.S. electricity generation would fall from 34% to 31%, with the deficit made up from renewables, coal and nuclear; and (5) CO₂ emissions would be only “slightly lower.”²⁰

In 2020/2021, WEA commissioned Professor Tim Considine, an economist at the University of Wyoming, to study the fiscal and economic ramifications that Wyoming could face with a moratorium on new federal leases for oil and gas companies, or a full drilling ban on onshore federal leases. According to Considine’s study, a leasing moratorium reduces Wyoming oil and gas tax revenues nearly \$200 million per year during the first five years. For onshore federal lands examined in the study, a leasing moratorium reduces oil and gas tax revenues by \$1.1 billion per year during the first five years. States with onshore federal lands use this income to fund education, health care, local governments, and special districts, such as conservation boards.²¹

In 2021, WEA, the Wyoming Enhanced Oil Recovery Institute and SER commissioned Advanced Resources, International (ARI) to conduct a similar study of the environmental and economic impacts of policy initiatives that suspend or restrict new leasing and drilling for fossil fuels on federal lands. The ARI study concluded: (1) GHG emissions could increase because of a federal leasing and/or drilling ban; (2) without an increase in oil and/or gas prices, U.S. oil and gas production could decrease by 21% to 34% by 2030; (3) a ban on future drilling on federal lands would prohibit development of 600 to 850 million barrels of incremental oil potential from CO₂ enhanced oil recovery in Wyoming, that would facilitate potential geologic storage of 420 to 570 million metric tons of CO₂; (4) without an increase in oil and gas prices, drilling levels in the six western states would drop by as much as 35% due to federal leasing/drilling policies; (5) in Wyoming, by 2030, drilling levels decline by 28%, growing to 43% by 2050; (6) in Wyoming, declines in expenditures associated with oil and gas well drilling would reach over \$800 million per year by 2030; and (7) in Wyoming, declines in state revenues associated from oil and gas production could reach over \$600 million per year by 2040.²²

Ms. CASTOR. Well, thank you, Governor Gordon.

I will recognize myself for 5 minutes to start off the questioning.

So, Governor Lujan Grisham, New Mexico, as you have stated, is a major energy-producing state. But when you came into office, you decided, well, we need to work on a balanced approach, and you ramped up renewables, you expanded cost savings for consumers through energy efficiency, and then moved to eliminate methane pollution and energy waste.

A lot of folks have said what you are doing in New Mexico is a model. What lessons can we learn from what you have done in New Mexico in this balanced approach that can inform our policymaking here in Washington?

Governor LUJAN GRISHAM. Chairwoman, thank you for that question. And I also want to take a moment to highlight the great work of my colleague from Wyoming.

¹⁹“The Role of Gas in Today’s Energy Transitions,” p. 56 (IEA, 2019) (available at <https://iea.blob.core.windows.net/assets/cc35f20f-7a94-44dc-a750-41c117517e93/TheRoleofGas.pdf>).

²⁰“EIA explores effects of not building future interstate natural gas pipelines” (EIA, April 4, 2022) (available at <https://www.eia.gov/todayinenergy/detail.php?id=51898>).

²¹“The Fiscal and Economic Impacts of Federal Onshore Oil and Gas Lease Moratorium and Drilling Ban Policies” (Dr. Tim Considine, Dec. 14, 2020) (available at <https://www.wyoenergy.org/wp-content/uploads/2020/12/Final-Report-Federal-Leasing-Drilling-Ban-Policies-121420.pdf>).

²²“Assessing Emission and Other Impacts Associated with the Proposed Federal Leasing Ban in Western States” (ARI, March 2021) (available at <https://www.eoriwyoming.org/downloads/Impacts-of-proposed-federal-leasing-ban-2021.pdf>).

States really are the innovators, and the Western states are clear about climate change and the climate crisis, and we all have a unique relationship with our industry and our stakeholders.

My advice to Congress is we did work with the oil and gas industry very closely and our environmental stakeholders, as well as constituents living in frontline communities.

This stakeholder group was critical in our success in not only passing the Energy Transition Act, which set both achievable but very robust climate crisis tackling solutions, including reductions in emissions and meeting renewable energy targets and getting them to market.

I think the problem is when you set these goals in motion, and strategies and policies, including our regulatory work, we do it in absence of the stakeholders and the actual industry who is critical to our success.

I think it is worth noting we haven't been challenged in court for any of our regulatory work. The oil and gas industry supported, through our legislature, additional investments in our regulatory state bodies that they are working diligently with us.

And most importantly, in terms of the innovation, in fact, New Mexico, I believe, is the only state through the industry that has fuel cells on site, which means we are not arguing about methane reductions and collections capture or flaring or leaking.

They are turning it into electricity on the spot, showing that the forward-thinking effort and this clear public-private partnership is not only meaningful but it is achievable. And they recognize that the climate crisis is real, that they have an obligation to address it.

In high-producing states like New Mexico, without that work, quite frankly, they run out of water. So we have a produced water rule, which means we are recycling water. The oil and gas industry asked New Mexico to work with other states, which we have done, including Texas, to promote those policies so that, again, they have consistency in what they do, that they are leading producers and innovators across the country, while meeting stringent, productive rules, but also making money.

We know that methane and natural gas create an opportunity for us to produce additional access to energy on the international market, as well as the USA market, but it also brings revenue, which brings jobs.

We don't want to waste methane and we want to address the climate crisis at the same time. The stakeholder set of agreements on the front end is exactly how you get there.

Ms. CASTOR. The Biden administration has proposed a methane rule. How would the Federal methane rule proposed by EPA complement what you have done at the state level?

Governor LUJAN GRISHAM. In a thousand different ways. And I know I am taking too much of your time, Madam Chairwoman, so I will be quicker.

Look, what companies want is predictability. What we need across the country is to all meet these goals. What we need is more access to the energy market. That does that.

And, in fact, if you have got competing rules in competing states, not only does it lower predictability, it increases liability for this

industry. They are clear about that. We want the same fair equitable rules. And it also does more to protect these frontline communities. It would be, frankly, a game changer across the country.

Ms. CASTOR. Thank you very much.

Next we will go to Ranking Member Graves.

You are recognized for 5 minutes for questions.

First, we will go to Mr. Palmer of Alabama for 5 minutes.

You are recognized.

Mr. PALMER. Thank you, Madam Chairman.

And welcome to our witnesses.

