

**AMERICAN ENERGY EXPANSION: IMPROVING  
LOCAL ECONOMIES AND COMMUNITIES' WAY  
OF LIFE**

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**HEARING**  
BEFORE THE  
SUBCOMMITTEE ON ENERGY, CLIMATE, AND GRID  
SECURITY  
OF THE  
COMMITTEE ON ENERGY AND  
COMMERCE  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED EIGHTEENTH CONGRESS  
FIRST SESSION

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FEBRUARY 16, 2023  
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<sup>1</sup>Ms. Blong did not answer submitted questions for the record by the time of publication. Replies received after publication will be retained in committee files and made available at <https://docs.house.gov/Committee/Calendar/ByEvent.aspx?EventID=115349>.

<sup>2</sup>The report has been retained in committee files and is available at <https://docs.house.gov/meetings/IF/IF03/20230216/115349/HHRG-118-IF03-20230216-SD002.pdf>.



**AMERICAN ENERGY EXPANSION: IMPROVING  
LOCAL ECONOMIES AND COMMUNITIES'  
WAY OF LIFE**

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**THURSDAY, FEBRUARY 16, 2023**

HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON ENERGY, CLIMATE, AND GRID  
SECURITY,  
COMMITTEE ON ENERGY AND COMMERCE,  
*Washington, DC.*

The subcommittee met, pursuant to call, at 12:50 p.m., at Bush Convention Center, 105 N. Main Street, Midland, Texas, Hon. Jeff Duncan (chairman of the subcommittee) presiding.

Members present: Representatives Duncan, Burgess, Walberg, Curtis, Weber, Pfluger, Rodgers (ex officio), Peters, and Cárdenas.

Also present: Representatives Carter, Crenshaw, Allen, Miller-Meeks, and Cammack.

Staff present: Kate Arey, Content Manager and Digital Assistant; Nate Hodson, Staff Director; Tara Hupman, Chief Counsel; Sean Kelly, Press Secretary; Mary Martin, Chief Counsel, Energy and Environment; Peter Spencer, Senior Professional Staff Member, Energy; Michael Taggart, Policy Director; and Kris Pittard, Minority Professional Staff Member.

Mr. DUNCAN. The Subcommittee on Energy, Climate, and Grid Security will now come to order.

The Chair now recognizes himself for 5 minutes for an opening statement.

**OPENING STATEMENT OF HON. JEFF DUNCAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF SOUTH CAROLINA**

First off, I want to thank you all for being here, both our local witnesses and my colleagues who made the trip, both from DC and from their respective districts.

This looks a little different than our normal hearing and our normal hearing room. But I am excited we are in Midland, Texas, for our first Energy field hearing. I believe field hearings gives us a unique boots-on-the-ground perspective on how the policies and rhetoric coming out of Washington, DC, affect, and actually impact, regulated parties and communities.

We unfortunately have an administration that has taken a whole-of-government approach to wage war on American energy production. President Biden has repeatedly promised to phase the industry out of existence and has followed through by creating uncertainty and issuing regulations to make energy harder to

produce, more expensive for consumers. The rush-to-green agenda has also compromised our energy security, making us more reliant on our adversaries for sources of energy.

Two years ago, America was energy dominant for the first time since 1952. In 2019, we became the number-one oil and gas producer in the world. This drove down the cost for consumers at home, benefited our allies abroad by providing supply as an alternative to Russia and to OPEC. Much of this success is owed to the innovation and entrepreneurial spirit of the shale revolution created by hydraulic fracturing and the production of both oil and natural gas, something this community knows better than most.

Energy and Commerce Republicans have solutions to build off of the success of the shale revolution and get us back to energy dominance. We have a series of bills that aim to unleash innovation by creating regulatory certainty and encouraging long-term investment. This is in sharp contrast to the Biden administration and congressional Democrats who want to make oil and gas production impossible.

For the United States, we produce oil and gas cleaner and safer than nearly anywhere in the world. And we need policies that reflect this reality instead of ones that undercut our success. We need to unleash more American energy.

So I am looking forward to the hearing, looking forward to hearing the perspective of our witnesses today, the ones who really understand the impact that the industry has on communities like Midland.

Also, I would like to thank Chair Rodgers for holding this hearing and my colleague, Congressman Pfluger, for hosting us here in his district.

[The prepared statement of Mr. Duncan follows:]

**Jeff Duncan (SC-03) Opening Remarks**  
**Energy Subcommittee Hearing**  
**Field Hearing on “American Energy Expansion: Improving Local Economies**  
**and Communities’ Way of Life”**  
**February 16, 2023**  
**3 Minutes**  
*As prepared for delivery*

Thank you all for being here—both to our local witnesses and my colleagues who made the trip from DC and their districts.

This looks a little different than our normal hearing room, but I am excited we are in Midland, Texas for our first energy field hearing.

I believe field hearings gives us unique, “boots on the ground” perspective on how the policies and rhetoric coming out of DC actually impact regulated parties and communities.

We unfortunately have an Administration that has taken a “whole of government approach” to wage war on American energy production.

President Biden has repeatedly promised to phase the industry out of existence and has followed through by creating uncertainty, issuing regulations to make energy harder to produce and more expensive for consumers.

The “rush to green agenda” has also compromised our energy security—making us reliant on our adversaries for energy.

Two years ago, America was energy dominant for the first time since 1952.

In 2019, we became the number one oil and gas producer in the world. This drove down the cost for consumers at home and benefitted our allies abroad by providing supply as an alternative to Russia and OPEC.

Much of this success is owed to innovation and entrepreneurial spirit of the shale revolution, created by hydraulic fracturing in the production of both oil and natural gas. Something this community knows better than anyone.

Energy and Commerce Republicans have solutions to build off the success of the shale revolution and get us back to energy dominance – we have a series of bills that aim to unleash innovation by creating regulatory certainty and encouraging long-term investment.

This is in sharp contrast to the Biden Administration and Congressional Democrats who want to make oil and gas production impossible.

The United States produces oil and gas cleaner and safer than nearly anywhere in the world and we need policies that reflect this reality instead of ones that undercut our success. We need to unleash more American energy.

I am looking forward to hearing the perspective of our witnesses today, they are the ones who really understand the industry and the impact on communities.

I also would like to thank Chair Rodgers for holding this hearing and my colleague Congressman Pfluger for hosting us here in his district. I would like to yield the remaining balance of my time to Mr. Pfluger to give remarks.

Mr. DUNCAN. I would like to yield the remaining of my time—balance of my time to Mr. Pfluger for some opening remarks.

**OPENING STATEMENT OF HON. AUGUST PFLUGER, A  
REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS**

Mr. PFLUGER. Well, thank you, Chairman Duncan, Chairwoman Rodgers, and the rest of the committee for making this trip to Texas.

OK. Is this on now?

I would like to thank the entire committee for making the trip here. We obviously had a little bit of air travel difficulty and are glad to be here. We will have some more of our colleagues joining us.

But Midland, Texas, Odessa, Texas, the Permian Basin is where our Nation's energy debates should take place. I am excited to have a bipartisan group of Congressmen and women here and that our community gets to showcase how the Permian Basin, and those in the audience today, are indispensable to America's economic and national security.

Under Chair Rodgers' leadership, this committee is committed to engaging with local communities to understand the challenges that American people are facing today, many of which have been inflicted by this current administration.

Thankfully, this city anchors the most important region that is poised to solve many of the critical issues facing our Nation and our world. If you listen to the White House, oil-producing regions are greedy and unpatriotic. But nothing could be further from the truth as we look out into the crowd today. The story of the Permian Basin is one of innovation. It is one of unending entrepreneurial spirit and community. In fact, Permian producers have a long history of rising to the occasion. Extraordinary cooperation between the U.S. Government and American oil companies is what helped win World War II as Permian crude literally fueled General Patton's infiltration of the German border and eventually the defeat of Hitler.

It is often quipped that that war was won inch by inch, and that is true. The U.S. launched two incredible pipeline construction projects, the Big Inch and the Little Big Inch. And the Inch lines delivered more than 500,000 barrels of Permian oil a day to the Northeast, and they were incredibly successful in safeguarding the precious commodity from U-boat attacks. Those pipelines are still in use today.

Again, in 2008, another engineering feat allowed Permian producers to rise to the occasion when hydraulic fracturing and horizontal drilling enabled the U.S. to significantly increase production of oil and natural gas in what is known as the shale revolution. This put OPEC on its heels. It established U.S. as the energy-dominant country in the world. It gave us an indispensable tool for national security.

In 10 years, production of the Permian has grown from well under 1 million barrels a day to over 5½ million barrels presently. That is 40-plus percent of total U.S. production and 7 percent of the world production.

Just like it did throughout World War II, the Permian Basin is doing its part to make this country energy secure. It is also helping our allies around the world. You cannot understand U.S. energy dominance without visiting the Permian Basin.

I am incredibly proud to show off my district, to have the conversation here, and to talk about the importance of delivering affordable, reliable, secure energy, not just to Americans, but around the world.

With that, I yield back, Mr. Chairman.

[The prepared statement of Mr. Pfluger follows:]

**Rep. Pfluger**  
**February 16, 2023**  
**Midland Field Hearing Opening Remarks**  
*As prepared for delivery*

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Thank you, Chairwoman Rodgers, Chairman Duncan, and to the rest of the Committee for coming to the Permian Basin. I am honored to welcome Members of Congress from both sides of the aisle, to Midland and Odessa this week.

Midland, Texas is where our nation's energy debates should take place. And I'm excited that our community gets to showcase how the Permian Basin—and those in the audience today—are indispensable to America's economic and national security.

Under Chair Rodger's leadership, this Committee is committed to engaging with local communities to understand the challenges the American people are facing—many of which have been inflicted by this Administration. Thankfully, this city anchors the most important region that is poised to solve many of the critical issues facing our Nation, and our world.

If you listen to the White House, oil producing regions are greedy and unpatriotic, but nothing could be further from the truth. The story of the Permian Basin is one of innovation, unending entrepreneurial spirit, and community.

In fact, Permian Basin producers have a long history of rising to the occasion. Extraordinary cooperation between the US government and American oil companies is what helped win World War II, as Permian crude literally fueled General Patton's infiltration of the German border and eventually the defeat of Hitler.

It is often quipped that the war was won by an inch, and that's true. The US launched two incredible pipeline construction projects: the Big Inch and the Little Big Inch. The "Inch Lines" delivered more than 500,000 barrels of Permian oil per day to the Northeast for the war effort and helped successfully safeguard the precious commodity from U-boat attacks. These pipelines are still in use today.

Then again in 2008, another engineering feat allowed Permian Basin producers to rise to the occasion when hydraulic fracturing and horizontal drilling enabled the US to significantly increase production of oil and natural gas leading to what is infamously known as the shale revolution. This put OPEC on its heels—establishing US energy as an invaluable tool for our national security.

The impacts of the shale revolution have been undeniable. In 10 years, production in the Permian has grown from well under 1 million bpd to over 5.4 million bpd presently. That is over 40 percent of US production. Globally, the share of crude oil production coming from Permian has grown from 1 percent in '07, to nearly 6 percent right now. Just like it did throughout World War II, the Permian Basin is doing its part to make this country energy secure—helping fulfill Europe's needs as they wean themselves off Russian gas.

You cannot understand US energy dominance without visiting the Permian Basin or visiting with local leaders like we are today. I am excited for the Committee to hear from our excellent witnesses and discuss how current policies are affecting their operations.

It is time for Congress to follow the Permian Basin's lead and rise to the occasion. Thank you, and I yield back.

Mr. DUNCAN. I thank the gentleman for having us and for your comments.

I now recognize Mr. Peters from California for 5 minutes.

**OPENING STATEMENT OF HON. SCOTT H. PETERS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA**

Mr. PETERS. Thank you, Mr. Chairman.

I want to say it is great to be back in West Texas.

Thank you, Mr. Pfluger, for having us.

Mr. Pfluger does a wonderful job representing you all and advocating for you in Washington, DC. He might think that it is a credit to him that he got such a big crowd. But I think it is because folks heard there might be a Democrat, and they want to see what that looks like. It is a pretty rare commodity in these parts, I understand.

On my previous trips, I have visited Houston, Midland, and Lubbock and learned about the oil and gas industry and local communities. I got a tour from Pioneer of fracking and some drilling. I came away with an understanding of how this industry is not just an economic feature of Texas but a cultural one.

And today I met people whose families have been working in energy for generations. It is hard, honest work. They are proud of it, and today I am excited to continue our dialogue.

To start, I want to say that this country has never solved any great problem, whether it is sending a man to the moon or winning a world war or beating back a pandemic, without the participation of both political parties. And in Congress I have three energy priorities that I think are ripe for bipartisan cooperation right now.

First, permitting reform. In the 118th Congress, we can work together to make it easier, not harder, to build things. For my Republican colleagues, this means looking beyond just oil and gas and truly investing in an all-of-the-above energy strategy. In the coming decades, we have to build massive amounts of energy and infrastructure, including transmission lines, solar, wind power, carbon capture, nuclear, and more.

And Texas is a great example of this energy future. We know the State is a global leader in oil and gas, but it also leads elsewhere. The American Clean Power Association found that Texas is the national leader in clean energy development, just ahead of my home State of California, which might bring some smiles in this room, because everyone likes to be bigger in Texas, all right? So you are bigger than California in clean energy.

This State is first in the Nation in wind power and second in solar and storage. Forty percent of the electricity in Texas comes from wind, solar, and nuclear.

We can learn valuable lessons from Texas and admit that picking technology winners and losers is a failed strategy, whether you are focused solely on natural gas in Texas or solar power in California.

On permitting reform, my Democratic colleagues have to accept that environmental laws written in the 1970s primarily to stop bad projects can and should be updated to meet the environmental challenges of today. And we can work together to speed up our processes without sacrificing environmental outcomes.

My second priority is making our energy system cleaner. We all agree that oil and gas isn't going away anytime soon. We also can agree that making U.S. oil and gas production cleaner is good for the economy and the environment. For the oil and gas industry, the focus must be on methane, a super pollutant more potent and harmful than CO<sub>2</sub>.

Last year, Democrats passed the Inflation Reduction Act, which included billions of dollars to monitor and reduce methane emissions at oil and gas facilities. This money can help address the methane problem without breaking the bank for companies, and I would love to work with you to make sure that this money is spent effectively in California to help your producers make this advance.

Third, I want to talk about advanced energy technologies. The United States should lead the world in developing and exporting technologies like carbon capture, geothermal, direct air capture, and advanced nuclear. The U.S. oil and gas industry can help develop carbon capture and carbon removal because they have the knowledge, labor force, and capital to take these technologies from good ideas to large-scale deployment.

We can clean up our domestic energy production and help the world do the same, positioning the United States—and Texas, parenthetically—as a global energy and climate leader.

It is wonderful to be with you today, and I yield back.

[The prepared statement of Mr. Peters follows:]

**Committee on Energy and Commerce**

**Opening Statement as Prepared for Delivery  
of  
Representative Scott Peters**

***Field Hearing on “American Energy Expansion: Improving Local Economies and  
Communities’ Way of Life”***

**February 16, 2023**

It is good to be back in West Texas.

On previous trips, I visited Midland and Lubbock and learned about the oil and gas industry and local communities. I learned a lot about fracking and drilling, and I came away with an understanding of how this industry is not just an economic feature of Texas, but a cultural one. I met people whose families had been working in energy for generations. It’s hard, honest work and they are proud of it. Today, I am excited to continue the dialogue.

To start, I want to say this country has never solved any great problem -- whether it’s sending men to the moon, winning a world war, or beating back a global pandemic – with the participation of just one political party.

This Congress, I have three energy priorities that are ripe for bipartisan collaboration. First, permitting reform. In the 118th Congress, we can work together to make it easier not harder to build. For my Republican colleagues, this means looking beyond just oil and gas and truly investing in an all the above energy strategy. In the coming decades, we must build massive amounts of energy infrastructure including transmission lines, solar, wind power, carbon capture, nuclear, and more.

Texas is a great example of this energy future. We know the state is a global leader in oil and gas. But it also leads elsewhere. The American Clean Power Association found that Texas is the national leader in clean energy development, just ahead of my home state of California, which is bound to get some smiles here. The state is first in the nation in wind power and second in solar and storage. 40% of the electricity in Texas comes from wind, solar, and nuclear. We can learn valuable lessons from Texas and admit that picking technology winners and losers is a failed strategy, whether you are focused solely on natural gas in Texas or solar in California.

Back to permitting reform, for my Democratic colleagues, we must accept that environmental laws written in the 1970s primarily to stop bad projects can and should be updated to meet the environmental challenges of today. We can work together to speed up our processes without sacrificing environmental outcomes.

My second priority is making our energy system cleaner. We agree that oil and gas isn’t going away any time soon. We can also agree that making U.S. oil and gas production cleaner is

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good for our economy and environment. For the oil and gas industry, the focus must be methane, a super pollutant more potent and harmful than CO2.

Last year, Democrats passed the Inflation Reduction Act which included billions of dollars to monitor and reduce methane emissions at oil and gas facilities. This money can help address the methane problem without breaking the bank for companies. I'd love to work with you to make sure this money is spent effectively in Texas.

Third, advanced energy technologies. The U.S. should lead the world in developing and exporting technologies like carbon capture, geothermal, direct air capture, and advanced nuclear. The U.S. oil and gas industry can help develop carbon capture and carbon removal because they have the knowledge, labor force, and capital to take these technologies from good ideas to large-scale deployment. We can clean up our domestic energy production and help the world do the same, positioning the US as a global energy and climate leader.

Thank you all for being with us today. I yield back.

Mr. DUNCAN. I thank the gentleman.

Now it is my pleasure to recognize the chair of the full committee, Mrs. McMorris Rodgers, for 5 minutes for an opening statement.

**OPENING STATEMENT OF HON. CATHY McMORRIS RODGERS,  
A REPRESENTATIVE IN CONGRESS FROM THE STATE OF  
WASHINGTON**

Mrs. RODGERS. Thank you, Chairman Duncan.

And a big thank you to you, Congressman Pfluger, for organizing, helping organize this field hearing today.

We are really excited to be here in Midland for the first field hearing of the House Energy and Commerce Committee for the 118th Congress. And Congressman Pfluger is the first Member representing the Permian Basin to serve on the best committee on Capitol Hill, the Energy and Commerce Committee.

But this is—this is really important to all the Members that are here. Thank you for being here, and we are looking forward to the discussion today. Thank you for the witnesses also.

Our primary energy objective is to ensure reliable, secure, and affordable delivery of energy to Americans, to their homes, to their businesses, the grocery store, and everywhere in between. We must build upon our Nation's diverse and abundant natural resources to create more secure supplies and more dependable power. And we must work to develop a predictable regulatory landscape, one that unleashes America's unmatched genius for innovation and technological leadership.

While we have examined solutions in our hearing room, in Washington, DC, to secure our energy future, here today in Texas we get to see where it all begins in places, like the Permian Basin. It begins with the workers, the families, and all the people living and working in energy-producing communities like Midland and so many others, large and small, all across this Nation.

We cannot achieve a more secure energy future, create more jobs, and increase affordability without the people who do the work and take the risk to produce American energy.

Today's hearing will shed light on the benefits of energy production at the local and State level, and it should serve as a reminder of how American energy expansion helps communities across our country and how we can change the regulatory environment to speed up this expansion.

America is a diverse Nation blessed with abundant natural resources. And we must be responsible stewards of those resources to ensure our communities flourish. Different areas of the country have different advantages, and the one-size-fits-all, top-down approach is not the way to go.

For instance, I come from Washington State. The Pacific Northwest has abundant hydropower. The Marcellus Shale has helped make the U.S. the world leader in natural gas production. Wyoming has the potential to provide uranium to power advanced nuclear reactors across the country. And the Permian Basin, where we are today, has made us the world leader in oil and natural gas production.

And August has impressed upon me that it is the hard-working and the—it is hard-working people and the ingenuity of the people that have made this happen in the Permian Basin, bringing tremendous benefits in terms of economic opportunity and tax revenues for local schools and communities.

Last year, the Texas oil and gas industry paid nearly \$25 billion in local and State taxes and royalties to support schools, infrastructure, and local services. It is almost double what it was 5 years ago. Permian Basin operations represent a major portion of these revenues.

Unfortunately, this administration has signaled repeatedly their intention to reduce oil and gas production in coming years. Today, we will hear from witnesses on what this would mean for communities like Midland: Lost jobs, lost revenues, and lost livelihoods.

I would like to join my colleagues in thanking Midland Mayor Lori Blong. You sit at the intersection of energy, economic development, and the needs and concerns of our families, those who live here in Midland. You and Mr. Carrasco, the Midland Hispanic Chamber of Commerce, both have unique perspectives on the challenges facing small businesses, including surging energy costs. Given your experience and the experience of our other witnesses, today's hearing is to explore the role of innovation in advancing cleaner, more productive operations.

Allowing businesses the freedom to experiment is fundamental to innovation. We saw this with the shale revolution where entrepreneurs found a more efficient, effective, and cleaner way to produce oil and gas, giving new life to oil wells and opening up new opportunities to produce American energy. And we did this with some of the highest environmental and labor standards in the world.

Unlocking our resources and removing barriers to American energy should be a bipartisan goal, and we are here bipartisan today.

I am confident that the voices we will hear today will reinforce that unleashing American energy is the best path forward to strengthen our energy security, reduce emissions, and make life more affordable across the board.

Thank you. I yield back.

[The prepared statement of Mrs. Rodgers follows:]

**OPENING STATEMENT FOR CHAIR CATHY MCMORRIS RODGERS  
SUBCOMMITTEE ON ENERGY, CLIMATE CHANGE, AND GRID  
SECURITY  
MIDLAND, TEXAS, FIELD HEARING:  
“AMERICAN ENERGY EXPANSION: IMPROVING LOCAL  
ECONOMIES AND COMMUNITIES’ WAY OF LIFE.”  
FEBRUARY 16, 2023  
*As prepared for delivery***

Thank you, Chairman Duncan.

And let me thank you, Congressman Pfluger, the first Member of Congress representing the Permian Basin to be on the Committee on Energy and Commerce.

Your assistance in planning this field hearing has been very helpful, and much appreciated.

Our primary energy objective is to ensure reliable, secure, and affordable delivery of energy to Americans...

...to their homes, to their businesses, the grocery stores, and everywhere in between.

We must build upon our nation’s diverse and abundant natural resources, to create more secure supplies, more dependable power...

...and we must work to develop a predictable regulatory landscape... one that unleashes America’s unmatched genius for innovation and technological leadership.

While we have examined solutions in our hearing room in Washington, D.C. to secure our energy future, we are here today in Texas to see where it all begins...

... in places like the Permian Basin.

It begins with the workers, the families, all the people living and working in energy producing communities, like Midland, and so many others, large and small, throughout this country.

We cannot achieve a more secure energy future, create more jobs, and increase affordability without the people who do this work and take the risks to produce American energy.

Today’s hearing will shed light on the benefits of energy production at the local and state level.

It should serve as a reminder of how American energy expansion helps communities across the country...

...and how we can change the regulatory environment to speed up this expansion.

America is a diverse nation blessed with abundant natural resources. We should be responsible stewards of these resources to ensure our communities flourish.

Different areas of the country have different advantages, and the one-size fits all, DC knows best approach of this current administration is not the way to go.

For instance, the Pacific Northwest has abundant hydropower...

... the Marcellus Shale has helped make the U.S. the world leader in natural gas production...

... Wyoming has the potential to provide uranium to power advanced nuclear reactors across the country...

... and the Permian Basin has made us a world leader in oil and gas production.

The oil and gas industry in the Permian Basin has brought tremendous benefits in terms of economic opportunity and tax revenues for local schools and communities.

Last year, the Texas oil and gas industry paid nearly \$25 billion in state and local taxes and royalties to support schools, infrastructure, and local services.

This is almost double the amounts just 5 years ago. Permian Basin operations represent a major portion of these revenues.

This administration has signaled repeatedly their intention to reduce oil and gas production in coming years.

Today, we'll hear from our witnesses on what this would mean for communities like Midland.

Lost jobs. Lost revenues. And lost livelihoods.

I'd like to join my colleagues in thanking the Midland Mayor, Lori Blong.

You sit at the intersection of energy, economic development, and the needs and concerns of the families who live here in Midland.

You, and Mr. Carrasco, with the Midland Hispanic Chamber of Commerce, both have unique perspectives on the challenges facing small businesses, including surging energy costs.

Given your experience, and the experience of our other witnesses, I want to use this hearing today to explore the role of innovation in advancing cleaner, more productive operations.

Allowing businesses the freedom to experiment is fundamental to innovation.

We saw this with the shale revolution, where entrepreneurs found more effective, efficient, and cleaner ways to produce oil and gas—giving new life to old wells and opening up new opportunities to produce American energy.

...and we did this with some of the highest environmental and labor standards in the world.

Unlocking our resources and removing barriers to American energy should be a bipartisan goal.

I'm confident that the voices we'll hear from today will reinforce that unleashing American energy is the best path forward to strengthening our energy security, reducing emissions, and making life more affordable across the board.

Thank you, I yield back.

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Mr. DUNCAN. Before I recognize Mr. Cárdenas, I want to thank the chairwoman for letting us wear jeans and boots today.

Now I recognize Mr. Cárdenas for 5 minutes.

**OPENING STATEMENT OF HON. TONY CÁRDENAS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA**

Mr. CÁRDENAS. OK. Got it.

Thank you very much, Mr. Chairman. Really appreciate this opportunity. But I really want to thank somebody who I owe my life to, Congressman Pfluger.

Thank you for getting us here safely. Our flight from McAllen to DFW to get to Midland didn't work out very well. So he swiftly commandeered a flight here and it was good and smooth, and he didn't fly it for us. I don't know if that is a good or bad thing.

You do fly, correct?

He does fly.

But, again, I think it is really important for us to understand that we are here as Americans. We are all Members of Congress. We are very blessed to represent our various communities, yet at the same time we come together. And sometimes we do argue, fuss, and fight, but it is because we have the best interests of all of you at heart.

And when I say "all of you," as the United States of America, I think that we all understand that we carry on our shoulders to be the shining example to the world and how, when we do our best, we definitely are the best. And it is not from a place of ego. It is just a place from being blessed to have a country of innovation like no other, to have a country that is willing to get into the eye of the storm and come out in a way that we make the better—the world a better place for everyone.

So with that, I just want to say thank you for bringing us together in your beautiful community here.

And I do have jeans but no boots. When I was—when I was single and much more successful, I got a pair of boots made for myself. But that was a long, long time ago. But I did wear the jeans.

"American Energy Expansion: Improving Local Economies and Communities' Way of Life," which is the title of today's hearing, but I think it is really important for all of us to understand that we can do all of that, and we have been doing all of that in many, many ways.

But the fact of the matter is the world is changing, and we are having an impact on the environment. And we must move forward in a way where we can actually have it all, and we can. But that means we have to be looking at all energy opportunities. And as was mentioned by my colleague from California, Texas is doing it bigger and better in many ways with many different energy sources.

And so making sure that we can do it right, I want to use one example that we cannot repeat, for example, when it comes to the 2017, it was Kineder Morgan—or Kinder Morgan, excuse me—announced the Permian Highway pipeline that would be routed through the Texas Hill Country. Despite citizens' protests and lawsuits filed, construction on the pipeline did begin.

And in March of 2020, an accident during construction caused about 36,000 gallons of drilling fluid to spill. It contaminated the groundwater, which local families depended on, and the drinking water source that they depended on as well, and it had let hazardous materials in the drilling fluid. And it was regarded as carcinogenic to humans.

Contaminating the drinking water is something—like I said, we can do things right. And we have to make sure that we hold everyone accountable to do it right and to actually finish the job in a way that doesn't leave behind any catastrophe or anything that would actually cause harm to our communities', as the title of this hearing is "way of life." And it is important that we all understand that we can do it better, and we can make sure that we hold everyone accountable.

Today we are hearing from four witnesses who are giving different perspectives of how to do it right, what we are doing right, and what we need to do better.

I want to use an example of my father. I am the youngest of 11, and my father came from Mexico. And he spoke very little English but—and he was a man of very few words. And one day I asked him what it was like, just—I don't remember why I asked him this question. I must have been watching TV, and there was some crop dusting going on over the fields.

And my father started in this country as a farm worker. He only had a first-grade education. He was proud of being a hard, hard-working man.

And I said, "Dad, what would you do in the fields back in the '40s and '50s when you were a farm worker when they were crop dusting?"

He said, "Son, we put a rag over our face, and we just kept working."

Well, obviously, that is not good for the people working in the fields. It is not good to have practices—today we know better. We know how to do things better. Science has brought us a long way. We have practices that we should be practicing, that we used to do in the past, that we shouldn't be doing today. No one should be subjected to that kind of environment in the workplace.

And so what I am here to say is that we want to come together and make sure that the United States continues to be the leader and also the shining light for the rest of the world, to make sure that tomorrow is better than today.

And I have grandchildren. I was just looking at their pictures a few minutes ago that was sent to me. And I want their world to be good and better than it was when we got here.

So, with that, my time has expired, Mr. Chairman. Really appreciate this opportunity and thank you so much.

I yield back.

[The prepared statement of Mr. Cárdenas follows:]

**Committee on Energy and Commerce**  
**Opening Statement as Prepared for Delivery**  
**of**  
**Representative Tony Cárdenas**

***Field Hearing on “American Energy Expansion: Improving Local Economies and Communities’ Way of Life”***

**February 16, 2023**

Thank you, Mr. Chairman. I was shocked by the title of today’s hearing, “American Energy Expansion: Improving Local Economies and Communities’ Way of Life.” It implies that improving local economies and communities’ way of life is a priority for the Majority.

I strongly support this Committee taking *honest* steps to do that through energy policy. But today’s hearing isn’t an honest exploration of how to achieve these goals. What’s particularly surprising is that Republicans are attempting to make a case for the fossil fuel industry by holding today’s hearing near a community that was poisoned by the fossil fuel industry and is struggling to fix the major environmental damage left from decades of drilling.

But, if my Republican colleagues want to use the Permian Basin and its pipeline network as an example of what fossil fuel expansion will look like, then let’s have that conversation:

In 2017, Kinder Morgan announced its Permian Highway Pipeline would be routed through the Texas Hill County. Despite citizens protests and the lawsuits filed, construction of the pipeline began.

In March 2020, an accident during construction caused about 36,000 gallons of drilling fluid to spill. It contaminated the ground water, which was local families only source of drinking water, with high levels of lead and hazardous drilling fluid that is “regarded as carcinogenic to humans.” Is polluted drinking water and a disregard for public input *really* my Republican colleague’s idea of improving communities’ way of life?

My colleagues on the other side of the aisle have not come here to tell the whole story. They have omitted the human and environmental costs of expanding fossil fuel production and gas pipelines. They have left out the devastating impacts that projects, like the Permian Highway Pipeline, can have on clean water, people, and the planet. They have proven, once again, that they are willing to sacrifice the well-being of the American people, so that Big Oil executives can get rich. And, conveniently, they have brought forth three witnesses who all either own or operate oil and gas companies.

Let me be clear: today’s hearing is a Republican messaging exercise. This isn’t about improving or protecting communities’ way of life, it’s about expanding an industry that is

February 16, 2023

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exacerbating the very issues my colleagues claim that they want to fix. *We can* protect energy security, cut costs for families, improve local economies, and advance homegrown clean energy, not only without risking the well-being and health of our constituents, but improving it. And it's shameful that my Republican colleagues refuse to commit to that.

Mr. DUNCAN. I thank the gentleman.

And we now conclude with Member opening statements.

There are other Members coming due to the flight delays. They will get here when they get here and will participate at that point.

The Chair would like to remind Members that, pursuant to the committee rules, all Members' opening statements will be made part of the record.

I want to thank all the witnesses for being here today and taking the time to testify before the subcommittee. Each witness will have an opportunity to give a 5-minute opening statement followed by a round of questions from Members.

And our witnesses today are the following: the Honorable Lori Blong, mayor of Midland; Mr. Adrian Carrasco, chairman of the Hispanic Chamber of Commerce; Dr. Michael Zavada, professor at the University of Texas Permian Basin, who is stepping in for the posted witness who was unable to make the hearing; and Mr. Steven Pruett, President and CEO of Elevation Resources, chairman of the board, Independent Petroleum Association of America. We appreciate your being here.

And I will now recognize Mayor Blong for 5 minutes to give an opening statement.

You are recognized.

**STATEMENTS OF LORI BLONG, MAYOR OF MIDLAND, TEXAS, AND PRESIDENT, OCTANE ENERGY; ADRIAN CARRASCO, CHAIRMAN, MIDLAND HISPANIC CHAMBER OF COMMERCE, AND PRESIDENT, PREMIER ENERGY SERVICES; MICHAEL S. ZAVADA, Ph.D., PROFESSOR OF BIOLOGY AND GEOSCIENCES, AND CHAIR, DEPARTMENT OF GEOSCIENCES, THE UNIVERSITY OF TEXAS•RMIAN BASIN; AND STEVEN H. PRUETT, PRESIDENT AND CHIEF EXECUIVE OFFICER, ELEVATION RESOURCES, AND CHAIRMAN OF THE BOARD, INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA**

#### **STATEMENT OF LORI BLONG**

Ms. BLONG. Good afternoon.

And thank you, Chairman Duncan and Chairman Rodgers and members of the subcommittee.

Thank you to Congressman Pfluger for all of your work in making this happen.

We welcome you to Midland, the energy capital of Texas and, arguably, the energy capital of the United States. We believe that the secure, affordable, reliable, and responsibly produced oil and gas of the Permian Basin is a critical component to promote human flourishing, both domestically and abroad.

My name is Lori Blong, and I serve as the cofounder and managing partner of Octane Energy, a Midland-based operator. I also have the distinct privilege of serving as the first female mayor of America's energy epicenter, Midland, Texas.

Today the perspective that I hope to share with you is not as a representative of a special interest group or as of a research firm but instead from the perspective of a small businesswoman, a community leader, a wife, and most importantly, a mother to three

very spirited West Texas children who are growing up here in the oil patch.

I am a second-generation Midlander, having graduated from high school just a few blocks from where we are now. And I am also a second-generation member of the oil and gas industry. Mine is a boots-on-the-ground perspective, and I am deeply conscious that I could see our region and my own business succeed or fail based on the decisions that you make and the policies that you advocate for.

Somehow over the past century, much of the U.S. has begun to think of oil and gas as merely a fuel source for transportation or for heating, and the reality is that these hydrocarbons that we produce are also responsible for creating the highest standard of living in any society in the history of the world. And there are also components in as much as 96 percent of the products that we use every single day, from pharmaceuticals to clothing and electronics, just to name a few.

I am sure that everybody in this room has a mobile phone in your pocket, and I want you to note that the part of your phone that breaks when you drop it is the part that is not produced from petroleum products.

The pipeline and the infrastructure permitting headwinds, the current SEC-driven ESG movement, and the current administration's vow to put an end to fossil fuels are all creating growing market distortions and need to be reversed. These policies prevent individual Americans and American businesses from growing, from creating jobs, and energy—and the energy security that we otherwise could.

Many of the members of this subcommittee have stated that energy security is national security, and I completely agree with that sentiment. We are watching today's newspaper headlines demonstrate how critical these reserves are to the future of our Nation.

We have the energy we need right here in the Permian Basin to keep American homes warm, to provide electricity to hospitals and schools, and to keep our country and our allies safe. But we must have Federal advocacy and support for the energy production that we require.

We also need the Federal Government to change the tone from restriction to proactive partnership with environmental solutions. And we have watched as the Federal Government has invested our tax dollars into wind and solar energy options, among others. We know that the Federal Government is doing those things. And we know that—we also have technology available that we have—we have identified much of it here in the Permian Basin for beneficial reuse of produced water that millions of barrels that are being produced every single year as associated byproducts of oil and gas production.

If we could get the Federal Government to partner with us in developing those into scalable, economically viable solutions for produced water in the Midwest and West United States, this would be a game changer.

Directly underneath our feet right now where we are sitting—you may not know this, but oil is being produced beneath where you are sitting, about 10,000 feet below ground here, and it is being extracted 2½ miles south of here on the south side of town.

Our Permian advances in science, engineering methods, and processes have yielded the safest, most environmentally responsible barrel of oil in the world. Considering the regulatory framework at the Federal and State levels, a barrel of oil in the Permian Basin is the greenest barrel of oil produced in the world.

Another tangible benefit that the city of Midland is currently experiencing from oil and gas is record sales tax collection. Much of it is attributed to the activities related to the oil and gas industry. This enables us to provide city services, healthcare, education, and many other things without overburdening property tax payers.

We are providing jobs in Texas to nearly half a million people with an average annual income of \$115,000. And we are tied for lowest unemployment rate in the State at 2.4 percent. An 18-year-old with a commercial driver's license can earn six figures a year in Midland, Texas. Not just can, but they do.

We have a crucial ingredient to enable flourishing: Secure, responsible, reliable, and plentiful American oil and gas.

I have heard it said that the last drop of oil on Earth may be produced right here from the Permian Basin because we are innovative, we are hard-working, and we understand how to watch our costs. Today I ask you to take a stand to enable and empower our people, removing unnecessary headwinds and roadblocks—the American ingenuity and productivity that all Americans—so that we may thrive and flourish.

Thank you.

[The prepared statement of Ms. Blong follows:]

Mayor Lori Blong  
Energy and Commerce Committee  
Subcommittee on Energy, Climate and Grid Security  
February 16, 2023

Good morning and thank you, Chairman Duncan, for holding this important hearing. My thanks to the members of the subcommittee and our Congressman Pfluger. Welcome to Midland, the energy capital of Texas...and arguably, the energy capital of the United States. It's an honor to address you today on the critical subject of how energy expansion improves our local economies and communities' way of life, addressing the challenges facing America today. We believe the secure, affordable, reliable and responsibly produced oil and gas of the Permian Basin is a critical component to promote human flourishing, both domestically and abroad.

My name is Lori Blong and I serve as the co-founder and managing partner of Octane Energy, a Midland, Texas - based, privately held exploration and production company that operates and stewards over 300 wells across 35,000 square miles of West Texas and SE New Mexico for ourselves and fellow independent oil and gas companies, as well as for other investor groups. I also have the distinct privilege to serve as the first female Mayor of America's energy epicenter, Midland, TX.

Our company, Octane Energy was founded and bootstrapped ten years ago this spring in response to the energy renaissance our country was experiencing at the time. Since then, our team has grown, our organization has matured and become more resilient, and we have been responsible for drilling, completing and producing over 2,000 wells. Currently we have a core team of 35 employees and contractors (down from 140 at our largest, pre-Covid), as well as countless other vendors that we depend on to unleash American energy.

Today, the perspective I hope to share is not as a representative of a special interest group or research firm, but instead from the perspective of a small businesswoman and community leader, a wife

and, most importantly, a mother to three very spirited West Texans. I am a second generation Midlander, having graduated from high school just a few blocks from where we currently sit here. I am also second generation in the oil and gas industry, having experienced the impacts of booms and busts, innovations and progressions during my decades here in our fair city. Mine is a boots-on-the-ground perspective and I am deeply conscious that I could see our region and my own business very well succeed or fail, based upon the policies you advocate and adopt.