And, Governor Lujan Grisham, it is good to see you again.

What I want to do is I want to direct some questions to Governor Gordon.

There is a tremendous amount of research that has been done on methane capture and repurposing. Are you familiar with some of the things that are coming out of MIT and other research for converting methane to usable products, particularly liquid fuel?

Governor GORDON. Yes, in a cursory fashion.

Thank you.

Mr. PALMER. They have discovered a way to reduce methane flare offs. And I don't know if this is impacting that in Wyoming. That is one of the big arguments that a lot of the folks have made, is how do we reduce the flare offs and convert methane into a profitable product. And what MIT has done is they have been able to convert it to derivatives of methanol and to produce several chemical products that can be made into automotive fuel. They have also used it to make energy production more efficient while also reducing emissions.

Are you finding technology like that being applied in Wyoming?

Governor GORDON. Madam Chairwoman, Mr. Palmer, I would say that we have a company here in Wyoming, MESSCO, which has developed technology that can capture over 80 percent of NGLs. They can then be produced for other products like the ones you are talking about.

That is an innovative technology that is being used both in Wyoming and in North Dakota. To my knowledge, it may also be used elsewhere. But clearly one of those innovations that can happen at a state level, and it is something that we truly want to encourage.

Mr. PALMER. In your testimony you mentioned that Wyoming's regulatory framework for methane emissions promotes both environmental stewardship and energy production. And I assume that is capturing methane and using that along with your natural gas and your oil production.

The Biden administration's EPA seems intent, though, on just adding regulation after regulation on energy production.

Can you talk a little bit more about how the Federal regulations may negatively impact your state's natural gas production?

Governor GORDON. Yes, Chairwoman Castor and Mr. Palmer, Representative Palmer.

We would regard the Federal regulatory scheme that is coming on, and we did provide comments to this, as being overly burdensome, providing, without much knowledge of the costs associated with the additional regulatory framework, more guidance, particularly on smaller producers.

We believe and commented on this to the EPA that that would actually put a number of our smaller producers at risk and the people that work for them.

I would say that what we have so far is an opportunity—I think we both testified to this, Governor Lujan Grisham and myself—to the fact that states really do provide an opportunity for innovation on a regulatory framework, and we do that with the knowledge and buy-in of our producers and our stakeholders.

That is a proper approach, and I think a Federal one-size-fits-all rule doesn't necessarily fit with unique circumstances, unique geologies, unique kinds of—

Mr. PALMER. I only have a few seconds left, and I just want to ask about how this administration's energy policies are impacting Wyoming families and small businesses.

We just saw gas hit \$5 a gallon on the national average. I think in Wyoming regular is at, like, \$4.76 a gallon, but diesel is at \$5.64. And that has got to be having an impact on small towns in terms of their own budgets because we are talking about diesel in 2020 was \$2.48 a gallon and regular was \$2.26 a gallon.

So when you talk about small towns and their fire departments, their police departments, it has got to have an enormously negative impact. And then talk about families that are literally trying to decide whether or not they can fill their tank to get to work that week and still be able to buy groceries.

Could you comment on how that is impacting families from Wyoming?

Governor GORDON. Yes. Thank you, Chairwoman Castor and Representative Palmer.

The impact on families is devastating. Wyoming has a lot of veteran families, and just yesterday I was hearing about how those veterans who often live in increasingly rural situations are having to figure out how they are going to find their way to pay for fuel to get to the grocery store, to get to church. It is really having an enormous impact on them.

What these policies have done to Wyoming is pretty demonstrable. In March of 2019, we had about 37 rigs running, 34 rigs. Today, just today, we have 19 rigs running. They have come back slowly.

But without having some predictability for their future and without knowing what happens with Federal leases, we have seen a lot of pullback from Wyoming and moving to places like Texas or offshore where there is perhaps a little more predictable future.

So it has been devastating to our ancillary industries, to our small towns, to our veterans. And I think those issues are not going to be easily repaired. But hopefully we can do something to make a difference.

Ms. CASTOR. Thank you.

Thank you, Governor.

Next we will go to Rep. Huffman.

You are recognized for 5 minutes.

Mr. HUFFMAN. Thank you, Madam Chair. And let me also thank you for your kind words and thoughts for Representative Casten and his family. We are all thinking about them today, and we are all heartbroken.

It is wonderful to see my old friend and former colleague, Michelle Lujan Grisham, Governor of New Mexico, and it is exciting to hear about how these Governors are working to make the natural gas system and its infrastructure less leaky, more efficient. That is certainly good news because we know methane is a super-polluter when it comes to the climate crisis.

And so I guess the goal is to try to make sure that all of that natural gas doesn't just leak into the atmosphere as a super-polluter, that we keep it in the pipes and get it to the point where we can just burn it and then just have CO₂ pollution, which is still not good.

And so I want to just kind of reset a little bit of the context for this conversation, because this is a climate crisis we are talking about.

And we have a huge methane problem. Methane emissions are the second-largest contributor to human-caused climate change, second to carbon dioxide, and we are setting record after record when it comes to methane emissions. In fact, we just set the record second year in a row for the largest methane measurements since we began measuring methane some 40 years ago.

And to make matters worse, when we talk about methane emissions, we are also talking about other toxic pollutants that go along with it. These are pollutants that cause debilitating health problems for millions of people who live near oil and gas operations, which of course are the largest source of methane emissions.

But I do want to thank Governor Lujan Grisham for her leadership in New Mexico, because it is no easy thing to tackle the oil and gas industry—or to work with them in your case, as you described—and we know that strong methane standards are a necessary tool among the other steps we need to take to confront the climate crisis and to advance environmental justice, because we need to always be thinking about those other pollutants and those other impacts.

One of the problems with methane is we don't have a very good sense for how much methane pollution there even is. We do know that it is underreported. We do know that every time we use new technology to look for methane, we find more of it than we thought that we had.

And part of that is certainly underreporting, but also inadequate rules, underfunded government agencies and their staff to enforce rules. And all of this, for the most part, has been just fine with the industry. So I am always glad to hear where progress is being made.

But it is important to note that the real solution to this climate crisis is to dramatically reduce fossil fuel extraction and really begin that thing we talk a lot about, that transition to clean energy, and a just transition as we do it.

That is the imperative of this climate crisis. It is the obvious takeaway from this terrible war that Russia is waging in Ukraine and, frankly, from just about every other war that we have seen in recent decades.

A few specifics.