Midland is truly an American gem with some of the most entrepreneurial and pioneering minds in our nation. American values are alive and well here and you can't help but feel it in the West Texas air. That's been true here for at least a century. In fact, this May we celebrate the 100<sup>th</sup> anniversary of the Santa Rita #1, the well that really started it all here in the Permian.

A lot has occurred in the industry since production began in the Permian in the early 20<sup>th</sup> Century. Admittedly, oil and gas are principally attributed to the robust transportation sector of our economy. However, these hydrocarbons are also responsible for creating the highest standard of living of any society in human history, as components in as much as 96% of the products we use every day, from pharmaceuticals, clothing, electronics, and cosmetics, to name a few. I am sure everyone in the room has a mobile phone – please note that the part of your phone that breaks when it is dropped is the part not derived from petroleum products.

Our City of Midland and our company have been on the front lines of the energy resurgence for some time now. We see firsthand how this energy renaissance has positively impacted jobs, how it has created greater sustainability in a historically cyclical business, and how it is helping to achieve energy security for our country. But we also see unnecessary hurdles that could limit the opportunities for US businesses. I would like to divide the remainder of my testimony into two parts, to discuss hurdles to and the benefits of American oil and gas production in the Permian Basin:

First, the pipeline and infrastructure permitting headwinds, current SEC driven ESG movement, and the current administration's vow to "put an end to fossil fuels" are all creating growing market distortions and need to be reversed. These policies prevent individual Americans and American businesses from growing as we otherwise could, prevent us from creating jobs as we otherwise could, and most importantly prevents our country from being energy secure as it otherwise could.

Many members of this subcommittee have stated that energy security is national security. I could not agree more. Russian aggression toward a sovereign neighbor, the People's Republic of China brutally repressing its own citizens and testing the resolve of the United States – these are not chapters in a history book. These are today's newspaper headlines. History shows us that conflict is brought about by the desire of one or more sides to gain the resources of another. We have the energy we need right here in the Permian Basin, to keep American homes warm, to provide electricity to hospitals and schools, and to keep our country and allies safe. But we must have federal advocacy and support for the energy production we require.

If the Federal Government truly wants to work with energy companies to positively impact the environment, one tangible suggestion is to significantly invest in technologies for beneficial reuse of produced water from oil and natural gas extraction. The technology for beneficial reuse of produced water already exists; we simply need to find ways to make that technology economically scalable, to benefit the millions of Americans in everyday communities in the central and western states, where abundant clean water is a game-changer on so many levels. Federal efforts in this case could help to accelerate our beneficial reuse efforts, rather than the federal efforts we have seen to restrict our industry but which do not ultimately benefit our communities.

The messages, virtue signaling and rhetoric that have come from the federal level lately tell us oil and gas is evil or not on the side of average American or on the side of care for our environment. This could not be further from the truth. Responsible operators in the Permian are committed to paying

excellent wages for the flourishing of our people and committed to ever-improving technology for the flourishing of our surrounding environment.

Directly underneath our feet, where we sit for this hearing, oil and gas is presently being produced from a depth of 10,000 feet below ground, extracted two and a half miles from here on the south side of Midland (see exhibit A attached). The men and women in our industry know how to safely find, recover, and process these natural resources; we have been doing so for decades. Our Permian advances in science, engineering, methods, and processes have yielded the safest, most environmentally responsible barrel of oil in the world. Considering the regulatory framework at the federal and state levels, a barrel of oil produced in Permian Basin is the “greenest” barrel of oil produced in the world. I can see drilling operations taking place close to my neighborhood where my children sleep. Knowing that industry best practices are being employed gives me reassurance that our local environment is protected.

Another tangible benefit the City of Midland is currently experiencing is record sales tax collection, much of it attributed to activities related to the oil and gas industry. According to the Texas Association of Oil and Gas, in 2022, the oil and the gas industry employed 443,000 Texans who earned an average \$115,300 each—roughly 40% higher than the average pay in other private sectors. And for every direct job in the industry, conservative estimates indicate that an additional 2.2 indirect jobs are created. In total, 1.4 million Texans’ jobs ultimately derive from the state’s oil and natural gas industry. An 18-year-old with a commercial driver’s license can earn six figures a year.

In yet another example of positive impact from oil and gas on our local community, roughly five years ago, twenty oil and gas companies came together to voluntarily form the Permian Strategic Partnership (PSP). These companies work continuously with local and regional leaders to explore and find solutions to challenges in education, healthcare, housing, road safety, and training the future workforce. Using education as an example, PSP member companies have invested over \$47 million in

education initiatives across the Permian Basin, supporting local public schools, universities, teachers, and students. The partnership has brought a STEM center to every elementary school in the Permian Basin. This type of commitment to a region of the county is unprecedented. These are real dollars committed by these companies voluntarily to guarantee the Permian Basin has a long and robust life. Imagine the possibilities of what could be achieved in partnership with the federal government, alongside the resources provided by this private sector creation. That is harnessing American potential and it is all right here.

So today, in this basin, America finds itself at another critical crossroads. Do we continue to vilify and restrict American oil and gas production or do we unleash US hydrocarbons and American ingenuity and innovation? At a time when inflation remains rampant and tech companies are laying off tens of thousands, the American energy sector has sustained and even added jobs for millions of Americans – both directly and indirectly through energy extraction and production, as well as it's required support services, increased domestic manufacturing, service and hotel businesses, residential and commercial construction just to name a few. In fact, the unemployment rate in the Permian Basin is currently 2.6% and has averaged 3.9% for the last decade compared to more than 5% nationally.

No person can travel across our country without being deeply stirred by the innovation, ingenuity and pure grit of the American people – qualities that are the hallmark of America's energy industry and the communities. It is also clear that the future is bright for Midland and the Permian Basin. I do not say that all problems are solved. Far from it. But I do believe that we must stand together as faithful and wise stewards of our abundant natural resources and imagine greatly if we are to fulfill our common inheritance. The United States is our common bond and our emphasis must be not on rivalry, self-interest or conflict but on cooperation, collaboration, trust and a shared vision of the future for the flourishing of all mankind. We have a crucial ingredient to enable that flourishing; secure, responsible, reliable, and plentiful American oil and gas. By unleashing US hydrocarbons particularly in

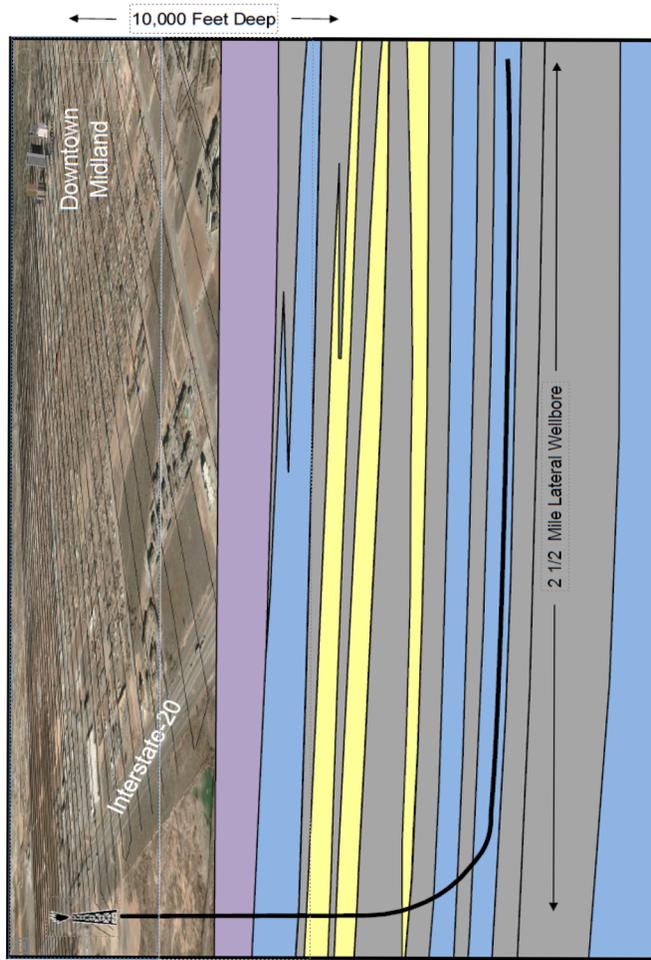
the context of our free market system, U.S. lawmakers can secure our energy future and that of our allies.

Today, I ask you to take a stand for a fundamental principle -- that the role of government is to secure our endowed and unalienable rights among which are life, liberty and the pursuit of happiness. We must enable and empower our people, removing unnecessary headwinds and roadblocks that stand in the way of extraordinary American ingenuity and productivity so that all Americans may thrive and flourish.

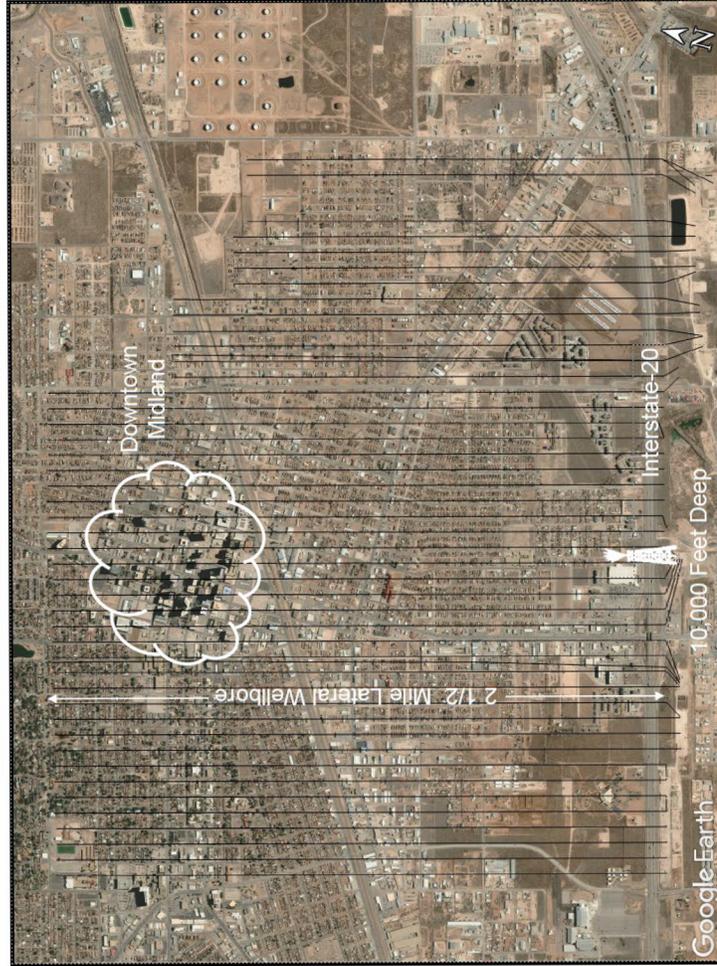
I thank you for your time.

Exhibit A:

Midland Texas – Horizontal Drilling



Midland Texas – Horizontal Drilling



Mr. DUNCAN. Mayor, thank you so much.  
And I will now go to Mr. Carrasco for 5 minutes.

**STATEMENT OF ADRIAN CARRASCO**

Mr. CARRASCO. Good afternoon.

Chairman Duncan, Chairwoman Rodgers, and members of this committee, I would like to thank you. And it is an honor to be a witness at this hearing that has so much meaning and positive impact in the world.

I would like to say a big thank you to Congressman Pfluger for his leadership, service, and dedication to our district.

I am Adrian Carrasco. I am the chairman of the board of directors of the Midland Hispanic Chamber of Commerce, president and owner of Premier Energy Services, and board of trustee of Midland Community College.

The MHCC has over 30-plus years of advocating, partnering, and supporting small minority businesses in Midland County. When I say "minority," it is not just color. It is women-owned businesses and veteran-owned businesses.

As many organizations suffered during COVID, the MHCC did, as well. And we had to totally rebrand the MHCC to ensure that we continued the great work of the past and create opportunity now and for the future.

The mission of the MHCC is to successfully lead, develop, and advocate for our members, while encouraging the advancement, economic growth, and social development of the Hispanic and minority community. The MHCC provides commerce opportunities through quality of education, quality of business, quality of jobs, and quality of life.

We all know that small businesses play a key role in increasing commerce, providing jobs, and bringing economic development within our community. It is crucial that we continue to provide business education, funding opportunities for business growth, and guidance for positive growth.

As communities like Midland grow, we look to entrepreneurs to develop businesses that meet the need of the community and its growth.

Through programs like our Bettering Your Business at Breakfasts, we have been able to education new and existing small minority businesses on how to obtain a credit line, how to build cost-effective websites, and how to promote the business and its services.

The MHCC builds connections between its members and the business community. With our quarterly business mixers, we give current members and future members the opportunity to network and develop business relationships for growth. It is important that we serve as a liaison to assist in making small minority businesses more marketable, ensure stability and lasting prosperity.

Due to the positive impact of the oil and gas industry on local communities, this has given aspiring entrepreneurs the opportunity to fulfill dreams of owning a business. We have seen home bakers open restaurants and bakery shops, restaurants expand their businesses into second locations and catering services to the oil field drill sites. Licensed commercial electricians have expanded services

into the oil and gas sector, and cosmetologists and barbers have opened their own shops.

I applaud the great work of the Midland Development Corporation and Kevin Dawson with Maybe in Midland/Odessa on their successful efforts of bringing new brands of restaurants, family entertainment centers, aerospace- and aviation-related businesses to Midland.

Midland is home to over 6,200 business establishments and provides over 100,000 jobs. Oil and gas in the Permian Basin is an economic driver not only here but throughout this Nation and the world. MHCC will continue to support our local minority and small business owners so they can provide economic growth and commerce in our community.

Premier Energy is a proud member of the MHCC, and my company is celebrating its seventh-year anniversary. I grew up in Kermit, Texas. And I actually started working in the gas plant industry at 18 years old and was able to continue work in the summer to help pay my way through college. I have over 14 years' experience in the production field of the oil and gas industry. I am proud of my 64 employees. And without them, my wife and I could not continue to grow and provide exemplary services to our customers.

Premier focuses on new construction and maintenance of well and battery facilities, environmental, and remediation and reclamation work, earthwork, and vessel repair.

I thank companies like Diamondback Energy, Pioneer Natural Resources, Elevation Resources, Walsh & Watts, and others that trusted me and my company to get the job done. Over the years, I continue to be impressed upon the innovation, the safety, and the commitment to the environment by these companies and all in this industry.

The use of plastic-lined facilities and berms is a true commitment to eliminating oil or produced water to fall directly onto the ground. The use of automation to monitor tank levels, well sites, and production facilities has allowed electricians to expand upon their knowledge and prevent overflow.

I am often disturbed by the attacks that groups display against this very important industry. The oil and gas industry is very responsible, and I get to see it firsthand. I challenge those that don't understand or go by hearsay to come visit an oil well and a facility site. All are invited to see the innovation, safety, and the importance of taking care of the environment.

I commend the Texas Railroad Commission for being in the forefront of working with oil and gas operators to provide clean oil and gas in Texas. Oil and gas operators and service companies have a positive impact on employment, building strong communities and quality of life. I have seen my very own employees able to buy and qualify to purchase their first home, first new car, and give back to their churches and communities. I have witnessed one of my own managers recently become a citizen of the United States.

Furthermore, I have provided opportunities for our contract lease operators to be hired on a permanent basis by oil producers which, in essence, will have access to more extensive training, benefits, and quality of life.

I thank you and look forward to your questions today and for a progressive dialogue.  
[The prepared statement of Mr. Carrasco follows:]

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STATEMENT BY

Adrian Carrasco

Board Chairman Midland Hispanic Chamber of Commerce

President/Owner Premier Energy Services LLC

Board of Trustee Midland Community College

BEFORE THE HOUSE ENERGY AND COMMERCE COMMITTEE

ON AMERICAN ENERGY EXPANSION: "Improving Local

Economies and Communities' Way of Life."

February 16, 2023

Chairman Duncan, Ranking member Degette and members of this committee, I would like to thank you and it is an honor to be a witness at this hearing that has so much meaning and positive impact in the world. I would like to say a big thank you to Congressman Pfluger for his leadership, service, and dedication to District 11. I am Adrian Carrasco, I am the chairman of the board of directors of the Midland Hispanic

Chamber of Commerce, President/owner of Premier Energy Services and Board of Trustee of Midland Community College. The MHCC has over 30 plus years advocating, partnering, and supporting small minority businesses in Midland County. When I say minority, it is not just color, it is women owned businesses and veteran owned businesses. As many organizations suffered during COVID, The MHCC did as well and we had to totally re-brand the MHCC to ensure that we continued the great work of the past and create opportunity now and for the future. The mission of the MHCC is to successfully lead, develop, and advocate for our members while encouraging the advancement, economic growth, and social development of the Hispanic and Minority Community. The MHCC provides commerce opportunities through quality of education, quality of business, quality of jobs, and quality of life. We all know that small businesses play a key role in increasing commerce, providing jobs, and bringing economic development within our community. It is crucial that we continue to provide business education, funding opportunities for business growth,

and guidance for positive growth. As communities like Midland grow, we look to entrepreneurs to develop businesses that meet the need of the community and its growth. Through programs like our bettering your business at breakfast, we have been able to educate new and existing small minority businesses on how to obtain a credit line, how to build cost effective web sites, and how to promote the business and its services. The MHCC builds connections between its members and the business community. With our quarterly business mixers, we give current members and future members the opportunity to network and develop business relationships for growth. It is important that we serve as a liaison to assist in making small minority business more marketable, ensure stability, and lasting prosperity. Due to the positive impact of the oil and gas industry on local communities, this has given aspiring entrepreneurs the opportunity to fulfill dreams of owning a business. We have seen home bakers open restaurants and bakery shops. Restaurants expand their businesses into second locations and catering services to the oil field drill sites. Licensed commercial

electricians have expanded services into the oil and gas sector and cosmetologists and barbers have opened their own shops. I applaud the great work of the Midland Development Corporation and Kevin Dawson with Maybe Midland/Odessa on their successful efforts of bringing new brands of restaurants, family entertainment centers, aerospace and aviation related businesses to Midland. Midland is home to over 6,200 business establishments and it drives over 100,000 jobs. Oil and Gas in the Permian is an economic driver not only here but throughout this nation and the world. MHCC will continue to support our local minority and small business owners so they can provide economic growth and commerce in our community.

Premier Energy Services is a proud member of the MHCC, and my company is celebrating its 7<sup>th</sup> year anniversary. I grew up in Kermit, TX and I actually started working in the gas plant industry at 18 years old and was able to continue working in the summers to help pay my way through college. I have over 14 years' experience in the production field

of the oil and gas industry. I am proud of my 64 employees and without them my wife and I could not continue to grow and provide exemplary services to our customers. Premier focuses on new construction and maintenance of well and battery facilities, environmental, remediation, reclamation work, earthwork, and vessel repair. I thank companies like Diamondback Energy, Pioneer Natural Resources, Elevation Resources, Walsh and Watts and others that trust in me and my company to get the job done. Over the years, I continue to be impressed upon the innovation, the safety, and the commitment to the environment by these companies and all in this industry. The use of plastic lined facilities and berms is a true commitment to eliminating oil or produced water to fall directly onto the ground. The use of automation to monitor tank levels, well sites, and production facilities has allowed electricians to expand upon their knowledge and prevent overflow. I am often disturbed by the attacks that groups display against this very important industry. The oil and gas industry is very responsible and I get to see it firsthand. I challenge those that don't understand or go by

here say to come visit an oil well and facility site. All are invited to see the innovation, safety, and the importance of taking care of the environment. I commend the Texas Railroad Commission for being in the forefront of working with Oil and Gas Operators to provide clean oil and gas in Texas. Oil and gas operators and service companies have a positive impact on employment, building strong communities, and quality of life. I have seen my very own employees able to buy and qualify to purchase their first home, first new car, and give back to their churches and communities. I have witnessed one of my own managers recently become a citizen of the United States. Furthermore, I have provided opportunities for our contract lease operators to be hired on a permanent basis by oil producers which in essence will have access to more extensive training, benefits, and quality of life. As a trustee at Midland College, I understand the importance of work force training and career building. Community Colleges are looked to as being the best for training the workforce for industries within their communities. I am proud to be a part of one of the best community colleges in the

nation. We are in the process of completing our state of the art Pre-K Academy that will accelerate the awarding of degrees for early childhood teachers to 3 years based on dual credit programs. This will help fill the shortage of early childhood teachers in our local and surrounding public school districts. Our Petroleum Professional Development Center continues to provide ce training for the oil and gas industry. We are currently in the design stage of a state-of-the-art CTE Facility that will provide training for various areas of industry in our area with vast emphasis on oil and gas. I encourage congress to work in unison to continue to embrace the oil and gas industry which brings employment, community drive, and a quality of life. I encourage congress to continue to find ways to fund community colleges in ways like no other because they will continue to be a strong avenue for diverse industry training, training in the healthcare field, and the service industries. I thank you again and I am looking forward to your questions and continued dialogue about the importance of oil and gas!

Mr. DUNCAN. Thank you.  
The Chair will now recognize Dr. Zavada for 5 minutes.

**STATEMENT OF MICHAEL S. ZAVADO, PH.D.**

Dr. ZAVADA. Yes. Good afternoon, everybody.

I am Michael Zavada. As my mother used to say, I am not a real doctor. I am a Ph.D. and geoscientist in environmental geology.

I would like to start off by saying that I don't think there is any doubt that the oil and gas industry in West Texas over the last 100 years actually has contributed to the development of the towns in this region. It has made major contributions to the energy available and the security of the United States.

And with new technologies, the Permian Basin continues to be a major producer. I think we are all aware of the argument and the data that surrounds climate change and continues to be discussed on levels in academia and also in politics and other areas.

But one thing I—one point I do want to make. I do think it is prudent if the United States—for the United States to develop alternative energy sources with a result to diversify our energy portfolio. I think this is necessary. That is the safest and most stable way of maintaining long-term energy independence.

But we shouldn't make any one form of energy excessively important. I think this is the most strategic way to protect the energy grid and has a good strategic move in the world, in a hostile world.

The Permian Basin, known for its supplying a major portion of America's energy, will remain so in any new paradigm that is emerging for the future. And that will be at least for the next 50 years. It is no secret that West Texas is also an ideal environment for the production of alternative energy: solar, wind, hydrogen fuels, among others.

I believe with rational and cooperative investment in the development of all forms of alternative energy will not only diversify our energy portfolio but continue the long-term tradition of West Texas as a major source of America's energy needs, and will also help our towns that rely heavily on oil right now transition to a new paradigm. I think to develop—I do have some suggestions to develop a sustainable plan for the communities in this region.

First of all, I would like to say, in partnership with industry and academics and academia within Texas, we need to continue to invest in developing technologies that will ameliorate the larger amounts of CO<sub>2</sub>, methane, and other volatile organic compounds released into the atmosphere at all phases of oil and gas production. That is recovery, transport, refinement, and use.

Industry and academics are already engaged in efforts—not in an adversarial way, but in a cooperative way—to remediate some of the environmental issues, for instance, as have already been mentioned, carbon capture, utilization, and sequestration; hydrogen fuels; and fuel-cell technologies. Industry is also partnering with academics to explore ways of cleaner-produced water to minimize needs for injection wells and to minimize low-grade earthquake damage.

All of these efforts by industry and academics need to be consistently invested in as long as fossil fuels remain a primary energy

source, and they will. I think any projections of 10 years or any time like that is just unreasonable.

And we have to get a level head about how this transition will actually occur, and that we should keep all of the components of it. It shouldn't be at the expense of any one component.

OK. So here is one of the suggestions—here is another suggestion. Because of the nature and rise of full price of a barrel of oil, many towns in West Texas that are only dependent on the industry take a characteristic—take on characteristics of a boom-and-bust economy and woefully lag behind communities in other parts of Texas and the United States that have more diverse and reliable tax base.

This also leads to a large number of itinerant workers living in temporary housing: trailer parks, RVs, and man camps, many of which are not regulated for disposal of human waste and are hosted on dusty, barren lots. They are reminiscent of worker camps associated with coal mining in the early part of the 20th century.

Itinerant workers and their families changed the effectiveness of funding that was intended for more permanent population with regard to education, health, and welfare. So this is an issue that many communities struggle with, as costs go up to service all of these families, as workers come into our towns, particularly in Odessa and West Odessa.

I think many companies have been effective in yielding large profits from their investors, but focused investment on permanent infrastructure in the communities of the Permian Basin is necessary: improving schools, roads, creating parks, walkable communities, supporting a variety of programs to enhance entertainment in these communities, summer programs to help children more success—to be more successful in school, and specialized programs for immigrant families.

Industry operations should be relegated exclusively beyond the borders of a town. This would be for aesthetic, health, and safety reasons.

There should be investment in providing help to these communities to better zone and plan their rural communities to be more beautiful and pleasant communities to live in. This often attracts other businesses, and people become permanent residents in the community.

In other words, what I am advocating for is that they are to diversify—they are to diversify their job base, in other words, the types of jobs they have, rather than to rely on one industry.

Provide funding to communities to seek out energy industries or tangential industries to diversify the jobs available in the region. This would ameliorate the effects of oil and gas boom-and-bust cycles. This will also diversify the skills of the workforce and may attract unrelated industries to the area in which workers' skills are transferable, further diversifying and stabilizing the community's tax base.

Thank you.

[The prepared statement of Dr. Zavada follows:]

There is no doubt that the oil and gas industry in west Texas over the last 100 years has contributed to the development of the towns in this region and has made major contributions to the energy availability and security of the United States. With new technologies the Permian Basin continues to be a major producer. However, this form of energy (fossil fuels) significantly contributes large amounts of CO<sub>2</sub>, methane and other volatile organic compounds (VOCs) released into the atmosphere at all phases, i.e., recovery, transport, refinement and the byproducts of the use of these fuels. In addition to some health risks associated with operations, it is confidently hypothesized (based on data derived from multiple investigators) that the addition of CO<sub>2</sub> to the atmosphere at current rates is driving changes in our climate, and may, or has already increased severe weather events. These events are costing the American people billions of dollars. Climate change is not a new phenomenon. Climate has been changing throughout the history of the planet. In the past 500 million years the biota on the planet have experienced 5 major extinctions all of which have rapid climate change as a causative component, the operative word is RAPID, which is often not emphasized or left out of conversation about climate. These observed changes have motivated governments and the people of primarily developed countries to seek alternative energies to ameliorate the effects of fossil fuels. I think it is prudent of the United States to develop these alternate energy sources with the result to diversify our energy portfolio, not eliminating any one form of energy, but not making any one form of energy excessively important. This is the most strategic way to protect the energy grid and is a good strategic move in a hostile world.

The Permian Basin primarily known for supplying a major portion of America's energy, will remain so in this new paradigm that is emerging for at least the next 50 years. It is no secret that West Texas is also an ideal environment for the production of alternative energy, i.e., solar, wind energy and hydrogen fuels. I believe if rational and cooperative investment in the development of all forms of alternative energy will not only diversify our energy portfolio, but continue the long tradition of west Texas as the major source for America's energy needs. I think to develop a sustainable energy plan for the future in this region and to maintain its value to our energy needs, I would recommend the following,

- 1) In a partnership with industry and government we need to continue to invest in developing technologies that will ameliorate the large amounts of CO<sub>2</sub>, methane and other volatile organic compounds (VOCs) released into the atmosphere at all phases of oil and gas production, i.e., recovery, transport, refinement and use. Industry and Academic are already engaged in efforts to remediate some of the environmental issues, e.g., Carbon Capture Utilization and Sequestration (CCUS), hydrogen fuels and fuel cell technology. Industry is also partnering with academics to explore ways of cleaning produced water to minimize the need for injection wells and minimize low grade earth quake damage. All of these efforts by industry and academics need to be consistently invested as long as fossil fuels remain the primary energy source (See Figures 1 and 2)
- 2) Because of the nature of rise and fall of the price of a barrel of oil many towns in west Texas that are only dependent on this industry take on characteristics of a boom-and-bust economy, and woefully lag behind communities in other parts of Texas and the United States that have a more diverse and reliable tax base. This also leads to a large number of

itinerant workers living in temporary housing (trailer parks, RVs and “man camps”) many of which are not regulated for disposal of human waste and are hosted on dusty, barren lots. These are reminiscent of the workers camps associated with coal mining in the early part of the 20<sup>th</sup> century. Itinerant workers and their families change the effectiveness of funding that was intended for the more permanent population with regard to education, health and welfare. Investment should not be primarily focused on the oil and gas industry. Many companies have been effective yielding large profits for their investors, but focus the investment on creating permanent infrastructure in the communities of the Permian Basin, improving schools, roads, creating parks and walkable communities, supporting a variety of programs to enhance entertainment in these communities and e.g., summer programs to help children be more successful in school and specialized programs for immigrants families. Industry operations should be relegated exclusively beyond the borders of the town. This would be for aesthetic, health, and safety reasons.

- 3) There should be investment in providing help to these communities to better zone and plan their rural communities to be more beautiful and pleasant communities to live in, this often attracts other businesses and people to become permanent residents in the community.
- 4) Provide funding to communities to seek out other energy industries or tangential industries to diversify the jobs available in the region. This would ameliorate the effects of the oil and gas boom and bust cycles. This will also diversify the skills of their work force and may attract unrelated industries to the area in which the workers skills are transferable, further diversifying and stabilizing the communities tax base.

It is not the companies that need your help or attention they have comfortably made significant amounts of money. Although these companies have supported many, if not all of the families in a direct or indirect way, very few have reinvested in the communities at a level that makes these communities aesthetically pleasing, safe and healthy environments for the people that support those industries.

Michael S. Zavada, PhD

2/17/2023

I would like to thank Drs. Robert Trentham (Petroleum geologist), Miles Henderson (Environmental Geologist and Sumit Verma (Geophysicist) for their thoughtful input into this discussion.

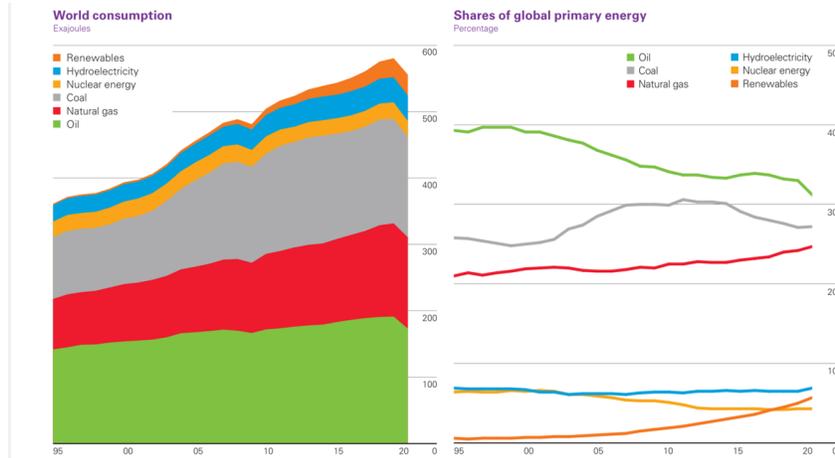


Figure 1. Showing the world consumption of energy sources and the percentage shares of global primary energy for years 1995-2020.

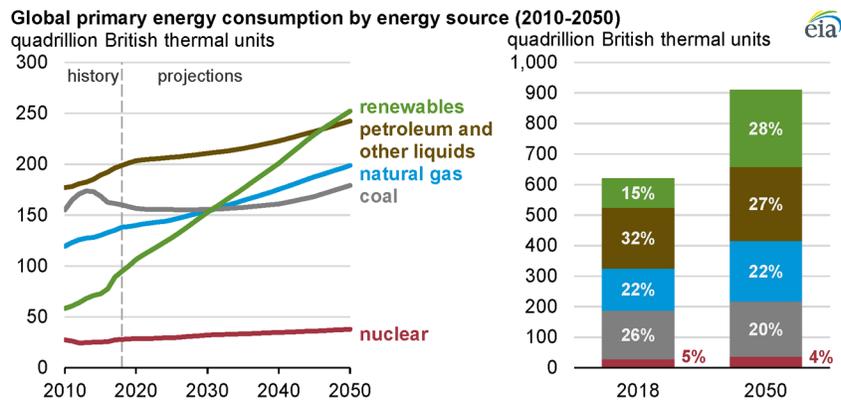


Figure 2 Consumption by energy source.

Mr. DUNCAN. Dr. Zavada, thank you and thanks for, at short notice, coming in and being part of the hearing.  
I now go to Mr. Pruett for 5 minutes.

**STATEMENT OF STEVEN H. PRUETT**

Mr. PRUETT. Thank you, Chairman Duncan, Chairman—Chairwoman McMorris Rodgers, Congressman Pfluger for inviting me, and to all the members of this distinguished committee for making the arduous trip to Midland, Texas, the heart of the Permian Basin. It is an honor to speak with you today.

I am Steven Pruett, founder and CEO of Elevation Resources, a private, Midland-based independent oil and gas company that happens to be owned by East and West Coast institutions and myself. We are active in drilling and operating horizontal wells in the Permian Basin.

I am also chairman of the Independent Petroleum Association of America, which I will refer to as the IPAA, which represents over 6,000 independent oil and gas companies and individuals in 33 States. We are based in Washington, DC. So you will be seeing me more over the next 2 years.

Elevation, along with the other active drillers in the Permian Basin, rely upon horizontal drilling and multistage hydraulic fracturing to develop unconventional shales that comprise over 90 percent of the oil and natural gas production in the Permian Basin today. As Congressman Pfluger said, in 2008 we were producing about 700,000 barrels a day. And thanks to horizontal drilling and fracking, we are now producing 5.6 million barrels per day. And we have got more upside from there.

I am going to discuss three factors that affect and limit the growth of U.S. natural gas production—U.S. oil and gas production. That is the impact of regulatory uncertainty, permitting delays in labor, and supply-chain shortages.

So regulatory uncertainty has constrained capital formation and the reinvestment of cash flows needed to increase U.S. oil and gas production. As a result of the COVID-induced oil and gas price collapse, over 300 oil and gas companies and oil field service companies filed for bankruptcy protection, and many ceased operations permanently. The universe of investors who will invest in oil and gas companies is dramatically smaller than a few years ago due to ESG concerns and financial losses. The number of banks loaning money to oil and gas companies is half what it was 5 years ago due to loan losses and ESG mandates from their investors.

The EPA is drafting rules for Quad-O b and c implementation, which dictates the equipment and practices we use to manage and reduce emissions. The EPA is—in the rulemaking process for the Inflation Reduction Act methane fee, which is ambiguous and gives the EPA a license to tax our industry as they see fit.

The IPAA supports Congressman Pfluger's H.R. 484, the Natural Gas Tax Repeal Act, as it addresses the tax that is singularly focused on the oil and natural gas industry, implemented by the EPA, which does not have taxing authority or the resources to do so, and utilizes a taxing formula that is flawed at best. It is—we believe that much of this language was drafted by environmental firms that really know nothing about our business.

Rest assured, Elevation and our peers have made and continue to make substantial investments in methane recovery. All of our operations are closed systems. We have also invested in emissions monitoring and reduction technologies ahead of the EPA rules. Oil and gas producers utilizing these technologies produce the lowest-emission oil and gas in the world here in the Permian Basin.

IPAA also supports Chairman Duncan's H.R. 150, Protecting American Energy Production Act. State regulatory bodies have been delegated primacy from the EPA, and in Texas we believe the Railroad Commission and TCEQ are best informed and best staffed to regulate oil and natural gas operators in their respective States.

Giving the President authority to shut down hydraulic fracturing is akin to killing the shale revolution, which is responsible for growth in U.S. oil production from 5 million barrels a day in 2008 to 12.3 million barrels a day presently. And natural gas production has increased from 56 billion cubic feet a day in '08 to over 100 Bcf today, which has been an economic engine for our country and, as Congressman Pfluger reminds us, for our allies in providing cheap, reliable energy.

Permitting delays for infrastructure development limits growth in U.S. oil and gas production. Without pipelines, processing plants, export terminals, oil and gas production in the U.S. will not grow as we need markets for our product.

Examples include the permitting of reactivating the Freeport LNG export facility, which is 20 percent of LNG exports over 2 Bcf a day to our allies in Europe, and there's other LNG export terminals waiting on years for export approvals.

Permitting natural gas pipelines serving the Northeast where power generators are still burning coal and homes and businesses still burn heating oil and import LNG from abroad, not from the U.S. Gulf Coast, due to the Jones Act—that needs to be fixed.

And leasing Federal land does not translate into drillable locations, as many other permits and easements are needed. There is the BLM in Carlsbad, New Mexico, sitting on stacks of permits that are needed because a well is not going to be drilled if they can't get product to market.

Finally, labor and supply-chain constraints have not been aided by the Biden administration's negative messaging.

Further, the oil industry is aging. My generation is approaching retirement, setting our industry up for the great crew change. However, there are not young people to replace my generation in the oil industry.

Over the last 2 years, oil fields experienced 15 percent wage inflation, if you can find the qualified workers. We have also experienced months-long delay in completing and preparing wells due to manpower and equipment shortage.

Drilling completion costs for my company are up 40 percent, and we still have escalating costs for steel labor while we have very weak natural gas prices because we don't have adequate pipeline capacity.

To reduce uncertainty and improve the investment climate needed to grow U.S. oil and gas production, we need Congress to provide oversight of the EPA, the Department of the Interior, the

FERC, and the SEC as it relates to regulations affecting the oil and natural gas industry.

Thank you very much.

[The prepared statement of Mr. Pruett follows:]

Steven H. Pruett  
Energy and Commerce Committee  
Subcommittee on Energy, Climate and Grid Security  
February 16, 2023

Thank you, Madame Chairman McMorris Rodgers, Chairman Duncan, Congressman Pfluger, and this distinguished committee for holding this hearing in the heart of the Permian Basin and for the invitation to speak to you today.

I'm Steven Pruett, founder and CEO of Elevation Resources, a Midland-based independent oil & gas company, active in drilling and operating horizontal wells in the Permian Basin. I am also the Chairman of the Independent Petroleum Association of America, which represents over 6,000 independent oil & gas companies and individuals in 33 states. Elevation, and the other active drillers in the Permian Basin, rely upon horizontal drilling and multi-stage hydraulic fracturing to develop the unconventional shales that comprise over 90% of the oil and natural gas production in the Permian Basin today.

I'm going to discuss 3 factors limiting growth in U.S. oil & natural gas production: the impact of regulatory uncertainty, permitting delays, and labor and supply chain shortages.

**Regulatory Uncertainty** constrains capital formation and the reinvestment of cash flows needed to increase oil and gas production in the U.S. and across the globe. As a result of the COVID-induced oil and gas price collapse, over 300 oil & gas companies and oilfield service companies filed for bankruptcy protection, and many ceased operations. The universe of investors who will invest in oil & gas companies is dramatically smaller than a few years ago due to ESG concerns and financial losses. The number of banks loaning money to oil and gas companies is half what it was 5 years ago due to loan losses and ESG mandates from their investors.

The EPA is drafting rules for OOOO b/c which dictate the equipment and practices to manage and reduce emissions. The EPA is rulemaking for the Inflation Reduction Act methane fee, which is ambiguous and gives the EPA a license to tax our industry as they see fit. IPAA supports Congressman Pfluger's H.R. 484, the "Natural Gas Tax Repeal Act," as it addresses a tax singularly focused on the oil and natural gas industry, implemented by the EPA which does not have taxing authority or resources, and whose taxation formula is derived by dividing the calculated weight of methane by the sales of natural gas in volume and heat content. The EPA's definition of a producer's "facility" for taxing purposes is an entire basin, which is an overreach.