The International Energy Agency and the Intergovernmental Panel on Climate Change tell us that we have to stop permitting

new oil and gas production entirely if we are serious about tackling this crisis.

The IPCC's new mitigation report and study in the journal *Environmental Research Letters* includes significant findings on methane that make it very clear that continuing to operate—just continuing to operate our current fossil fuel infrastructure—drives us past any point of limiting global warming to 1.5 degrees Celsius.

So we just need to be very clear-eyed about that. We have got to start phasing it out, and we have to mean what we say when we talk about this transition.

Now, California, I am proud to say, is leading when it comes to tackling methane pollution. We are requiring a 40 percent reduction by 2030. We are on track to meet that goal.

And the California taxpayers are putting a lot of skin in the game to clean up the industry's mess. California is spending \$300 million to tackle methane leaks, including plugging idle and leaking wells, which is really critical.

These are important things.

But let me ask you, Governor Lujan Grisham, what more can the Federal Government do to support states like California and New Mexico who are setting high climate goals and trying to achieve them?

Governor LUJAN GRISHAM. Congressman, it is great to see you again. And I too share your enthusiasm for the work of many of the Western states Governors, including Governor Newsom, Governor Inslee, Governor Brown, Governor Gordon, and so many others—Governor Polis—who are really clear that you have to have both, that we have to reduce emissions in all of our sectors, oil and gas, the energy sector, the transportation sector, the ag sector. We have to do more at the individual level.

All of that has to occur, while at the same time figuring out what we do about reducing emissions in our core energy sector, particularly for states like mine that are large oil and gas producers.

Where the Federal Government can create that certainty—and I think that we can do that. This may be a place where my colleague, Governor Gordon, and I might just barely disagree. We work really well together.

States need flexibility. I think we agree about that. You can create potential narrow waivers for independent producers, for different geology and different state efforts in both their transition and reducing the impact of the oil and gas or fossil fuel industry on our climate crisis.

We need Federal rules. We need Federal investments in innovation. We need more transmission for renewable energy. And we need more equitable investments. And New Mexico has done that. We are investing in the workers in the fossil fuel industry directly.

These kinds of policies create a race to the top, address the climate crisis, and create opportunities for states, with their stakeholders, to do far more than they are.

Last thing I will say. You are right, we don't look at methane emissions from a baseline. So we do it differently every time. There are no real standards. There is self-reporting. It is difficult to say where we are.

Ms. CASTOR. Thank you, Governor.

Mr. HUFFMAN. Thank you, Governor.
Thank you, Madam Chair. I yield back.

Ms. CASTOR. Next we will recognize Mrs. Miller for 5 minutes.
And since they have called votes, I am going to be a little more stringent on the time and ask the Governors to watch the clock as well.

You are recognized.

Mrs. MILLER. Thank you, Chair Castor and Ranking Member Graves.

And thank you to both of you Governors for being here today.

Like you all testifying before us today, I also represent an energy-producing state. West Virginia is blessed with vast amounts of coal, oil, and natural gas, and our history is rich in stories of our proud people providing the country and the world with the energy we need to keep the lights on, keep our homes heated, and to power our economy.

As the world continues to advance and the demand of energy increases, energy-producing states have risen to the challenge to meet this need for growth. As the last year has proven, an all-of-the-above energy strategy is necessary to keep prices affordable and the power grid reliable.

Ensuring that we keep utilizing our natural sources of energy while supplementing the grid with new sources will be essential to achieving this goal and keeping our energy-producing communities intact and prosperous.

I look forward to working with my Federal and state partners to ensure an all-of-the-above strategy is fully embraced at all level of government.

Governor Gordon, how important are Federal leases to the development of energy resources in your state? And can you explain why having leases available is not enough and why producers need certainty from the Federal Government in order to make long-term investments for reliable energy sources?

Governor GORDON. Thank you, Madam Chair and Madam Representative Miller. Thank you for the question.

It is absolutely vital that companies have a way to plan their future. Leases aren't always held at exactly the same stage, and so it takes some time to put together a leasehold that reduces the impact, the surface impact of the development. It allows for much more better technology, much more planned infrastructure, and just makes the whole process work a lot better.

I do want to just comment, I think, Representative Miller, your point about having an all-of-the-above future is absolutely essential. Wyoming has virtually every type of energy resource you could imagine. In a few years we will outpace Governor Lujan Grisham for the largest wind farm. We have just built a new generation nuclear plant where we are in the process of getting the Sodium reactor up online.

And I would also comment that it is our fossil fuel developers that have done the most for wildlife and understanding how we do migration corridors and making sure that their impact on the ground is de minimus.

So I want to thank you for mentioning the all-of-the-above energy future.

Mrs. MILLER. So you do see coal playing a role providing base-load energy as we move forward.

As the Governor of a landlocked state, like my own state, we often face challenges to bring our coal to market even during periods of high prices like today.

What are some of the difficulties Wyoming has faced, especially when it comes to exporting American coal to the international market, which burns much cleaner than our foreign competitors?

Governor GORDON. Thank you, Madam Chairwoman and Representative Miller.

Wyoming has had a distinct challenge in that and we have brought it up as a constitutional Commerce Clause issue that the State of Washington blocked our ability to transport coal from the Powder River to Asian markets. And in their own analysis they indicated that it would have reduced greenhouse gases to burn Powder River coal as opposed to Jakartan or the other options that they might have had.

It was really designed to keep the coal in the ground. It has been problematic. We did bring a constitutional challenge and almost got it to the Supreme Court. But, unfortunately, the company had to declare bankruptcy.

To your point about coal, we believe coal holds a very large part of the future. If we can integrate biomass with coal and have CCUS, we believe that is the way we get to a net-negative CO₂ future, and that is something that Wyoming is pushing with all new energy.

Mrs. MILLER. So you are invested in carbon capture technology? Is that true?

Governor GORDON. That is correct. In fact, in the last budget session I was able to secure matching funds from our legislature to promote what is really an important new technology that we can incorporate with our existing coal infrastructure to reduce CO₂ emissions and then be able to geologically sequester it. All of these things are essential for climate solutions.

Mrs. MILLER. Thank you.

Thank you. I yield back my time.

Ms. CASTOR. Thank you.

Rep. Bonamici, you are recognized for 5 minutes.

Ms. BONAMICI. Thank you, Madam Chair.

Thank you, Governors Lujan Grisham and Gordon.

I serve on the Committee on Science, Space, and Technology, and last week we released a majority staff report finding that oil and gas companies are failing to address super-emitting leaks, failing to use data to mitigate methane leak emissions, and they are not deploying innovative and available leak detection and repair technologies in a consistent manner.

Governor Lujan Grisham, nice to see you again.

In your testimony, you discuss how New Mexico is cutting harmful methane pollution. What will it take to get more states to take similar actions? And why should the United States be leading on tackling harmful methane pollution?

Governor LUJAN GRISHAM. Nice to see you too, Congresswoman.

We have an obligation to do our part as one of the largest energy consumption countries in the world. We need to do our part to combat climate change.

Look, the West, including New Mexico, isn't any longer under an extreme drought situation. We are in the aridification. Getting water to the West is going to be the next new congressional Federal Government challenge that we are all going to have to address.

We are spending tens of billions just in this state to deal with the recovery of just one fire over the next decade, and we need to protect our frontline communities in much more aggressive ways.

If there isn't a Federal design that both creates the baseline for accountability—leak detection repair and review, predictability and consistency in the industry—we can't get there as a country. And given that I am the state that has one of the largest, if not the largest, oil reserve in the country, the Permian and Delaware Basins collectively, Texas and New Mexico need to have common rules. The only way we get there is through a Federal effort.

We want flexibility about how that gets done. We want our stakeholders, including oil and gas, to be able to be effective innovators.

But this is the only way you get there. Otherwise, it is an up-and-down roller-coaster ride where we don't, any of us, meet the goals and efforts—

Ms. BONAMICI. Thank you for your leadership, Governor, on that. And I absolutely agree that the Federal Government has a role in getting other states to do the work as well.

So, Governor Lujan Grisham, again, the BlueGreen Alliance has found that the continued adoption of leak-reduction technologies and practices at new and modified oil and gas facilities could create up to 50,000 new jobs during the next decade. And they also found that 300,000 jobs would be available from repairing and replacing leaky natural gas distribution pipelines which pose major health and safety hazards.

So, Governor Lujan Grisham, how can the Federal Government help support the workforce development so these opportunities that are available to New Mexico and across the country to access the skills they need for jobs in the clean energy economy?

Governor LUJAN GRISHAM. I am going to push Congress. New Mexico now boasts the best college access programs in the country, free 4-year, free 2-year, free license, free certificates. We have Centers of Excellence in energy transition and methane-reduction efforts in our community college. Make community college free and you will create the workforce of the future.

Twelve new companies have moved to New Mexico that will quite literally create thousands of jobs in our state dealing with our methane-reduction efforts while putting more energy into the pipeline—pardon the pun—access to consumers, lowering prices.

Ms. BONAMICI. Thank you very much.

Do you have in New Mexico, then, the partnerships between industry and community college to make sure that the programs at the community colleges are meeting the needs in the workforce?

Governor LUJAN GRISHAM. Yes, we do. And one of our best efforts actually is now launching in Hobbs, New Mexico, which is a cornerstone for much of our oil and gas production in the state.

Ms. BONAMICI. Terrific. Thank you.

And I am going to yield back the balance of my time.

Ms. CASTOR. Thank you.

Rep. Crenshaw, you are recognized for 5 minutes.

Mr. CRENSHAW. Thank you, Madam Chair.

I want to start by expressing my sincere condolences to our colleague, Congressman Casten, and Tara and I will keep your wife and your family in our prayers.

Turning to the hearing today, thank you to the Chair and Ranking Member for holding this hearing.

And thank you to both Governors for being here and taking the time out of your very important jobs to discuss methane emissions with us.

But I want to point out that when we say methane emissions, it is a bit of a misnomer, because what we are really talking about is leaks of natural gas. And for anyone watching, let's make that clear. There are no methane pipelines. Methane makes up 70 to 90 percent of natural gas.

And that is important for a couple of reasons.

One, we should all agree that we need to produce more natural gas. This administration has even said so. We need to increase our exports to the EU by 65 percent. The Department of Energy says we are on a war footing for more production. Gas prices have quadrupled, which have, in some states, like mine, doubled electricity prices.

It is also important because, number two, no one, not one company wants to see a leak of natural gas because the stuff is actually pretty valuable, especially as the price has quadrupled. And as we see these electricity prices increase drastically, I have got to ask: why are we discussing regulations and requirements that would reduce natural gas production when electricity prices have recently doubled?

Now, this hearing is about how much more potent methane is as a greenhouse gas. Okay. That is true. But it is also true that methane—or, in other words, natural gas—is also the primary reason that we have lowered our overall carbon emissions in the U.S. back to 1990 levels.

Even the U.N. IPCC has acknowledged this due to the fact that natural gas displaces huge amounts of coal.

In the end, we are talking about leaks during natural gas processing and transport, which by all estimates only really account for a very tiny fraction of emissions. And I stated at the top, companies already have an incentive to prevent these leaks. They don't need the heavy hand of government to force a new regulation on their product which will do nothing but raise an already expensive price.

Now, the word "crisis" also gets used a lot in this hearing, and yet you don't see that word in, say, the United Nations IPCC report. And the word is used so that you can convince people to double their electricity bills every month to pay for this regulation if they believe that they are indeed in danger and indeed in crisis.

But the truth is, especially right now, no one is willing to shoulder additional and unnecessary costs on their energy bills. So we are seeing an administration talk outside of both sides of their mouth. The Department of Energy says we are on a war footing to increase energy production. The EPA says we are on a war footing to roll out rule after rule that is chilling investment in energy production.

I think it is a foolish way to govern, and it is hurting Americans now for some vague promise of slightly better weather in the far-away future, and the cost-benefit analysis just does not add up.

So I want to turn to Governor Gordon and just generally ask you, how will these regulations, requirements affect production in your state at a time when I think we all agree we need more production?

Governor GORDON. Madam Chairman, Representative Crenshaw, thank you for that question.

Additional regulation is always an inhibitor to any kind of business proposition, and it will raise the price particularly on fuel. It will raise the price on production. It will make things just more difficult to get accomplished.

For the state, it will also complicate—and we did comment on this—it will complicate our ability to administer those regulations, putting unnecessary and burdensome requirements on our staff to be able to sort of meet these new requirements.

So all in all, Governor Lujan Grisham might refer to it as flexibility. I look at it as the opportunity to be able to innovate and be able to get the same project accomplished.