Rest assured Elevation and our peers have made and continue to make substantial investments in methane recovery and emissions monitoring and reduction technologies. Oil and gas producers utilizing these technologies produce the lowest emission oil and natural gas in the world.

IPAA also supports Chairman Duncan's H.R. 150, "Protecting American Energy Production Act." State regulatory bodies are best informed and staffed to regulate oil and natural gas operations in their respective states. Giving the president authority to shut down hydraulic fracturing is akin to quashing the shale revolution which is responsible for growth in U.S. oil production from 5 MMBopd in 2008 to 12.3 MMBopd presently, and natural gas production from 56 Bcfd in 2008 to over 100 Bcfd today, which has been an economic engine for our country and our allies by providing cheap, reliable energy.

**Permitting delays** for infrastructure development limits growth in U.S. oil and gas production. Without new pipelines, processing plants and export terminals, oil and gas production in the U.S. will not grow as we need markets for our product. Examples include:

- Permitting the reactivation of the Freeport LNG export facility, representing 2.1 Bcfd for our allies in Europe, along with other LNG export terminals waiting on FERC approvals
- Permitting natural gas pipelines serving the Northeast where power generators are still burning coal and homes and businesses burn heating oil and import LNG from abroad, not from the U.S. Gulf Coast due to the Jones Act
- Leasing federal land does not translate into drillable locations as many other permits and easements are needed to actually produce a well, and if not in place, the well doesn't get drilled.

#### **Labor & Supply Chain Constraints**

Negative messaging by the Biden Administration discourages people from joining our industry. COVID relief reduced our workforce as workers stayed home, living on government handouts. My generation is approaching retirement, setting the oil and gas industry up for the "great crew change." However, there are not enough young people to replace my generation in the oil industry. Over the last 2 years, the oilfield has experienced 15% wage inflation if you can find qualified workers. We've also experienced months-long delays in completing or repairing wells and facilities due to manpower and equipment shortages. Drilling & completion costs for my company have risen from \$8 million in 2021 to \$11 million per well in 2022 due to escalating input costs including steel and labor, while weak natural gas and liquids prices have reduced our returns, thus limiting drilling activity.

To reduce uncertainty and improve the investment climate needed to grow U.S. oil and gas production, we need Congress to provide oversight of the EPA, DOI, FERC and SEC as it relates to regulations affecting the oil and natural gas industry broadly defined from the wellhead to the consumer.

Mr. DUNCAN. I want to thank the gentleman, and we now have finished up the opening statements portion.

Other Members are very, very close. I hate that they didn't get the benefit of—don't start my clock yet—of your testimony, and I hate they are not going to get the benefit of my excellent questioning of you. But now, I will now recognize myself for 5 minutes for questioning.

You know, when I looked at the title of this hearing, "American Energy Expansion: Improving Local Economies and Communities' Way of Life," I thought about all the time I spent in the State of Louisiana. Now I am an honorary Texan thanks to Governor Abbott, and it is great to be in West Texas.

When I have spent time in Louisiana, from Lafayette and New Iberia to Thibodaux, Houma, on down to Port Fourchon, on the sides of Highway 90, a four-lane highway, there is business after business that are somehow involved in supporting energy production offshore.

It could be HVA services, it could be food services, it could be transportation, it could be, you know, drilling mud, it could be supply vessels, it could be casing, it could be all the downhole widgets that make energy production possible offshore.

Guess what I saw last night when I drove from the airport in Midland to the hotel across the street. On I-20 Business, I guess is what it is called, Mayor, business after business after business after business after business after business after business that supports the energy production that happens in the Permian Basin. That is an impact on the economy. Those are great jobs within those industries that you guys represent.

But the workers and the businesses themselves, they join the United Way and the Chamber of Commerce and they support ball teams at the YMCA and they go to church and they tithe and they tip the waitresses and they eat at local restaurants. Tremendous trickle-down economy within the energy sector, both in Louisiana, Oklahoma, Texas, and anywhere energy is produced. I saw it firsthand just from a little short drive from Midland airport to downtown. You know the impact. You know the impact that energy provides.

And I think about when you—and I talked with the guys from Pruitt Energy today. When you take a barrel of hydrocarbon, you put it under pressure—God gave us this tremendous ability to figure this out—you put a barrel of hydrocarbon under pressure, and it miraculously separates in all kinds of products during the cracking that we use today, whether it is bottles—and I look around and see all the things that may derive from a barrel of hydrocarbons. It is an amazing substance produced right here in the Permian that makes the lives of people around the world so much better.

But this administration is killing this industry. OK. I appreciate the President saying that we are going to still need oil and gas for a while. His definition of "a while" and my definition of "a while" and your definition of "a while" all could be different. We use "10 years" in Washington for all kind of stuff. Ten years is just kind of a filler word, 10-year budgeting, 10-year this, 10-year that. It is

going to be here a lot longer than 10 years, and I am glad of that, but we have got to support the industry, not kill it.

So, Mr. Pruett, you mentioned how regulatory uncertainty and the COVID price collapse, ESG movement, how it all constrained the capital available to the industry.

Can you explain how the President promising to end oil and gas production in the U.S. impacts your ability to establish long-term investment that is needed?

Mr. PRUETT. Yes, I will give you an example.

So we—I mentioned we are owned by East and West Coast institutions through a private equity fund. And when we needed, when our bank held a gun to our head and said, “You need some additional equity or we won’t extend your credit agreement,” and—or, “If you don’t put in the money, the alternative is you won’t drill anymore, you are going to blow it down, and we will own your cash flows”—and it was a major bank—we went to our primary investor, even though we are 10 years old, we are way beyond the period in which they should be investing money, we are surviving on our own cash flow.

So we went out to our 20 or so investors, and two of the largest—and they are household names, one is the largest money manager in the world—said, “Not only are we not going to invest, we are going to sell our shares back to the company.” And we negotiated a price, and they went on their way, which was fine. Actually, it was fantastic, because we managed to scrape together the money between myself, our CFO, and our primary investor.

We got a new lease on life, paid down debt a little bit, and cut our debt in half over the next 6 months by not drilling. But basically, we quit drilling, we started blowing it down, but we complied with the bank, and now we have a great relationship with that same bank. We expanded our credit group.

But there were many companies during that same time, even though we violated no covenants and our credit statistics were good, we were all put into the workout group just because the CEO mandated that. And we—they were basically telling us, “We are going to dictate your budget. You can’t drill. We own your cash flows.” And that was a dark place to be. But, fortunately, we got price recovery. The industry has healed, those of us who survived that dip. And—but in the meantime, the number of banks who would even consider loaning money shrunk, and most of our banks said, “We have a mandate from the top not to advance any more capital than what we have already committed to you.”

So it was—it is a whole new game. So from that experience, my peers and I, all knowing we have to survive on our own cash flow—we can’t rely on the banks, we can’t rely on getting external money, the number of private equity firms has dropped from 30-something to probably 5 or 6 that can actually raise capital. And it is just a new world.

So, while we are not public, I mean, the publics are all saying, “We are going to reinvest 30 percent of our cash flow, the rest will go to share buybacks and dividends,” because that is what their investors want. But it is the same for private companies. We now need to provide dividends, and that will fundamentally limit the ability of Permian Basin and U.S. oil companies to grow.

Mr. DUNCAN. My time is expiring, so I want to thank you for that.

I look forward to the other Congressmen's comments and the questions you guys and talk about the impact on the economy and the government in that area.

I am going to go to Mr. Peters from California for 5 minutes.

Mr. PETERS. I just want to say I want to talk a little bit about a place where I really think we can agree in concept, even though Mr. Pruett points out some of the—maybe we haven't gotten it quite right in terms of regulating. But that is methane. A lot of my colleagues have pointed out that the shale revolution has dramatically reduced the production of carbon dioxide over other sources of energy, and that is absolutely true.

The problem is that fugitive methane takes away a lot of the climate benefit from that, and I think that is an opportunity for us to work together to close this gap, whether it is—even Dr. Zavada said 50 years. It is going to be some long time that oil and gas is going to be around. Let's just make it clean while we are doing it, and I think there is a real opportunity there.

In fact, when I went to Qatar to thank them for helping us with refugees from Afghanistan, everyone asked about refugees. I asked the emir about methane. I said, "What do we do about methane?" This is something where we can really, I think, come together and agree.

It is complicated. When I visited Texas Tech, we visited with the petroleum engineering department there. It is not easy to get right. I commit to working with you to get the mechanics of it right, because I think we owe you that. We want to get it right. We don't want to be wasting money or product.

But I think it is an operative concept. If we can work together, we can tone down the rhetoric around oil and gas a little bit, even as other sources of energy help diversify our economy.

And, Mayor, I would say that is important to you, because I didn't hear—to be honest with you, I heard that right now Midland is killing it. Congratulations, right? So right now we are not looking at a lot of downsides. But you are concerned about the talk, what you hear about the future. And I think one way to bridge the gap—and I say this to Midland—is help on methane. Let's all come together and fix that problem.

Mr. Pruett, you did mention the problems you had with the methane fee in the Inflation Reduction Act, but there is money that is going to come out to help producers comply. And can you talk to me about how we can work together to make sure that that money gets to the Texans and Oklahomans and Pennsylvanians who are doing this work to really deal with this methane issue that I just identified?

Mr. PRUETT. Yes, Congressman Peters, our 6,000 members distrust the EPA because they have had a target on our back. If the monies were instead managed and permitted by the DOE, I think it would be a very different picture.

The concern is that, in order to qualify for a grant from the EPA, you are basically going to lift the hood on all of your practices. And for some of the small operators who aren't in compliance with the coming regulations, that is a frightful process, because they may be

subject to fines for their noncompliance. And the irony is they are the ones that need the funding most—not my company, not Diamondback or Pioneer, because we are already in compliance.

So if there is a way to move the funding, it is kind of like the EPA has never taxed anything before. That is in Treasury Department—that is unnerving—and the same thing about applying for grants. DOE has the technical experts, the scientists, the engineers. The EPA, it is a different concern. And I just don't think members will sign up for those grants.

Mr. PETERS. I think it is a very constructive comment. I think we have also assigned the EPA other grant-making that maybe doesn't—a square peg in a round hole. And I will take that back and consider it.

Mr. PRUETT. Thank you.

Mr. PETERS. But in terms of the money, I want to make sure people understand that the intent is to make sure that we can help people comply.

By the way, your Representatives, Mr. Pfluger, Mr. Curtis, have also explained to me that when I hear that the industry is interested in methane compliance, it often comes from the big players. And it is the independents who are low to the ground and living month to month that need the help. So that is the intent of us and that we are trying to achieve, and we will keep at that.

And if you can't send me a Democrat, I guess Pfluger is all right.

Mister—I am sorry. I want to ask the mayor. The region has been effective at both producing large amounts of oil and natural gas and welcoming new technologies like solar and wind.

How would you like policymakers to better communicate on energy policy so that we embrace this all-of-the-above thing without pitting one against the other? What would you like to hear out of DC? What would sound good to Midland on that score?

Ms. BLONG. I think the perception here, and perhaps the reality, is that we have picked winners and losers in certain cases because we have given, you know, we have given benefits to solar and wind that we have not afforded to oil and gas. And so, we are faced with restrictions. We are faced with regulatory headwinds and with permitting issues that are making things harder for to us move forward.

And so I think that pulling back on some of those headwinds that we face would go a long way. Most of the folks in oil and gas don't really have a bone to pick with solar and wind development as long as it is a level playing field.

Mr. PETERS. You will only hear 10 more seconds from a Democrat in this whole hearing. So let me just say this:

I believe in subsidizing and researching from the Federal Government as things get started. I think your comment is legitimate as those industries mature. I think right now, concentrating on investing in things that are new like carbon capture and direct air capture and things that need help, I will take that comment, as well, as constructive.

And, again, thank you all for having us in Midland. I love visiting here. I have—still have to explain what chicken fried steak is, but I enjoy it when I get it.

So I yield back.

Mr. DUNCAN. Where are we getting chicken fried steak? Because I am.

Mr. PETERS. Down the street.

Mr. DUNCAN. OK. Yes, you just drive north up to the panhandle. You will see all the windmills you want, and there were a lot of them subsidized by the Federal Government, at least initially.

I will now go to the full committee chair, Mrs. McMorris Rodgers, for 5 minutes.

Mrs. RODGERS. Thank you, Mr. Chairman.

Again, just a big “thank you” to all the witnesses and everyone for being here today. It is great to be in the energy capital, as you labeled it, or called it.

You know, and in America, we often—we often celebrate American ingenuity and creativity and what it has meant for us in so many different—different fields, sectors where we have led the world. And the result of that has been America has done more to lift people out of poverty, raise the standard of living more than any other Nation in the history of the world.

And energy is foundational to all of that. You can’t do anything without energy. It is our economy. It is our way of life. It is our national security. And I think at a hearing like this, I am reminded of just how foundational energy is. And we truly do need the all-of-the-above approach.

The fact is that America has been leading. And right here, you know, the numbers Mr. Pruett was sharing about just the increase in production, energy production, because of new technology in Midland has had a tremendous impact here in this community, impacting a lot of people’s lives. And I just wanted to have you talk a little bit more about that.

But it has been—what we need to make sure that we continue to focus on is that all-of-the-above approach and continue to advance the new technologies, the innovations, the research that is going to ensure that we lead.

And so to the mayor, I just wanted to have you speak a little bit more about what you have seen in Midland since, I guess, it was 2005, 600 percent increase in production, oil production, here and just the impact that that is having as far as on the city, your ability to provide for people, on individuals that live here, citizens, your way of life.

Ms. BLONG. Well, thank you.

One of the things—you know, I am recently elected, and so I did polling in the fall, so I have fresh information on some of the biggest concerns for our community.

And the number-one polling issue in our community is education, and number two is healthcare. And so, when we look at the things that are really being impacted by this, it is really the population growth that we have seen and also some State-level issues that are really not yours to deal with, with recapture and other things here in the State of Texas. But education here in Midland is our number-one concern.

And we—all of these families that are coming in here, workers at all different levels, are bringing kids with them. Our average age in Midland, Texas, right now is 31 years old, and our largest group of population is ages zero to 4.

And so we have this dynamic in Midland of an extremely young population, folks that care a lot about getting good education for our kids. And so that is probably the single most significant impact.

But we also see other things, you know, housing, affordable housing in the booms-and-bust cycles that were referenced, and some of the man camps and the things that are associated with that. So there are concerns that we are facing because of rapid population growth and the development of oil and gas.

Mrs. RODGERS. Does it mean more revenue also to the State, or—

Mr. BLONG. It absolutely means more revenue.

And so, on the positive side, we are collecting more tax revenue than we have ever seen, especially on sales tax, but also our tax basis for ad valorem tax is higher than it has ever been. And so that is a pro and a con, right? So the folks here are paying a lot in taxes, but we are also collecting that, and we are able to move some things forward.

And we see this facility that we are in and other capital campaigns that we have had over the last few years where we have developed things in Midland to improve upon the community that we have. And so that has been afforded to us because of oil and gas.

We also see so much innovation taking place that we export out of the Permian Basin to other basins around the world technology that was developed here because we have investors that are willing to put their money into it here. They know that we take care of their capital. They know that we are creative and we have the groups that are able to advance technologies in Midland. And so we are benefiting not just here but the world because of that.

Mrs. RODGERS. Thank you. Appreciate that.

Mr. Carrasco, I understand that you are a Midland trustee, or you said that. Would you just speak to what the energy production here and expansion has meant for the students at Midland College?

Mr. CARRASCO. Thank you, Chair Rodgers.

Without a doubt, it is something that we continue to work on. My goal as a board of trustee is workforce training. We have to train our workforce. We have to be able to develop the innovation that is out there for us to continue to grow.

And, with that, as you train students, they get into better jobs, so they benefit in the community. They buy homes. They buy their first home. They buy their first car. They get to go shop a lot more in the mall. So it is an opportunity for them to be able to improve their quality of life.

And it helps the oil operators because we have to be a partner with them to make sure that we not only provide what they need, but we need plumbers, we need A/C and refrigeration techs because our homes are growing. So there is a lot of opportunity. And so it is our job, and it is something that I am very proud of that we are working on a CTE design right now and a big state-of-the-art CTE building where we are going to be able to train students so they can get out into the workforce quicker.

So that is an opportunity that is definitely there for our students.

Mrs. RODGERS. OK. I ran out of time that quickly. I had more questions, but I will save those conversations for later.

Mr. Chairman, I yield back.

Mr. DUNCAN. You are the chairwoman of the committee. Do you think I am going to gavel you?

Before I recognize Mr. Burgess, who will be our next Congressman to question, there are two former Members of Congress in the room: Pete Olson, who I served with, former Energy and Commerce member, and former Congressman and now Texas Tech Chancellor Kent Hance, right here in Texas.

Welcome, and thank you guys for participating.

I will now go to Mr. Burgess for 5 minutes.

Mr. BURGESS. Thank you. And thanks to everyone for being here. We were late, and I apologize to you for that.

But I just have to share something with you. You have a great Congressman in August Pfluger. We are sitting in the McAllen Airport at 5:15 this morning, and things start looking bad like they can sometimes on an unnamed national airline. People are scurrying around. They are closing doors. They are wheeling people off the plane we have already gotten on.

August doesn't miss a beat, and—well, what he told me was, "I got 400 of my closest friends coming to this hearing, and I will not disappoint them"—not "I *cannot* disappoint them," "I *will* not disappoint them." And he gets on his phone, and he arranges not one but two chartered aircraft.

I still don't know who is paying for them, August. I hope I am not.

And he gets us—for the most part, gets us all here. We didn't all make it. But it was a big deal, and he moved—literally moved Heaven and Earth to make sure that this hearing came off.

So big hand to your rep, Representative Pfluger.

And, Madam Mayor, in, of course, spending the last 8½ in airports—and I apologize I missed your testimony, but I had a chance to read it, reread it, reread it, while we were waiting. And, you know, we had kind of an interesting start to this Congress. It took us 15 votes to elect a Speaker. First time that has happened in a hundred years. Kent Hance called me at midnight on one of those nights and said, "What the hell are you all doing up there?"

But, in your testimony, a hundred years ago, Santa Rita No. 1 came online. And that kind of—when you talk about education, particularly for our State, I mean, that changed the curve.

Can you tell people who may not know about Santa Rita No. 1 a little bit about that event?

Ms. BLONG. Sure. So it was the first well that really brought on the Permian Basin and changed the trajectory of this region.

Before that, we were known as the midway station between Fort Worth and El Paso. That is how our name came about, so we became known as Midland, halfway between Fort Worth and El Paso. And, whenever we saw Santa Rita No. 1 and the development that exploded here quickly thereafter, it has really been an interesting trajectory for our community and for our region—not just for Midland, Texas, but for Odessa and for all of our surrounding communities.

And so we have seen the expansion of communities with education, with roads and infrastructure, with workforce training, with our—we have two community colleges, one in Odessa and one in

Midland, and then we have the University of Texas Permian Basin. And so—

Mr. BURGESS. Right.

Ms. BLONG [continuing]. So much growth has come in the community, largely driven just by oil and gas. And so we have seen some diversification. But, for the most part, it was driven by the discovery of this huge basin and the reserves here.

Mr. BURGESS. And the creation of the permanent endowment fund—

Ms. BLONG. Yes.

Mr. BURGESS [continuing]. For University of Texas and—

Ms. BLONG. Absolutely.

Mr. BURGESS [continuing]. Texas A&M. Not that those universities are important to me, but they are to other people.

Ms. BLONG. Right.

Mr. BURGESS. But the Permian Strategic Partnership is also a big deal—

Ms. BLONG. Uh-huh.