I would point out—and this is a particular issue for production in Wyoming—we have taken two refineries offline and converted them to renewable fuels—renewable fuels that are first produced in the Midwest as beef tallow and soy oil, then railroaded to Mexico where they are pretreated, then moved up to the existing refineries that are being reconditioned to refine the product and then send it to California.

That all is an energy loss. It costs a lot of extra money. But for consumers in California, it is great. For people here in Wyoming, not so good.

Mr. CRENSHAW. And I assume, Governor Grisham, you probably disagree, but I am not sure we have enough time to ask you why.

I yield back. Thank you.

Ms. CASTOR. Thank you.

Next we will go to Representative McEachin.

You are recognized for 5 minutes.

Mr. MCEACHIN. Thank you, Madam Chair.

And, to our dear friend and colleague who has ascended to such great heights, Governor Lujan Grisham, it is good to see you again.

Governor, we all understand methane is the second-largest contributor to human-induced climate change and immediate action can quickly reduce the rate of overall atmospheric warming and allow us to help limit global warming to the Paris Agreement target of 1.5 Celsius.

How has the New Mexico Environment Department and the Energy, Minerals, and Natural Resources Department's commitment to engagement and transparency with Tribal governments, NGOs,

industry, and the public eased efforts in developing and implementing new rules?

Governor LUJAN GRISHAM. It has been the cornerstone of our success, Congressman. And it is nice to see you, too.

Look, we are proof positive that you can increase production, you can reduce emissions, you can innovate, you can create new jobs.

And I agree that the Biden administration, which is working to get more access with natural gas and committed to do that for the European Union, methane and reducing waste is one vital vehicle to doing that while at the same time making it clear that we take seriously that we have to reduce our emissions and greenhouse gas aspects for every single state.

We know that the industry can, in fact, work with you. We have got both large and small producers, our New Mexico Oil and Gas Association, who supported a consistent, transparent regulatory vehicle and set of policies that would make sense to promote their innovation and to provide access for them to different educational and related National Lab scientific efforts.

We hosted an evidence-based, science-based National Lab and related groups that supported the industry to do more in that space of innovation. It is critical to the success of both the regulatory environment and, in fact, meeting our climate crisis goals.

Mr. MCEACHIN. Thank you for that, Governor.

As you know, the effects of climate change, including methane emissions, disproportionately impact low-income and fence line communities. How can we best ensure that the policies we enact in response to this are effective in securing access to clean air and drinking water?

Governor LUJAN GRISHAM. Congressman, you have highlighted how important it is to make sure that we have a national focus on this issue. In fact, we know unequivocally that, where harmful energy production strategies exist, that they have a disproportionate impact on frontline communities.

In New Mexico, that means exactly what you think it means. Tribal communities, Hispanic communities are in a situation to have far more negative, serious health impacts related to living where the production of fossil fuels is occurring.

Which is one of the reasons in our Transition Act, which was supported by all of the energy industries, provides real skin in the game by investing in frontline communities.

One example—twenty million dollars goes to a natural gas county, San Juan County, large city there, Farmington, while \$20 million goes directly to workers to offset these negative impacts and to highlight that our public health responsibilities will be met in each of these frontline communities.

Mr. MCEACHIN. This sounds exciting, Governor. Thank you for that.

Finally, I would just ask you—and this probably touches a little bit on what you were just alluding to—but how do we ensure that these communities have access to the new and exciting employment opportunities that are going to be created through this new green economy?

Governor LUJAN GRISHAM. By making sure, Madam Chair and Congressman, that we invest in their training.

These efforts, which are supported by both the men and women in our labor organizations in the state, private sector, and our institutions of higher education, are all wrapped up in what we are calling a moonshot investment in education and workforce retooling and retraining.

You have to do all of it in our both energy transition and in our commitment to reduce harmful emissions.

Mr. MCEACHIN. Thank you so much, Governor. Good to see you again.

Madam Chair, I yield back.

Ms. CASTOR. Next up, Representative Escobar.

You are recognized for 5 minutes.

Ms. ESCOBAR. Thank you so much, Madam Chair.

And I want to thank you for opening up our hearing with a moment of silence. I am so heartbroken for our colleague, Representative Casten, and his family. I am just sending lots of love and prayers for comfort to him and his family.

And, to our panelists, thank you so much for joining us today. Thank you for your leadership.

I represent the community of El Paso, Texas, and I live in a state that is obviously also a major energy producer. But, unfortunately, we also have the dubious distinction of being the first in harmful flaring, which is obviously devastating for the environment.

And so, Governor Lujan Grisham, I would like to explore with you just a couple things because we are neighbors, and you have been at the forefront of really crafting a modern vision for New Mexico, one that doesn't just embrace the state's role as an energy producer, but that, at the same time, looks to the future in terms of climate mitigation and really trying to get as in front of what will be some of our biggest challenges ahead, try to get as much in front of them as possible.

And so, Governor Lujan Grisham, I wanted to share with you that, according to the Department of Energy, my home state of Texas, as I mentioned, ranks first in harmful flaring. And obviously the impacts of the climate crisis, we feel them in communities that are economically disadvantaged. We feel the pain even worse.

But, last year, operators flared or wasted enough gas to meet about 10 percent of our nation's home heating needs while releasing from the flares massive amounts of CO₂, unburned methane, and other pollutants that harm people's health in nearby communities.

New Mexico, as I mentioned, on the other hand, along with Colorado, is leading the nation by prohibiting routine flaring of natural gas that is co-produced at oil wells.

So, Governor Lujan Grisham, what is the challenge that you face? In the absence of Federal regulation, here you are, a state that is trying to be on the cutting edge and reduce these emissions, and you are right next door to a state that is number one in releasing these emissions.

What kind of challenge does that pose to you for the goals that you are trying to set for your state?

Governor LUJAN GRISHAM. It, quite frankly, means that our public health initiatives for people living in frontline communities don't

get met in the way that they should if you are in the Texas border area.

So look no further than Lea and Eddy County, where all of our efforts get diminished by—you step over the border, I can see Texas, then we see flaring by a company that isn't flaring in New Mexico. It makes no sense.

And I firmly believe that the oil and gas industry is interested, by and large, in making sure that we have a consistent effort collectively.

Texas is also causing incredible ozone problems in New Mexico that, without these rules squarely placed in Texas, which means that all of our stakeholders and partners are operating the same way, then we aren't meeting our climate crisis goals and we are creating real obstacles and challenges in mitigating our air pollution, and that is hugely problematic.