Mr. BURGESS [continuing]. Here, and you all have worked very hard to promote that.

Can you, in a couple of words, just kind of tell us what the Permian Strategic Partnership—

Ms. BLONG. Absolutely.

Mr. BURGESS [continuing]. Has meant?

Ms. BLONG. So the Permian Strategic Partnership is a collection of 20 companies and several others that are joining, and they have pooled their resources voluntarily to solve some of the greatest issues that we face in our community. And so they are addressing healthcare and workforce training, education—I am going to miss some—affordable housing, and transportation issues, infrastructure related to our region. And they are not just addressing that in Midland but in the Permian Basin at large.

Mr. BURGESS. And one of the more exciting things you said is that technology that is developed here because of the expertise and the investment is exported to other areas, and you all are doing it so well here that the overall carbon footprint of the United States year over year since 2005 has gone down. And it is because of exporting that technology.

And Chancellor Hance, I do have to also mention—Representative Peters mentioned the great engineering school you have built out at—in Lubbock at Texas Tech to create the engineers or to educate the engineers of tomorrow. So that is the sort of stuff that is coming out of West Texas. And the country—the world—benefits from that.

Mr. Pruett, let me just ask you because you spent a lot of time in your testimony talking about, look, the methane problem that Representative Peters addressed is true. It is real. But the longer the gas is stranded here—he calls it fugitive emissions, venting and flaring. All of those are byproducts of the fact that you can't get your product from here to where it ultimately is going to be sold, generating electricity in Dallas or Houston or at an LNG facility out of—off Freeport.

So are there things that can be done to hasten that delivery?

Mr. CURTIS [presiding]. And, Mr. Pruett, can you answer rather quickly and so we can move on to the next speaker?

Mr. PRUETT. Yes. Just permitting reform to—we need to replace aging pipelines. Kinder Morgan's pipeline was down for 9 months to California. They needed our gas. We couldn't get it there. So we need to replace our aging pipeline infrastructure. We need the permits to do so.

Mr. CURTIS. Thank you.

Mr. BURGESS. Well, we are going to help you do that.

Mr. PRUETT. Thank you.

Mr. BURGESS. Thank you.

Mr. CURTIS. Thank you.

The Chair now recognizes Mr. Walberg.

Mr. WALBERG. Thank you.

I think I—it is on. I see the green light.

Thanks for waiting around for us. And, again, Representative August Pfluger did a masterful job of getting us here. And I think it showed the desire to make sure that we had a chance to hear from the industry, the community, and the concerns that really assist us all, so thank you for being here.

Mr. Carrasco—and did I pronounce that right? I wasn't here for your opening statement.

Mr. CARRASCO. That is fair.

Mr. WALBERG. I read all of your statements—written statements—so I guess I am up to that. But, Mr. Carrasco, I also sit on the Education and Workforce Committee as well as this committee, and I hear from countless constituents about the challenges that they face in attracting and growing a workforce in these critical industries.

How is your community addressing career exploration and workforce training for the oil and gas industry?

And, secondly, how are you engaging with K–12 as well as post-secondary institutions?

And I would add the final point: How are you dealing with parents to get them past the peer pressure of saying Johnny and Susie have to go to 4-year institution when there may be better values for them and a lifelong opportunity?

Mr. CARRASCO. Well, thank you, sir.

And, without a doubt, I mean, we understand that, within our increasing industry, we need workforce training.

To address your pre-K, we are now building a pre-K academy that is going to serve the community well of over 280 young students that we are actually going to be able to—

Mr. WALBERG. You have toy oil wells or something they work with?

Mr. CARRASCO. No. They will be able to—well, we are able to accelerate early childhood teachers in a 3-year degree. It is the first bachelor's degree that we have. So we will be able to fill that void in the education. As Mayor Blong has talked about, that is a very important—

Mr. WALBERG. Right.

Mr. CARRASCO [continuing]. Piece of ours.

Also the fact that we are starting with our strong dual credit programs so our seniors, our juniors are able to take dual credit. And

they—and we talk to them about careers. We talk to them about, if you don't want to go to a 4-year institution, it is all right. You can be an electrician and make a lot of good money. You can be a welder. You can be a diesel mechanic. And we will train you, and we will put you out into the workforce fast.

So thanks to the Permian Strategic Partnership, because they have invested in us. Along with their partners, they invested in our community college to make this happen so we don't have to put the burden on the taxpayer, ask for a bond or this and that. So very grateful for that because it allows us to be able to expand our reach and understand what our operators need, what our industry needs, what our community needs.

Mr. WALBERG. More student loan debt to follow—

Mr. CARRASCO. Exactly.

Mr. WALBERG [continuing]. Many of them.

In his State of the Union address last week, President Biden said that we would need fossil fuels for at least another decade.

Coming from Michigan, auto industry capital, that idea that we could move past the use of fossil fuels, these essential resources, in 10 years is laughable, or cryable. But that doesn't mean that the administration won't try.

So, Mr. Pruet, how are the backdoor rulemaking efforts by the EPA and DOE affecting the industry's ability to produce oil and gas and keep our country energy independent?

Mr. PRUETT. You know, what is frustrating for the IPAA and the industry as a whole is, under the Obama administration, the Clinton administration, certainly under Trump and the Bushes, we had access to—we had a dialogue with the EPA. That is no longer the case. We have no—they will not return emails, phone calls. There is no dialogue.

On the other hand, I am on a group with EDF—Environmental Defense Fund—Ceres, UT Austin scientists, and the majors where we are collaborating to look at ways to measure and reduce emissions in the Permian. That is collaborative. It is kind of across the aisle, but the EPA doesn't want to hear from us. They would rather get their formulas from EDF and others that don't apply and are not calculable.

And, further, their subpart W Excel spreadsheet is flawed as it can be, and that is how we are reporting emissions and how we will be taxed. So there needs to be a lot of help and a dialogue with industry to create something that is implementable and viable. It is really not even a constitutional or—I don't think it will survive the courts as presently contemplated to implement the methane fee.

Mr. WALBERG. OK. I thank you.

These rush-to-green policies by the Biden administration have caused an increase in investment in traditional energy production. My own horsehead pump at the end of my cornfield hasn't pumped for 9 months, and very little before that. It will pump long enough to pay for my daughter's wedding. That is about it. That helped.

Mayor Blong, how has the Biden administration's rhetoric around the oil and gas industry impacted communities like yours and these industries that they support?

Ms. BLONG. I think the main impact that we see is the lack of access to capital for a lot of our local businesses. And so, through the downturn during COVID and following, we saw a lot of businesses suffer and fail in our community.

And, whenever we are facing the kind of headwinds that we have at a Federal level with the rhetoric that has come out of DC, it does not incent people to want to invest in what we are doing. And, if he is calling for an end to our industry entirely, it has caused difficulty for access to capital.

Mr. WALBERG. OK.

Ms. BLONG. I think that is the biggest—

Mr. WALBERG. Thank you.

My time has expired. I yield back.

Mr. DUNCAN [presiding]. I thank the gentleman.

And now the Chair will go to the vice chairman of the committee—Subcommittee on Energy, Climate, and Grid Security, Mr. Curtis, for 5 minutes.

Mr. CURTIS. Thank you, Mr. Duncan.

I was also going to compliment our colleague, Mr. Pfluger, but he is not in the room, so I am not going to waste my time with that.

And I would rather give a shout-out to my colleague from San Diego, Mr. Peters. I think it is no small thing that you are here today, and I think it is no small thing that you have been to Houston and to many places to understand this from our perspective. And I just really compliment you on that.

And I would say to all of us, to the extent that we heed his thoughts about methane, really that helps fossil fuels be viable into the future and helps with the argument that we want to replace our adversaries' foreign fuels with U.S. foreign fuels. So my staff will tell you, Mr. Peters, they roll their eyes when I talk about methane because they know that I want to do something. I want to join you in that effort. So thank you for bringing that up today.

Mayor Blong, you and I met just briefly, but we share some things in common.

Ms. BLONG. Yes.

Mr. CURTIS. I was a mayor of Provo City, some of the happiest years of my life being a mayor. I think that is a really important position that you hold.

And, in my congressional role, I too represent many people who derive their income, their livelihoods, from oil and gas and, in my case, actually coal as well.

And I would like to focus on a couple of your comments that were in your testimony.

You said, "The messages, virtue signaling, and the rhetoric that have come from the Federal level tell us oil and gas is evil or not on the side of average American or the side of the care of our environment."

And then you made a very, very bold statement: "Our Permian advances in science, engineering, methods, and processes have yielded the safest, most environmentally responsible barrel of oil in the world. A barrel of oil produced in the Permian Basin is the greenest barrel of oil produced in the world."

And then, in your testimony, you used the word “vilify.” So can you tell me why you and your constituents feel that your way of life are vilified?

Ms. BLONG. As to why it is vilified, I am not sure that I can speak to that, but I would like to address that, absolutely.

I think that the—there is a large lack of understanding in our Nation and in our world for what oil and gas professionals really do and for the care that we give to making sure that we are doing it in the most economically viable but also environmentally friendly way. Our families live here. And my children are going to bed at night just not very far away from the closest drilling operation. We can see it from our house, from our street. And so we care a lot about that.

We are incented locally to invest our time and our money and our efforts into making sure that we are doing this well, and so I think that is a really important thing to consider.

Mr. CURTIS. So is it fair—and some of this, I am projecting for my constituents—

Ms. BLONG. Sure.

Mr. CURTIS [continuing]. In Utah. Is it fair to say that they are disturbed when they hear and they see the shutting down of U.S. fossil fuels here in United States, and then they hear the messages to Iran, to Venezuela, to Russia to produce more?

Ms. BLONG. Yes.

Mr. CURTIS. Can you just, like, explain how that makes them feel?

Ms. BLONG. Well, absolutely. And I think that that is—you are exactly right. We are watching a national push to some of these other basins around the world where we do not have friendly relationships with their governments. We know that they don't have our best interests at heart. And they are producing a dirtier barrel of oil than what we are.

And so we are—we are able to do the job that community around us needs to do, the Nation needs us to do, and the world needs us to do, but we are facing our strongest headwinds from our own Federal Government.

Mr. CURTIS. So you mentioned you can see the rigs and things like that. You mentioned you are a mother of three.

Can we assume that you care deeply about your children's future and about the Earth that they inherit—

Ms. BLONG. Yes, absolutely.

Mr. CURTIS [continuing]. And you do care about these environmental issues? And not just you, but the people that you represent. And could you speak to that for a minute?

I call Utahns the best environmentalists in the world.

Ms. BLONG. Uh-huh.

Mr. CURTIS. I don't know about your constituents. Mine hate to be called environmentalists. But can you speak to that for a minute?

Ms. BLONG. That is absolutely true. As a mother and as a person who has lived here for—now I am the second generation, as I said, raising the third generation here in our community, I will also tell you that some of the oil and gas companies in the Permian Basin are doing more to advance beneficial reuse, water recycling oper-

ations, and the technologies associated with that than anyone else anywhere in the world. And so we are advancing those technologies right here.

Mr. CURTIS. Thank you.

Mr. Pruet, I want to just quickly turn to you.

I believe, when we go to the year, let's say hypothetically 2050, and we see what energy sources we are really using, there are going to be four variables that determine what we will use: reliability, affordability, safety, and clean.

Can you speak for those in the room today? Are you prepared to compete with fossil fuels in all of those, including the clean area, moving forward?

Mr. PRUETT. Absolutely. I—look, we produce in the closed systems, as Mayor Blong said. We are drinking the water from aquifers from which our wells drill through. So we are on that path.

I think a big part of the challenge for our industry is having you all here and having people see it to believe it, that we are good stewards of the land. And so I do think, representing thousands of smaller independents, we have got to pull some of the older practices to the modern practices that we employ since all of our facilities are less than 10 years old. That will—

Mr. CURTIS. I am going to cut you off because I am out of time, and the chairman is going to cut me off.

Mr. PRUETT. That will be the key, to bring up the laggards to the highest standards, and we will be competitive.

Mr. CURTIS. Thanks, Mr. Chairman. I yield my time.

Mr. DUNCAN. I thank the gentleman.

And, as a football aficionado, I just realized that Midland and Odessa gave us *Friday Night Lights*, so I want to thank you.

Ms. BLONG. You are very welcome.

Mr. DUNCAN. Yes. Look, I'm going to skip over Mr. Weber and come back to you and go to Mr. Pfluger. It is his area, so Mr. Pfluger.

Mr. PFLUGER. If I may have just a minute of personal privilege, and then I will—

Mr. DUNCAN. OK. Go ahead.

Mr. PFLUGER [continuing]. Yield back for Mr. Weber's.

To both Chairman Duncan, Chairwoman Rodgers, thank you for bringing this committee to the heart and soul of energy production here in this country. We are so thankful for your leadership. Not even one month into the legislative business, and we are already talking about the most important thing for our economy that underpins our national security. And I can't thank both of you enough for bringing this many Members, being able to introduce you to our community, the hardworking men and women.

And, as a small token of our appreciation, we figured that you needed to go home with a little piece of West Texas.

And, Chairman Duncan, you have been mentioning a cowboy hat, and so we have a Leddy's cowboy hat that I would like you to take home with you. Most of the time in West Texas, we don't wear it indoors. We will give you a second to put it on so that you can go home to South Carolina and show off your new cowboy hat there.

Mr. DUNCAN. Wow.

Mrs. RODGERS. Wow.

Mr. PFLUGER. Chairwoman Rodgers, we can also do a cowboy hat. However, in West Texas, we have worn spurs for a long time. And, as a token of our appreciation for your leadership, we have a spur pendant that we hope that you will wear with pride in Washington and in Washington, DC, and maybe as a piece of symbolism to spur along our government to do the right thing and put a little bit of reality—some West Texas reality—into Washington, DC.

Mr. DUNCAN. As long as she doesn't stick the spurs in the committee members—

Mr. PFLUGER. I have a feeling that might happen, but that is OK. We are good with it if you do.

Thank you for your leadership, and it is—not everybody can see it as much as the cowboy hat.

Mrs. RODGERS. Here we go. Oh, it is great. Look at this. Oh, OK. Here we go. I have some spurs here. Great. All right. Great.

Mr. PFLUGER. Thank you. I yield back.

Mrs. RODGERS. I apologize that I am going to have to sneak out now. I have some other commitments I have to get to, another plane to catch.

But, first and foremost, it is great to be here. And so pleased that we were able to bring the Energy and Commerce Committee to Midland, Texas, for our first field hearing.

A big thank you to Congressman Pfluger for all his help in organizing and putting this all together. But also just know you have a great Representative. He is a great voice for you. He represents your community, this industry so well—a strong defender and promoter of American energy and oil and gas production that is driving our leadership on so many different fronts.

So it is great to be here. I look forward to coming back again and spending more time with all of you. And just keep up the great work. Keep innovating, keep working hard, keep leading the way, OK? Good to be with you.

Mr. DUNCAN. Thank you so much.

August, I don't know who wears it better, me or John Dutton.

But, anyway, now I will go to Representative Weber for 5 minutes.

Mr. WEBER. Boy, that is a hard act to follow, I will tell you.

But I will tell you this. How many Members in the crowd remember who E.F. Hutton was? Some of you all are almost my age. When August speaks, he is like E.F. Hutton: We listen. So give him a hand, will you?

[Applause.]

Mr. WEBER. I don't mind telling you that having August for a friend gives me status. You know, I had a friend in the fifth grade gave me the measles one time, and this is a lot better deal. So it is great to be here.

Mayor, I want to come to you. I didn't get to hear your testimony. We were on the second plane. It is exciting what you wrote. I have read most of it and tried to listen and pay attention to everything going on.

You actually write in your testimony that you are a privately held exploration and production company that operates and stew-

ards—you all, don't miss that word—stewards over 300 wells across 35,000 square miles of West Texas, southeastern Mexico.

I think, for the gentleman from California, our colleague across the aisle, I think a lot of times that is missed on some people, that some of the original environmentalists were farmers and ranchers and people who cared deeply about the land and things that have to happen.

Well, August and I have a great relationship for a number of reasons, not the least of which is I am the upper Gulf Coast of Texas. I represent from the Louisiana border, that other foreign country, right down the Gulf Coast toward Corpus Christi. Michael Cloud is below me. I have got the first three coastal counties. We produce 65 percent of the Nation's jet fuel, 80 percent of the Nation's military grade fuel, almost twice the Nation's gas in the eastern Rockies.

You all punch holes in West Texas out here. Now, I am going to put you all on the spot again. How many of you all remember *The Beverly Hillbillies* show? When he says he went out hunting, and up through the ground comes some bubbling crude—what did they call it?

Ms. BLONG. Black gold.

Mr. CARRASCO. Black gold.

Mr. WEBER. Texas—

Mr. CARRASCO. Texas tea.

Mr. WEBER. Texas tea. There you go. You all remember that. You all saw the—you saw the reruns, young lady.

So you all punch holes out here, and you send it down to us. We are the pipeline capital of the world, really, in Texas, 235,000 miles of pipeline. We produce that oil, gas—the gasoline, jet fuel. And I will just go right down the list. So August and I really have a great, great, great energy connection on what you all do.

And did I mention that you all are good stewards of what you all do? So thank you for that.

I want to ask a couple of—I want to point out a couple things and then ask a couple of questions.

First, Americans need to understand that not only are we good stewards and do we care about our environment, because we have got kids to raise—you said you have three. I have got three kids and eight grandkids, and our oldest granddaughter is 22, married 2 years, and I am fixing to be a great grandpa. So I am getting old. All that to say I am getting old.

Americans need to understand that we care just as much about our environment and the country as anybody else. And I would even argue really, in some fashion, maybe even more because we understand what is at stake.

2013, when I got elected to Congress, Jim Clifton, then the CEO of a research committee, Gallup polls, came and spoke to us, the Republican freshmen, and he made this comment. He said that free enterprise is not a fiscal tool, it is a spirit.

And I said, "Wait, wait. What did you say, Mr. Clifton?"

"Free enterprise is not a fiscal tool, it is a spirit."

And I thought, you know what? He is on it. If you get the spirit of free enterprise, you will do it no matter what, and you will do it right, and you will do it correctly, because you care about those

kids and grandkids. You care about this country. You run risks. I owned an air conditioning company for 35 years. I am a small business guy. You invest your capital, and you are not guaranteed that you are always going to get a return.

Americans need to understand that energy for us is energy dependent—what we are doing, energy independence, it is national security. It is energy dominance. It is economic security. It is actually geopolitical security, what you all do, because when America is strong, the world is a safer place.

Now, Dr. Zavada, you made a couple of comments in your writing too. I had a chance to read through it. You say these observed changes have motivated governments, talking about climate change, and the people of primarily developed countries to seek alternate—alternative energies to ameliorate the effects of fossil fuels.

We love renewables. Renewables are good. But let me just say this. You know, we went through Winter Storm Uri 2 years ago when Texas was number-one energy State, produced most of our energy, 5 percent of solar panels, we found out—we found this out. Renewables cannot be the leading actor in this movie. They can play a supporting role. Back to John Dutton's—where did my John Dutton friend go?

What you all do is important. I hope you all understand that. I hope you understand that we care about our environment. Everybody here is a perfect example of industry and the care that they have for this country and why I am glad to be here.

And I will yield back.

Mr. CURTIS [presiding]. Thank you, Mr. Weber.

Chair now turns to Mr. Pfluger.

Mr. PFLUGER. Thank you, Mr. Chairman.

First, I would like to thank some people behind the scenes before I get into my questions.

We have a phenomenal team with multiple Midlanders, not just here in the Midland office, the Odessa office, but also in our DC office. A lot of people put on this hearing today, to include my chief, John Byers, Deputy Chief Evan Thomas, Lyssa Bell, and Preston Hovey, who are Midlanders, Corbette Padilla, and Monica Mauldin. They did a great job, and we are thankful. Fabulous.

The title of this hearing is so important. We are in an energy expansion. We are in an expansion—not a transition, but an expansion. And we have to keep focused on that. And I want to talk a little bit about the shale revolution. And this revolution has allowed so many people around the world to not be impoverished by energy, without energy. But there are still many who don't have access to energy. And I don't want to see us go down that path here, the path that Western Europe is going through right now, where they have made bad choices that led to terrible situations. We can't get there.

When it comes to the reduction of emissions, we have reduced CO<sub>2</sub> emissions 30 percent over the last 10 years, 14 percent on methane. Yes, we will continue to do what we can here. And we will work together, but it is innovation that makes that happen.

I have three questions.

Mr. Carrasco, thank you for your testimony. Thank you for your leadership. You have 64 employees. That is amazing. How do those families feel—we will do 1 minute each for 3 questions.

How do those families feel when the President of the United States says—and I quote—“I am going to end fossil fuels”? How do they feel about the careers they have chosen?

Mr. CARRASCO. Well, I think it brings panic, because, you know, how can you say that it is going to be gone in 10 years? These are employees that have been with me for well over 10 years that have benefited from this industry and the innovation of this industry and the safety of this industry. So, without a doubt, there is panic because, you know, they say, “What will we do after? Where do we go after?”

So, you know, obviously we need to understand that the oil and gas industry are here to stay. And I will tell you—I talk about this, about how I get to see it firsthand. I see these operators and what they do and how they employ—they help me employ people so they can have a quality of life. So I—sometimes they ask me, “What is going to happen?”

Mr. PFLUGER. You know, those families aren’t just putting food on the table. They are adding to our national security. They are doing something that no other country in the world has done. We have revolutionized the delivery of affordable, reliable, secure energy.

And, Mr. Pruett, we appreciate what you do. But what happens to our country—in 1 minute or so—what happens if we stay on the path of the policies that we have seen over the last 2 years, where we have basically legislated through Executive fiat? What happens to our country, to our national security vis-a-vis the energy industry?

Mr. PRUETT. Well, the path we are on with China’s oil consumption recovering, we are going to be short crude. And a lot of the experts, including, you know, Scott Sheffield, who runs Pioneer, are predicting \$150 oil, which won’t be good for this country or the developing world or our allies. And that is not a scenario that I want or our members want.

And unless we remove the regulatory barriers and the access to capital constraints that we face now, we will not be able to grow U.S. production enough to meet the growth in worldwide oil and gas consumption.

Mr. PFLUGER. We hear this talk about 9,000 permits when we know that most wells take up to 50 permits. So how many permits do you think we need throughout the United States—maybe it is impossible to say.

Mr. PRUETT. Well, it is just—the BLM and the other regulatory bodies in States other than Texas are intentionally slowing down our activity. Unless you have the easements to lay the pipes so you can get product to market, you are not going to drill the well. So it is a whole series of permits that have to be approved by States like New Mexico and the BLM, and that is just not happening. And it is true offshore as well.

Mr. PFLUGER. Well, thank goodness for our Railroad Commission. They do a great job of helping us to achieve the multiple goals that we have.

I appreciate my colleague from California. I appreciate your comments and wanting to work together, and I think we can work together.

To the mayor, great testimony. Thank you for your leadership. I will give you the last 40 seconds here.

How do we innovate? Is it privately? Is it government, top-down directed? How do we innovate to achieve not only taking care of our world, but making sure people still have affordable, reliable energy?

Ms. BLONG. I think the best innovation comes from private companies and from the good ideas of people who have boots on the ground. I do not believe that the best ideas come from the government top-down. But I do think that there are things that we can do to facilitate good ideas and to invite more people to the table to bring those forward.

One of the areas that that is taking place is cooperation among companies on produced water and solutions for injection for SWDs but then, also, how we might be able to recycle that water and have beneficial reuse. They are leading the way in that, and I am thankful for that.

Mr. PFLUGER. Well, the Permian Basin is the heartbeat of this country when it comes to the energy innovation, when it comes to taking care and doing better. And I think we can and have and we will continue to demonstrate ways to take care of this Earth but also ways to make sure that the quality of life remains the highest that it has ever been.

Thank you for coming to the Permian Basin, which is leading the world through the shale revolution and through a hundred-plus years of national security for our country.

I yield back.

Mr. CURTIS. Thank you, Mr. Pfluger. And thank you for hosting today.

The Chair now recognizes the gentleman from Georgia, Mr. Carter.

Mr. CARTER. Well, thank you, Mr. Chairman.

And thank you all for having us here today. And I want to echo the comments made about your Representative. August Pfluger is a great Representative and is certainly a rising star in Congress, and we look forward to his leadership for years to come.

As you heard, I am from Georgia. I guess I am not too popular in Texas right now. But, nevertheless—

VOICE. Don't bring it up.

Mr. CARTER. I kept—well, I didn't. I didn't say anything. I just, you know—

VOICE. Don't complain.

VOICE. Don't complain.

Mr. CARTER. No. It is—you know, I kept looking for our quarterback doing community service on the side of the road, but I didn't see him, but nevertheless.

Anyway, thank you. Thank you for having us here. And thank you for the work that you are doing. And I mean that sincerely. Look, I am—I have served in the previous session on the Select Committee for Climate Change. I am a member of the Conservative

Climate Caucus. I have the honor and privilege of representing the entire coast of Georgia, over a hundred miles of pristine coastline.

The environment matters to me. It is my home. It is where I have lived all my life, where I intend to live the rest of my life. I want to make sure, just like you do, that we take care of our environment. We all understand how important energy independence is to our national security.

Mayor Blong, like you, I was a mayor in another life, and, you know, in no small part, the job of a mayor is kind of to be a cheerleader. I mean, you are the one who has got to keep everybody encouraged and keep things going.

It must be difficult knowing that this administration, that this President, day one—day one, declared war on fossil fuels and on fossil energy. And, even in the State of the Union address here just last week, when he said that, you know, it was only going to be around for the next decade—I mean, it must be difficult for you to keep everyone here and those of you in business—to keep everyone encouraged that, you know, we all know that we in America have not gotten as much credit for decreasing carbon emissions that we should.

The United States of America has decreased carbon emissions more in the last decade than the next 12 countries combined—the next 12 countries combined—while still growing our economy. I applaud what you have done in the fossil fuel industry. You have done it, but, Mayor, it must be difficult for you to keep people encouraged.

Ms. BLONG. I think one of the best things that Midland has going for it is public-private partnerships to be able to address the needs that we face as a community. We have Pioneer Natural Resources that partnered with the city of Midland to put in a water reclamation facility to take effluent water from the city of Midland and use it for fracking and other things. And so we see this partnership, this convening of oil and gas companies and the leadership and innovation that they have partnering with our municipal needs and our community needs.

We are seeing that not just with water, but we are seeing it with our education system and with so many other things. And so I believe that the way forward for us as a community and really the way forward for us as a Nation is to listen to the creative business minds in our—

Mr. CARTER. Absolutely.

Ms. BLONG [continuing]. Communities, to take a page from their book.

Mr. CARTER. And then to hear our President—our President, he is my President too—to hear him say that, you know, the reason for high gas prices is because the industry has stopped pumping oil. You know, why have they stopped investing? Have you seen the decrease in investment? Are you worried about that? Are you preparing for that? What is the—tell us: What is the pulse?

Ms. BLONG. I would say that we have seen a decrease of investment. And certainly through those COVID years, it got really, really difficult. And Steve Pruet has referenced some of that from his own story.

But I do believe that we are seeing some of that bounce back. The other thing that we are seeing locally is local investors, people who have made good money in the oil business, are investing back into other for-profit efforts here in our community. So they are investing in technological advances, in fracking and in other things, water issues that I have referenced multiple times here. But they are—those dollars are coming back into our economy from people who made their money here. They are investing back into our community.

Mr. CARTER. Right.

Mr. Pruettt, have you seen investment in infrastructure? What is your feelings?

Mr. PRUETT. Well, I would echo what Mayor Blong said about it is the old style of financing of family offices and syndicates, of redeploying money they have made, money in the oil business over the decades, and they are putting it back in. That is really the best source of capital an entrepreneur has right now, is local money, or I call it Texas family office moneys.

So I am seeing some improvement, banking markets starting to heal just because the leverage in our sector has come down, so we are better credits. So that is encouraging as well.

So I think the capital—the big issue is just we are distributing so much cash to investors now as an industry, and that is just—

Mr. CARTER. Right.

Mr. PRUETT [continuing]. Something investors have demanded. That is not changing.

Mr. CARTER. Well, I am here to encourage you. I am here to thank you. I thank you. I thank for the innovation. You have cleaned up the industry. You continue to clean it up. You have continued to invest in innovation. And thank you for that, and thank you for what you do for energy in our country, and God bless you.

Mr. PRUETT. Thank you for your service.

Mr. CARTER. I yield back, Mr. Chairman.

Mr. CURTIS. The gentleman yields.

The Chair now recognizes, also from Texas, Mr. Crenshaw.

Mr. CRENSHAW. Thank you, Mr. Chairman.

Thank you all for being here. It is great to be in August's district. Wonderful, wonderful time in Midland. Been here many times. And it is a place like this that keeps America afloat in hard times, and that is absolutely true.

It is probably why J.P.Morgan's CEO, Jamie Dimon, called a world without fossil fuels a road to hell, and so I kind of want to examine what a road to hell might like look.

For starters, you essentially lose the ability to heat your home or cool your home. That ability, by the way, saves millions of lives a year.

You have to do away with all the things that you need to build a modern society: steel, concrete, plastics, all gone. No roads, no bridges, no buildings, no hospitals, no cars, no military defense, phones, computers, no other modern luxuries: all gone without fossil fuels.

And—oh, yes, fertilizer too. Synthetic fertilizer is one of the main reasons we can feed billions more people than we ever thought possible, and that is made because of natural gas.

The recent societal collapse in Sri Lanka might be a great example of what happens when radical environmentalists get their hands on the reins of policy and insist upon organic-only fertilizers. So no air-conditioning, no hospitals, no biomedical devices, no cars, no planes, maybe mass starvation. That does sound kind of hellish, to be honest.

It is more than that. I mean, it is the basic things we need to stay healthy. It is antihistamines, antibiotics, cough syrups, lubricants, creams, ointments, any gels, processed plastics which are made for heart valves and other specialized medical equipment. Petrochemicals are used in radiological dyes and films, intravenous tubing, syringes, oxygen masks.

We could go on and on and on, but, if you took away petrochemicals and then you looked around the room, you would watch basically everything disappear. That is pretty amazing. And it is places like this that help us maintain the wonderful reality that we all live in.

I am concerned, though, about the investment in this important industry. Recently, J.P. Morgan head of oil and gas research Christyan Malek said the bank had identified a \$600 billion shortfall of upstream investment needed between now and 2030 to meet what he called a muted view of global oil demand.

I am wondering if you all can expand upon that point. We will start with you, Mr. Pruett.

Mr. PRUETT. Yes. That is a—I have read that research, where the—we are investing 400 billion in oil and gas development exploration and development now. We were investing over 800 billion. Researchers think we need to invest about a trillion a year, which happens to be what is being invested in renewables now, which is great.

But there is an imbalance, and so there is so much capital flow to the low-return investments and renewables, which we need to do, but there is too much capital flowing there. It reminds me of the various oil booms where too much money flowed to our industry, and we destroyed value. It is happening in the renewables at the expense of the upstream and midstream oil and gas development.

So, unless that rebalances, we will be short oil and natural gas in this world within the next 2 years, and it will be very economically damaging.

Mr. CRENSHAW. And maybe you could also talk about some of the end uses of the products that many of your members pull from the ground. You know, maybe expand upon the list—the long list that I just gave.

Mr. PRUETT. Well, I don't know that I can. That was comprehensive. It is very impressive.

But, you know, one thing that people miss is the amount of petroleum that goes into making a wind turbine or a solar panel. There is a massive amount of coal that is used to burn the silicon to make a solar panel. The components of a wind turbine are resins and petroleum-based products. And the amount of mining that goes on, which is all diesel-driven equipment, to mine lithium and cobalt for batteries. There is a huge supply chain that depends on petroleum to make renewable power possible.

Mr. CRENSHAW. And it is a pretty dirty supply chain.

And, Ms. Blong, I want to come to you on this, because you have mentioned that, here in Midland, we produce one of the cleanest, most greenest barrels of oil. I am paraphrasing, I think, what you said.

Ms. BLONG. Uh-huh.

Mr. CRENSHAW. But, you know, I tend to agree. I have seen research that says that American natural gas is 42 percent cleaner on a lifecycle basis than, say, Russian natural gas.

Can you speak to that and how your industry here is cleaner than the rest of the world? The point we are making here is demand is going to increase around the world no matter what.

Ms. BLONG. Uh-huh.

Mr. CRENSHAW. So somebody has got to produce that. Should it be us, or should it be the Saudis?

Ms. BLONG. I think that is an excellent point.

One of the ways that I think we produce greener and a better barrel of oil here is that we are looking for ways to capture emissions before we are required to. And we see that as destruction of value.

If we have to vent or flare, we are actually destroying value and losing money. And so we need to have access to be able to capture that and get it to market.

We require permits to be able to build the midstream pipelines to get that gas to market, and so we need y'all's help to get that accomplished.

Mr. CRENSHAW. How much better could we do for the environment if we were allowed to build more pipelines more quickly?

Ms. BLONG. I think that we could come close to solving some of—I don't know if we could permanently solve, but from an oil and gas perspective, we could alleviate most of the methane concerns for those kinds of emissions if we had access to the pipeline permits that we need.

Mr. CRENSHAW. Thank you, and I yield back.

Mr. DUNCAN [presiding]. The Chair will now go to the gentleman from Georgia, another Bulldog, Mr. Allen, for 5 minutes.

Mr. ALLEN. Well, yes. Correction. Well, my mom and dad are Bulldogs, and my youngest daughter and my middle daughter went to graduate school there, so—but I do know how to go “woof, woof, woof,” OK? And it has been more fun than that. I went to Auburn, and so it has been tough.

But, anyway, Congressman Pfluger, thank you for all this. It is amazing what you have done here for us in the last 2 days, and the things we have seen have been eye opening. I mean, it is just you had to be here to experience this. And it is just a privilege for me to be here.

And, you know, I have been around a while. I spent most of my life in the business world creating businesses, growing companies, and I know a lot of the challenges out there and understand the challenges with the oil and gas industry. I served on the Energy Action Team, and we had a lot of the—mostly independents coming, which is another thing.

Big Oil doesn't produce the oil in this country. I think it is a small percentage of it. It is the independents that are producing the oil.

But a little history on energy. I graduated from Auburn in 1973, and it was not really a good economy then. And then, within a year, the oil embargo hit, and it almost devastated our economy. And, I mean, I didn't know if I was going to be able to keep my first job.

And we were only 28 percent dependent on energy in this country at that time. And, in fact, our fellow Georgian, who Buddy knows very well, Jimmy Carter, was elected President because he promised to make this Nation energy independent. He created the Department of Energy.

And then, you know, it didn't take long that, you know, we fast forward to 2008, the Great Recession. The administration during that—that came into office at that time declared war on the coal industry. All this money that my MC spent to clean coal to meet the Clean Air Act that was passed by Congress—he spent all that money. The rules all changed.

And so the State of West Virginia—I am not predicting anything here, but the State of West Virginia had the tenth-best economy in the Nation. Today, they are third from last. That State has been devastated.

You know, you cannot—I mean, so what happened is, in 2016—and the other thing that is great, we have an election every 2 years in this country, so we can kind of see where the American people sit on these issues. But the bottom line is, in 2016 we had the majority in the House, we had the majority in the Senate, and we had the White House.

And, under the leadership of Paul Ryan and many of our leaders on committees, we went through the Congressional Review Act. We unleashed the economy. I had no idea what that would do. All I know is I was all in. I was pro-business, and we had a pro-business administration.

I could not believe what I saw. We became not only energy independent, we became energy dominant. Do you realize how much power that is? We were setting the price of a barrel of oil. There was unprecedented world peace.

And so, you know—so what we get to then—of course, then COVID hits, and, you know, we have—you know, we got a major reset, and it was a big problem.

Mr. Pruet, you started your own business, and, you know, like I said, we have an election every 2 years. Election every 2 years. If we get a pro-business administration in this next term, how long would it take you to get back to where you and all of your members to get back to where we were just 3 years ago?

Mr. PRUETT. It is probably about 2 years. So, when I make the decision and my board approves a budget, it takes about a year to contract the rig, get all the permits, and that is in Texas. That is the fastest cycle time anywhere. But it is a 2-year timeframe to really get the machine turning, and then there is a lag on getting all that production to market.

But it can be done. But we need the White House. Without the White House running this, we are—

Mr. ALLEN. Right. Right. Well, one of the things I realized in business, too, is our whole economy is based on confidence. I mean, we are 70 percent—

Mr. PRUETT. That is right.

Mr. ALLEN [continuing]. Consumer economy. And, if consumers aren't happy—and they are not happy right now. You know, this war on fossil fuel has created the inflation issue in our country. I mean, bar none. I mean, every—this coat has oil in it, OK? It affects everything in our economy.

And I experienced that in construction. Construction costs have skyrocketed because of the price of a barrel of oil. And I do know, like—I am out of time, but I do know how it was back during COVID. I mean, you guys were calling because we had a war between Russia and Saudi Arabia, and oil was \$7 a barrel, and I had a lot of friends in your business that called me and said, “We have got to get the price up to at least market,” you know, “We are going broke here.”

So—but, anyway, thank you for hanging in there. Keep the faith.

Mr. PRUETT. Thank you.

Mr. ALLEN. And I think the American people are going to wake up.

Mr. PRUETT. Appreciate it.

Mr. DUNCAN. Chair will now recognize Ms. Miller-Meeks for 5 minutes.

Mrs. MILLER-MEEKS. Is it on?

Mr. DUNCAN. Should be.

Mrs. MILLER-MEEKS. All right. Well, thank you very much. I thank Energy and Commerce Committee for having this hearing.

And, while in Texas, if you are around Representative Pfluger and Representative Weber and Representative Burgess and Representative Crenshaw, you hear a lot and have had the pleasure of hearing how everything is bigger and better in Texas in every way that you can imagine.

However, let me say that I grew up in Texas around San Antonio, started at San Antonio Junior College at 16, enlisted in San Antonio, have all my education from San Antonio. But I realized I was threatening the reputation of Texas that it is bigger, and so I went to a smaller State.

In the spirit of qualifying the States we represent, Representative Peters mentioned solar in California, and McMorris Rodgers mentioned hydropower. So I just want to take the opportunity to say that that smaller State that I moved to, Iowa, has 50 percent of its energy from renewables, and we are an energy exporter, so Iowa is an energy State along with Texas.

But, also, that Iowa has 50 percent of its energy—over 50 percent electricity is generated from wind power, Representative Pfluger, but I will give Texas credit, because overall does produce the most wind power of all States. It is also the top crude oil and natural-gas-producing State in the Nation. And we have learned how important that production is to both the State and to Midland in particular.

And, as States increasingly depend on nondispatchable resources, such as wind, we need strong natural gas supply and deliverability.

Why? For 2021, the U.S. Energy Information Administration reported that total U.S. primary energy consumption was equal to—anybody have a guesstimate? Ninety-seven quadrillion Btus. And how much of that was from renewables, such as wind and solar? Twelve point five percent. How much from natural gas? Thirty-two percent.

And we know, having gone to both COP26 and COP27, everyone around the globe acknowledges that energy demand—global energy demand is increasing, despite advances in energy efficiency.

Mr. Zavada, you mentioned health risks associated with the oil and gas operations and also from climate change. But are you aware how many people perish from cold or heat exposure each year?