I am spending too much time.

Texas is harming New Mexico residents, and New Mexico residents have no recourse against that or to deal with that without Federal support in this space.

And, most importantly, it can all get done while helping already record profits in an industry—record profits. We are seeing a 125 percent increase in oil and gas production in New Mexico with the requirements that they don't flare unless it is an emergency.

So this notion that we can't reduce prices, reduce utility prices, and protect people is just not the experience of the second-largest oil and gas state in the country.

Ms. ESCOBAR. Governor Grisham, thank you so much. You actually answered my second question, which was, after New Mexico decided to prohibit routine flaring, did it harm your position as an energy-producing state? And the answer that you gave us was no.

Thank you so much for your leadership.

Madam Chair, I yield back.

Ms. CASTOR. Thank you.

Next we will go to Representative Brownley.

You are recognized for 5 minutes.

Ms. BROWNLEY. Thank you, Madam Chair.

And hello, Madam Governor. It is wonderful to see you. Thank you for your leadership. The good folks of New Mexico are very, very lucky to have you. And thanks for being here with us today.

A lot of my questions have been asked. But I wanted to drill down a little bit further on your development of a regulatory framework that is enforceable, and I am interested in the enforceable piece.

So what is it that will make it enforceable?

Governor LUJAN GRISHAM. Two things. And, Congresswoman, it is lovely to see you too.

Madam Chair, thank you for allowing my informality with so many of my dear colleagues, and really appreciate the kind, bipartisan nature of this committee and the respect that you have shown both Governor Gordon and I and so many other—I will just brag about the Western states' Governors.

And this is how we work. And I really appreciate the respect and kindness and the opportunity to have robust discussions about what works in our states and what could work across the country.

You do need investments in a regulatory system. And what does that mean? And I know that we say that, and I do think people sort of bristle. But, in fact, a company that is meeting those goals, it doesn't help them if a company right next door isn't. They need to know that we have the folks who can assist them to detect leaks, to repair leaks, to identify that, we are being fair and equitable about how we hold the industry accountable.

And the way that they are enforceable is you get the industry to help you craft the rules. This notion that we have to be adversarial is also false.

What they want is transparency. Agreed. They deserve that. What they want is equitable fairness in any regulatory environment that invests in their innovation and independent designs and ideas about how to meet the regulatory effort.

That is what we did here, and I have no doubt that, if we use New Mexico's effort, that we can adopt those same kinds of standards at the Federal level that also allows states like my good friend and colleague, Governor Gordon, to do the innovation that meets the needs and highlights the strengths in his state.

That is what Governors want, that is what our industry partners want, and that is what is enforceable, if we do that like New Mexico did at the Federal level.

Ms. BROWNLEY. Thank you, Governor.

And I also wanted to know, in terms of creating this whole framework which you have done in terms of getting to your goals and your whole renewable portfolio, standards, et cetera, did carbon pricing ever come up in the conversation?

Governor LUJAN GRISHAM. While we certainly worked with folks who were very interested in carbon pricing, and while that is on the national dialogue, it was not specific in our work.

More specific from the industry was creating a level playing field by being able to more universally identify methane-reduction strategies and to have partnerships where they are innovating, we are innovating.

I didn't mention a new company called Sceye that is assisting us in methane leak detection in new, exciting ways, because you can't see an invisible gas, and you can't have enough people with their devices on the ground, particularly given a state like ours, the size of ours, with the number of innovators.

But here is where we did go. Instead of identifying the specific strategy, we hold utilities to a net-zero carbon standard and then let them figure out how they get there. But they have to get there, and that is part of our transition requirements.

Ms. BROWNLEY. Very good. And I don't have much more time, but I know, as you have been talking about having the oil and gas sector as stakeholders in this whole conversation, and I think you have already said that they are looking for a level playing field and transparency.

Was there anything else in that discussion that they didn't want to do with regards to regulations or accountability or measurability?

Governor LUJAN GRISHAM. I am sure there are some. That would take more than my 9 seconds. But our commitment is, is that we continue to work with them so that we deal with those issues and

resolve them in an immediate and timely manner. That is the key to a regulatory successful environment.

Ms. BROWNLEY. Thank you, Madam Governor. It is wonderful to see you.

Ms. CASTOR. Next up, Ranking Member Graves.

You are recognized for 5 minutes.

Mr. GRAVES. Thank you, Madam Chair.

Governor Gordon, I believe the State of Wyoming was recognized by the World Resources Institute in their efforts to reduce emissions, methane emissions specifically.

Governor Lujan Grisham, as I recall, the State of New Mexico reduced emissions 57 percent over a 6-year period while actually increasing production I think it was 125 percent, which is just remarkable that you are seeing production go up while emissions going down.

So I, again, want to congratulate each of you for your states' efforts to be innovative here.

Governor Gordon, in the State of Wyoming, you not only have pursued efforts to reduce emissions through conventional fuels, but you have also progressed efforts on blue hydrogen. You have worked to try to diversify the state's energy sources, advanced nuclear and others.

Could you talk about kind of how you are pursuing conventional fuels with carbon capture as well as diversification and how that sort of fits into your overall energy strategy?

Governor GORDON. Well, thank you, Chairwoman and Ranking Member Graves. Yes. Thank you very much for that.

Wyoming, as I mentioned in my testimony, is kind of an all-of-the-above state. We have multiple resources that we want to use, and actually consider the transition a real challenge and an opportunity.

I want to make a little bit of a distinction between just jobs and careers. I think Governor Lujan Grisham and I have both talked about how jobs are one thing, and careers, people that stay, people that raise their families, people that are invested in the state, that is something that I think both of us want to have.

Which is one reason why we have tried to diversify across, advanced nuclear, which can bring back on shore really some of the most important parts of that future energy supply, our uranium industry, both important for New Mexico and for Wyoming.

It is also really talking about hydrogen. And there Colorado, Wyoming, New Mexico, and Utah have jointly talked about a hydrogen hub.

We recognize that electric vehicles have a future, and we all have worked towards that.

But in logistics, and particularly long-range logistics, over-the-road trucking and those kinds of things, we really need to find some other alternatives. And that is why we have been as invested as we have been in developing this hydrogen hub. Our School of Energy Resources really has taken a leadership role in that.

And there the challenge is, of course, for the West, water is incredibly precious. Should we be burning water as fuel or should we use it for growing crops, being able to feed our people? Just keeping

our electric grid up and running, all of those things are particularly important in the Colorado River.

So what are the options that we can use natural gas for? What are the things we can use with coal? Both can be useful sources for hydrogen. Hydrogen will be a part of the energy future.

And so, Ranking Member, I really thank you for that question, because I think our future really depends on us being able to transition in a way that grows our economy, be able to make the careers that are important, and be able to have the innovation that is really necessary for our country to remain a leader in the world.

Mr. GRAVES. Thank you, Governor.

Governor, your state is also one of only two states in the country that EPA has delegated primacy to in order to approve carbon capture or sequestration projects.

Can you talk about how that delegation of authority from the EPA has benefited your state in efforts to promote carbon capture storage and utilization projects?

Governor GORDON. Well, absolutely, Chairwoman and Ranking Member.

For us, we believe that our legacy industries have as much a role to play in the future of energy as any of the new sources that come online. We obviously know they have to be better. Carbon capture and sequestration provides us that opportunity.

And we also understand that, if we are going to do something about CO₂ in the atmosphere—I think, actually, Chairwoman, you mentioned that CO₂ is a little longer lasting in the atmosphere—we are going to have to do something dramatically to reduce that, to offset what is going to be uses elsewhere.

Carbon capture and sequestration, particularly geologic sequestration, is important. If we can incorporate agricultural processes and in things like forest management in that equation, we believe that we can do a much better job of capturing carbon and getting it disposed of.

Our primacy has given us a lot of an opportunity. Really only North Dakota and Wyoming are the two states that have that opportunity. We feel that we can be the solution to long-term climate change if we use this. Wyoming also has the best ability to model what that does in formation. And so we really stand ready.

The big difficulty for us is the first well is the most challenging. It is the one that regulation has to be really proofed and challenged. And that is really where we are at this point.

Thank you.

Mr. GRAVES. Thank you. Thank you, Governor.

Ms. CASTOR. Thank you.

Next, we are going to recognize Representative Carter for 5 minutes. But I am going to run and vote and allow Ranking Member Graves to close out the hearing with the unanimous consent request.

But I want to, before I leave, I want to thank Governor Lujan Grisham and Governor Gordon for sharing your wisdom with us today on how to reduce methane pollution and energy waste and tackle the climate crisis.

Representative Carter, you are recognized for 5 minutes.

Mr. CARTER. Thank you, Madam Chair.

And thank both of you for being here.

Governor Lujan Grisham, good to see you again. We miss you up here.

Governor Gordon, I want to ask you, according to the EPA, methane emissions associated with natural gas and oil production declined by 23 percent since 1990.

This is a point that I don't think the oil and gas industry in the United States get credit for, is that really we have cleaned up the oil and gas here in our country, and it is much better and much cleaner than it was in years past. And I really think that we deserve to have credit for that.

I would argue also that methane emissions are already effectively regulated by the EPA and by states. Under the framework for controlling emissions of volatile organic compounds, EPA found that the required volatile organic compounds pollution control has also reduced methane emissions at the same time, making it clear that separate regulation of methane established no additional health protections and is thus unnecessary.

In your testimony, Governor Gordon, you said, "Wyoming does not need, nor do we welcome, an additional layer of Federal regulation to regulate methane emissions."

Does that mean that you agree that existing EPA regulations can reduce EPA emissions?

Governor GORDON. Ranking Member and Representative, thank you for that question.

We believe that two things are really important. We have had an amazing reduction in emissions already with EPA regulations in place. States like Wyoming and New Mexico have been able to sort of go beyond in that without much detriment. We have done that with stakeholder agreement and, actually, support.

The same is true of coal. Coal emissions have been reduced dramatically over the last several years. Wyoming boasts the Integrated Test Center, which is actually looking at what we can do to capture carbon and put it to useful products.

All of these things are happening without increased regulation. And, in fact, I think markets should drive this. And I don't mean investment markets. I think consumer markets. If consumers are truly interested and invested in seeing how carbon dioxide or methane can be reduced, let's build a market around that, let's let the private sector deal with it.

Mr. CARTER. Well, it certainly sounds like, by all accounts, that your state is doing a wonderful job, the State of Wyoming, and that you really don't need more Federal regulations. Do you think that is the case for all states?

Governor GORDON. Thank you, Ranking Member and Representative Carter.

You know, honestly, I think states, at this point we have a floor on the Federal level, and states are allowed to build their own systems if they choose to do that. We have done that with both the Nuclear Regulatory Commission, we have done that obviously now with carbon sequestration. This has given us an opportunity to be very competitive in the marketplace.

So, to answer your question directly, I don't really think we need additional Federal regulation. We all understand what the cir-

cumstances are. Let's get out of the way and let industry deal with the problem.

Mr. CARTER. Thank you, Governor. I could not agree more with you. And I really applaud your efforts and your attitude toward this and your approach to this.

Let me ask you something about the future of using fossil fuels. You have directed your state to pursue a goal of net-negative CO₂ emissions and continue to use fossil fuels.

And I think this is extremely important, because I believe that we have to adopt an all-of-the-above type energy strategy. And, again, as I stated earlier, I don't think that we get the credit here in the United States that we deserve for the decrease in emissions that we have achieved over the last decade.

One of the facts that I use most often when we talk about this subject is the United States of America has decreased our carbon emissions more in the last decade than the next 12 countries combined, and we have done it without necessarily having to have the interference of EPA or the heavy hand of government to do it. If we would get out of the way and let the oil and gas industry just do what they do so well, I think we would be able to achieve that.

Just very quickly, what do you think that we sacrifice by choosing to move on or ignore the abundant resource of fossil fuels that we have in this country?

Governor GORDON. Well, thank you, Ranking Member and Representative.

Really, what we choose to ignore is the opportunity for new technology to show up.

What we do in this country obviously should influence what happens elsewhere in the world. The best thing we can do to reduce carbon emissions, methane emissions, is to have our technology be the very best and be able to export it to places that perhaps can't meet that challenge right now.

If we can reduce that on a global level, we will understand much better what our opportunities are to be able to address climate change.

Mr. CARTER. Thank you, Governor.

And I yield back.

Mr. GRAVES. Thank you. I want to thank our witnesses for the testimony today.

Governors, both of you, really appreciate your leadership efforts in your respective states and appreciate you sharing perspective with the committee.

At the request of the Chair, I am going to ask unanimous consent to submit four items into the record: an August 3, 2021, letter from the New Mexico delegation to the Environmental Protection Agency regarding methane emissions; a September 22, 2021, letter from the Colorado delegation to the EPA relative to emissions; a May 17, 2022, Environmental Research Letters document; and, lastly, a "Net Zero By 2025—A Roadmap for the Global Energy Sector" by the IEA.

[The information follows:]

Submissions for the Record
Representative Kathy Castor
Select Committee on the Climate Crisis

June 14, 2022

ATTACHMENT: Letter from the New Mexico Delegation urging the EPA to create new and stronger protections against methane pollution from oil and gas activities, informed by and building on the strong New Mexico state rules, August 3, 2021.

This letter is retained in committee files and available at:
<https://www.heinrich.senate.gov/newsroom/press-releases/heinrich-leads-members-of-nm-delegation-to-urge-epa-to-strengthen-methane-rules-for-oil-and-gas-industry>

ATTACHMENT: Letter from the Colorado Delegation urging the EPA to swiftly adopt protective methane standards for the oil and gas sector, using the robust Colorado rules as a blueprint for bold action, September 22, 2021.

This letter is retained in committee files and available at:
https://www.bennet.senate.gov/public/_cache/files/a/e/ae2ba1ed-2e02-4847-9bab-acab0b4bd2d1/AB25F5BD169E6F574EC8465A856E78C8.9.21.21-letterepamethanestandards.pdf

Submissions for the Record
Representative Jared Huffman
Select Committee on the Climate Crisis

June 14, 2022

ATTACHMENT: Kelly Trout, et al., *Environmental Research Letters* 17 064010, 17 May 2022, "Existing fossil fuel extraction would warm the world beyond 1.5 °C."

This article is retained in committee files and available at:
<https://iopscience.iop.org/article/10.1088/1748-9326/ac6228/pdf>

ATTACHMENT: Bouckaert, S., et al., International Energy Agency, May 2021 *Net Zero by 2050: A Roadmap for the Global Energy Sector*.

This report is retained in committee files and available at:
<https://www.iea.org/reports/net-zero-by-2050>

Mr. GRAVES. Without objection, all members will have 10 business days within which to submit additional written questions for the witnesses. And I ask our witnesses to please respond as promptly as you are able.

This hearing is now adjourned.

[Whereupon, at 2:32 p.m., the committee was adjourned.]

United States House of Representatives
Select Committee on the Climate Crisis

Hearing on June 14, 2022

“State Perspectives on Cutting Methane Pollution”

Questions for the Record

The Honorable Michelle Lujan Grisham
Governor
State of New Mexico

THE HONORABLE KATHY CASTOR

1. Why it is important to cut methane pollution from existing wells and facilities, not just new or modified ones?

New Mexico has more than 60,000 existing wells and more than 10,000 existing facilities. Over the course of 2021 those existing wells and facilities had more than 16,371,180,000 cubic feet of methane waste. If rules are only written to address new or substantially modified facilities, the majority of those sites would go unaddressed.

2. Recent analysis found that leaked, vented, or flared methane wastes at least \$271 million worth of natural gas annually in New Mexico. Capturing this wasted methane could add around \$43 million in revenue from taxes and royalties to the state. Additional economic analysis found that strong methane rules like the ones you have implemented could deliver hundreds of millions more in human health benefits and avoided air quality nonattainment costs. Could you expand on how cutting down on methane waste will benefit your state economically?

Fundamentally, our methane rules are a cost-saver. They require the use of methane control technology, which is already cost-effective as it allows producers to capture more gas that they can then bring to market for sale. This is even more profitable now due to higher natural gas prices.

The rules also create a stable regulatory environment where businesses know what to expect, and in turn spur innovation. There are already more than twelve firms in New Mexico specializing in methane emission mitigation services or equipment manufacturing.

Finally, our rules ensure that New Mexicans are less likely to suffer the health consequences of poor air quality, preventing health expenses that otherwise would have been borne by consumers and the larger health care system. The US EPA and the World Health Organization have recognized that hazardous air pollutants like benzene, that are known to be emitted from oil and gas production wells, cause cancer and other major non-cancerous health impacts, and the World Health Organization states that there is no safe level of exposure to these pollutants.

In New Mexico 35,000 residents are living within 1,000 feet of a wellsite. Of those, over 2,700 are children under the age of 5, more than 4,500 are adults 65 years or older, more than 5,700 are living in poverty, and 19,000 are people of color, including more than 5,800 Native Americans. Preventing exposure to these pollutants may result in long term cost savings due to reduced negative health impacts.

3. The Bipartisan Infrastructure Law invests \$4.7 billion in helping states and tribes and federal agencies plug abandoned wells across the country. How do you expect that funding to impact your state in terms of jobs and impact on rural and tribal communities?

The Bipartisan Infrastructure Law (BIL) provides a total appropriation to states of \$4.7 billion to fund programs for the proper closure and cleanup of abandoned oil and gas wells and facilities on federal, state, tribal, and private lands. Over the next ten years New Mexico expects to receive approximately \$100 million of those funds, for use on state and private land, which will be directly injected back into local New Mexico economies. The management of orphan oil and gas infrastructure falls to the Energy, Minerals, and Natural Resources Department (EMNRD) which has a long-standing orphan well plugging program. This program is managed through contracts with local New Mexico companies. The BIL funding will allow EMNRD to substantially increase the level of work that is done and provide long-term funding commitments to these local contractors. Long-term commitments allow them to hire and retain additional staff, providing high paying jobs in rural communities.

The BIL will not only have positive impacts on rural communities by providing high paying jobs, but will also clean up historic pollution sites within these communities, many of which have borne the brunt of decades of environmental neglect. The majority of the oil and gas production in New Mexico occurs in two unique basins, the San Juan Basin, consisting primarily of San Juan, Rio Arriba, McKinley and Sandoval counties, and the Permian Basin, consisting primarily of Lea, Eddy and Chaves counties. Based on the definitions provided in the guidance for the BIL orphan well programs, these areas qualify as “disadvantaged communities” (e.g., poverty rates range from 10% to 32% across these areas). Further, the area around the San Juan Basin is home to a large portion of New Mexico’s tribes and pueblos. As a result many, if not all, of the wells and associated facilities that EMNRD plugs and reclaims will benefit historically disadvantaged communities.

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