Dr. ZAVADA. Not offhand, no.

Mrs. MILLER-MEEKS. Lancet and Wall Street Journal articles in 2021 indicated exposure to hot or cold temperatures is associated with over 5 million—5 million premature deaths globally each year. Heat deaths account for 1 percent of global fatalities, about 600,000, but cold kills 8 times as many people, 4.5 million annually.

A study by the National Bureau on Economic Research in March of 2019 estimates that, by driving down natural gas prices, not only did that help Midland, but by driving down natural gas prices, the fracking revolution saved more than 11,000 American lives annually from 2010. Eleven thousand lives saved by what you do here in Midland, Texas.

The best way to protect people from heat and cold excess mortality deaths is access to plentiful, cheap energy. And that often means carbon-based fuels.

Mr. Pruett, can you speak to how a strong oil and gas industry is necessary to support other sources of energy, including Texas and Iowa wind?

Mr. PRUETT. Yes. As I mentioned earlier, the components of the renewable machines, whether it is the massive wind turbines that you have all seen that populate west Texas and the panhandle or solar panels or the wires that are built to transmit remote renewables to consuming markets like the San Antonio area, where you hail from, or from the panhandle to DFW, petroleum is critical in all of that.

And, without—this idea that the world can survive on renewables without petroleum is just unrealistic, as Dr. Zavada said, because of the components that go to make it and the enabling of those—the construction of and the management operation of renewables is tied to petroleum. And the density of it and the use of petroleum in transportation fuels also cannot be ignored.

Mrs. MILLER-MEEKS. Thank you.

And will you discuss the topic of Federal permitting reform? For me, both permitting reform for oil and gas projects and permitting reform for transmission come to mind, and we must find a better balance between energy project development and environmental goals. And I think that we can do both of those. Not lessen environmental standards but provide greater certainty and predictability to permitting efforts.

Because my time is running out, Mr. Chair, I would ask—the question I want to ask of our panel is if they can speak to the challenges that exploration and production companies have faced with respect to permitting and what reforms may be helpful at the Federal level.

If they could submit that in writing, and then I will yield my time.

Mr. DUNCAN. Yes. So we will talk about the ability to have questions inserted in the record and answered at the end.

I will now go to the birthday girl, who turned a year older today, Mrs. Cammack from Florida.

Happy birthday, and you are recognized for 5 minutes.

Mrs. CAMMACK. Thank you.

Well, I can't think of a better place to spend my birthday than Midland, Texas. I love it.

No. Thank you. And thank you for everybody for showing up today. I thank you to all my colleagues, everybody, and the witnesses for appearing before us.

And, as the lone Representative from Florida and the Gator Nation, Dan, hell is listening to Buddy Carter talk about another national championship. That is hell.

We are going to get you, though, for Texas. Welcome to the SEC.

Thank you to my friend, August, and fellow congressional baseball teammate. I am not sure if you all know, he was our MVP last year. I trucked a guy at home plate, and you still got MVP. I don't know how that happened.

But, in addition to having great States, Texas and Florida, great constituents, wonderful industries, we also share something else in common. We are both taking all of Representative Peters' constituents from California. No. Seriously, thank you for being here. It does. It means a lot. Seriously, we do appreciate you being here.

And, you know, a couple of weeks—

Mr. PETERS. Careful. You know how they vote.

Mrs. CAMMACK. I think we are getting the good ones.

Mr. ALLEN. That is great.

Mrs. CAMMACK. See, the people have personalities in Washington. We all aren't like doorknobs.

So a couple of weeks ago, Chairwoman Rodgers, she hosted a full committee hearing on energy dominance and concerns within the industry. And one of the things that stood out that—was that every single one of the witnesses, Republicans and Democrats, were in favor of domestic production. And we recognized that as Americans we can do it better, cheaper, safer, efficiently, and cleaner than anywhere else in the world. That is an American idea, not a partisan one.

Something else that stood out was the recognition that we are an energy economy, and it is not only the thing that powers our everyday lives, from our schools, for our businesses and everything in between, but our domestic energy economy is the foundation for the American dream.

One of our witnesses, Ms. Donna Jackson, she made a comment that really stuck with me. She said that because of high energy costs at home, when they turn on the lights, when they fill up at the gas station, and basically everything else, that folks weren't liv-

ing paycheck to paycheck anymore. They were living paycheck to Wednesday and borrowing the rest to get by.

That really stuck with me as somebody who was raised by a single mom on a cattle ranch. My family, we were commercial sandblasters. And I just—I had never heard anyone say anything beyond paycheck to paycheck, because I know what it is like to live paycheck to paycheck. Heck, I remember what it was like filling up my gas tank when I was homeless with pocket change. That really stuck with me, the impacts that the regulatory regime has had in the last 2 years on our producers.

And so I think it is incumbent upon us here today, as representatives of the people's House, that we do the most important thing, which is get the hell out of your way. We need to get government out of the way, because I believe that our producers can do it better than anywhere else. And so, that is going to be our goal, is to help get out of the way.

Now maybe because it is my birthday, maybe it is because I am sleep-deprived, I am feeling a little froggy, but I'm going to ask my first question to you, Madam Mayor.

The Department of Energy is proposing new energy conservation standards for new household gas and electric cooking devices. This move comes shortly after the Consumer Product Safety Commission suggested that they should ban gas stoves under the pretext of reducing indoor air pollution.

Now, I personally see this as President Biden's rush-to-green agenda to phase out oil and gas and electrify everything.

Should gas stoves be phased out, and how this will impact costs to consumers?

Ms. BLONG. Absolutely they should not be phased out, if only for the fact that they cook better. As a person who loves to cook, that—I prefer to cook on a gas stove.

No, I think that this is something that is a little bit of posturing on their part. I don't believe that it is a needle mover in terms of consumption in our Nation. And so I think that it is posturing, but I do believe that it is symptomatic of the lack of understanding of how energy actually works and how our grid works in—

Mrs. CAMMACK. Exactly.

Ms. BLONG [continuing]. In the United States.

Mrs. CAMMACK. My husband, who is the avid chef in our family, when he cooks at the firehouse, he loves a good gas stove. So this really got him riled up.

Mr. BURNS. Yes.

Mrs. CAMMACK. But I will move on because I only have 22 seconds.

I am the author of the REINS Act, which would rein in the regulatory environment across the board. Any major rule or regulations that had a \$100 million impact or more would come back to Congress for an up-or-down vote.

Mr. Pruet, I have got 7 seconds. Give me the number-one regulations that you want taken off the books.

Mr. PRUETT. NEPA.

Mrs. CAMMACK. Easy. Done.

I yield back.

Mr. DUNCAN. Awesome. The gentlelady's time is expired.

She yields back.

Mr. DUNCAN. I gave you 8 seconds because it is your birthday.

Mrs. CAMMACK. Just 8?

Mr. DUNCAN. First off, I want to thank all the witnesses and panelists. You-all have done a great job, and thanks for taking time to be here for this field hearing.

Seeing there's no further Members wishing to ask questions, we will wrap this up.

Mr. PFLUGER. Mr. Chairman?

Mr. DUNCAN. Yes, sir.

Mr. PFLUGER. I have three thank-yous: Number one, to my legislative energy director, Clara Cargile, for putting a phenomenal hearing on from our standpoint; number two, to our witnesses, as you just mentioned; number three, to all of the oil and gas workers, industry professionals, and residents of the Permian Basin who are in the audience today for what they do.

Mr. DUNCAN. Thank you.

Go to Mr. Peters for just a second.

Mr. PETERS. I want to say thanks to Midland for hosting us.

I am not from a State that is much of a producer. I just want you to know that I am committed to taking a trip to Texas whenever I can to learn about this. I think we have to work together. For us to work together effectively, we have to understand it. So you have my commitment that I will keep trying to work with you.

And I would just also just remember that when some of the times when—sometimes when people say something into a microphone in a political context that are ridiculous, they are ridiculous.

And you know I thought that the testimony from the gentleman here, the professor, that oil and gas is going to be around at least 50 years is more along the lines of reality. I think we should just keep that in mind as the heat of politics plays out and that I am very well aware that oil and gas is going to be with us for a long time. I just hope we can make it clean and as part of a larger suite of all-of-the-above energy, which is what my colleagues talked about as well.

So, again, thanks to Midland for hosting us and thanks to Chairman Duncan and chairman of the committee Rodgers for bringing us out.

Mr. DUNCAN. Yes, appreciate that. I thank the Democrats as well.

Just some last comments. I ask unanimous consent to insert into the record documents included on the staff hearing documents list.

Without objection, that will be ordered.

Pursuant to committee rules, I remind Members they have 10 business days to submit additional questions for the record.

And I ask witnesses to submit their response within 10 business days upon receipt of the questions.

Without objection, the subcommittee is adjourned.

And God bless Texas.

[Whereupon, at 2:56 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

# Power of the Permian

A Vision for U.S. Energy Independence,  
Economic Growth, and National Security

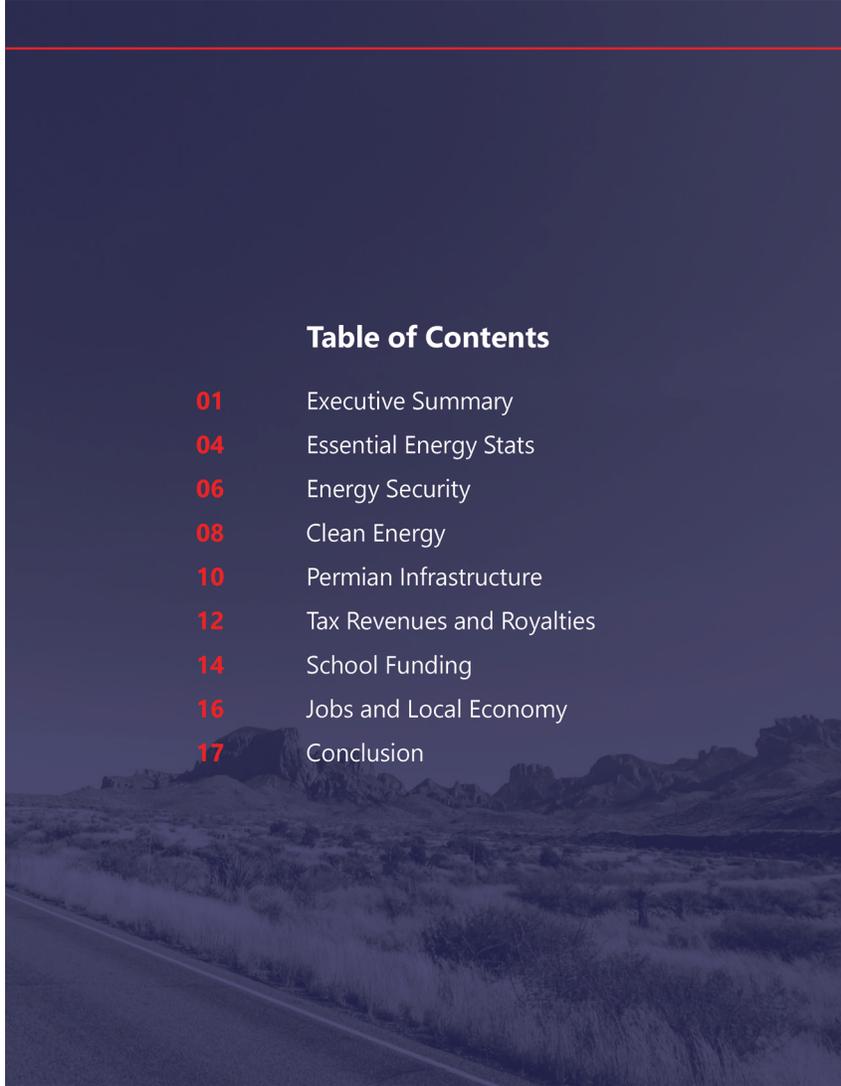


July 2022



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## Executive Summary

The Permian Basin's strategic importance to the United States, and our role in the geo-political outlook, cannot be overstated. As one of the top oil-producing regions in the world, our citizens and allies will be increasingly connected to Permian Basin resources for decades to come.

Stretching from the plains of West Texas into the southeastern part of New Mexico, the Permian Basin is about the land-area size of Minnesota with a population equivalent to Seattle, Washington. Yet the region holds outsized economic significance; if the Permian Basin was its own country, it would be the third-largest oil producer in the world. Along with oil and natural gas, the Permian is also a major center for renewable energy and a source for liquified natural gas (LNG). The region's overall energy output is projected to grow substantially in the next decade.

As the world confronts complex and evolving geopolitical issues like the climate crisis, fallout from the Russian invasion of Ukraine, and expanding global energy needs, the Permian Basin—the largest secure supply of energy in the world—remains a safe harbor of stability and opportunity.

Today, the Power of the Permian is more critical than ever—and that power directly correlates with America's energy independence, economic growth and national security. America was once the world's largest importer of oil and is now the world's largest producer driven by technology, innovation and work ethic. Responsible development of the Permian Basin and strategic investments to bolster and grow this region are key to securing America's future.



## Securing our Energy Future

The Permian Basin has been a reliable energy producer for decades, holds vast reserves, and has the potential to provide cleaner and more environmentally-friendly power sources for all future generations.

Since 2005, the Permian Basin has experienced a six-fold increase in oil production, growing to an estimated 5.1 MMBopd in 2022, up from 0.8 MMBopd in 2005.<sup>1</sup> This accounts for nearly half of all oil produced in the U.S. More than 72% of Texas oil production and more than 46% of Texas natural gas production occurs in the Permian Basin. In New Mexico, 95% of oil production and 33% of natural gas comes from the Permian.

Not only is oil abundant in the Permian, but the region contributes cleaner and more environmentally friendly oil than other major production areas. Permian petroleum has the most attractive low-carbon characteristics of any major onshore formation in the world, with carbon dioxide (CO<sub>2</sub>) content 22.8% lower than the average of the remainder of world production.<sup>2</sup>

The region also contributes significantly to U.S. renewable supplies. Texas ranks first among all U.S. states for installed wind capacity and is adding new facilities at a faster rate than other areas. Permian

wind capacity accounts for more than 12% of Texas's total and has more than doubled in the past decade. In Southeast New Mexico, wind power facilities currently operating or expected to come online make up 9.4% of current wind capacity in the state.<sup>3</sup> Texas ranks second to California in solar capacity yet outpaces California in capacity additions. 93% of Texas solar capacity sits in the Permian Basin and about 30% of Texas's solar capacity is scheduled to be built in the Permian. In Southeast New Mexico, solar farms make up 16.9% of the state's current solar generation capacity for electric utilities.<sup>4</sup>

Permian Basin natural gas production also supports the export of LNG. Considered to be the cleanest fossil fuel, LNG emits around 40% less CO<sub>2</sub> than coal and 20% less than oil.<sup>5</sup> The region is well connected via pipeline to areas where LNG facilities are located. As this emerging market segment expands, the Permian Basin will become an even more important resource.

The world is projected to need almost 50% more energy by 2050. As the global economy returns to normal growth, long-term production increases will be required. The Permian Basin is distinctly positioned to provide the natural resources to ensure America's energy security.

## Securing our Economic Future

The Permian Basin contributes billions each year in tax and royalty revenues to federal, state and local governments. In 2021, the Permian contributed \$11.8 billion in total taxes to the State of Texas, and \$3.3 billion to New Mexico.<sup>1</sup> These funds directly support public schools and teachers, police and fire departments, community hospitals, universities, road improvements, and other essential services.

In addition, Permian industries create thousands of jobs every year that support families and local businesses across West Texas and Southeast New Mexico, with a long tail of stimulus throughout the entire U.S. economy and across all major industries. The Perryman Group estimates that, including multiplier effects, the total annual economic benefits of Permian oil and gas activity include \$129.2 billion in gross product and 508,800 jobs in Texas, \$17.2 billion in gross product and 110,900 jobs in New Mexico, and \$153.2 billion in gross product and over 673,900 jobs across the United States.

The Permian Basin also provides an international trade advantage, with Permian output and energy exports improving the U.S. international trade balance.

## Investing in the Permian to Strengthen National Security

Securing America's energy and economic future is key to strengthening our national security. The Permian Basin plays a critical role.

The United States is not immune to the effects of global instability. However, economic and security volatility can be minimized by investing in our strengths. More can be done to prioritize and protect the strategic importance of the Permian.

The Permian has a growing economy and an expanding workforce, and more families are relocating to the region for new opportunities. Demand is increasing for basic services, yet our physical and civic infrastructure is strained and requires significant investment. Many Permian roads are no longer adequate to safely support higher volume. Public schools are faced with swelling classrooms and are struggling to attract and retain good teachers. Most rural areas lack access to reliable broadband service, now a basic public utility for families, students, and at-home workers. Healthcare services need to be expanded to ensure a productive workforce and healthy communities.

The Permian Basin's most treasured resource is not energy, but the talented and hardworking people who call this region home. A precious commodity, they represent the backbone of our industries and the heartbeat of our communities. As the Permian's strategic influence grows, critical investments must scale to support the people who sustain the region.

Powered by the Permian, our nation has the energy resources necessary for generations to come. However, the region cannot meet the moment without investments to match its strategic importance. By investing in the Permian Basin, America invests in its future—keeping our energy abundant, our economy strong, and our nation secure.

<sup>1</sup> Rystad Energy. Oil includes crude oil and condensate.

<sup>2</sup> The Perryman Group.

<sup>3</sup> <https://edd.newmexico.gov/choose-new-mexico/key-industries/energy-natural-resources/>

<sup>4</sup> <https://www.nm-pirc.org/utilities/renewable-energy/#renew>

<sup>5</sup> <https://www.naturalgasintel.com/is-ing-clean-energy/>

## Essential Energy

The Permian Basin is one of the top energy-producing regions in the world, with abundant natural and renewable resources. It boosts economic growth, job creation and education in Texas and New Mexico, and supports U.S. economic growth and energy security.

### The Permian Basin Holds



### Benefits to Texas and New Mexico

The Permian Basin is Home to:



**1.6%**  
of Texas' Population

**6.3%**  
of New Mexico's  
Total Population\*



But Can Contribute Up to:

**7.8%**  
of Texas'  
Private Sector GDP

**21.3%**  
of New Mexico's  
Private Sector GDP



**508,800**  
Oil and Gas Industry  
Jobs in Texas

**110,900**  
Oil and Gas Industry  
Jobs in New Mexico



**\$11.8b**  
in 2021 Texas  
Tax Collections

**\$3.3b**  
in 2021 New Mexico  
Tax Collections

\* <https://www.census.gov/quickfacts/NM>



Source: Texas A&M Transportation Institute, January 2021



## Energy Security

The Permian Basin is essential to meeting future energy needs, and with new advances, can do so while enhancing global efforts to reduce climate challenges. The United States is the top oil and gas producer in the world—and the Permian Basin accounts for nearly half of all U.S. production. The region is also a major center for renewable energy resources and innovative technologies that facilitate global production. The region is critical to U.S. energy security and improving the trade balance fostered by energy exports.

Despite temporary disruptions due to the COVID-19 pandemic and the February 2021 winter storm, the Permian Basin's annual oil production has increased over the past three years, from 1.59 billion barrels in 2019 to 1.64 billion barrels in 2021.<sup>7</sup> Production increased in early 2022 as the world economy returned to normal growth patterns and prices elevated because of supply and demand and the dislocations from the Russian invasion of Ukraine. Monthly production of natural gas in the Permian Basin has also risen. Overall annual natural gas production in the Permian has increased from 5.5 TCF (trillion cubic feet) in 2019 to almost 6.5 TCF in 2021.<sup>8</sup>

The Permian Basin has advantages over many regions, with massive untapped reserves from multiple layers of shale rock, costly energy infrastructure already in place, high driller

productivity rates and relatively low breakeven costs. While the COVID-19 pandemic and associated decrease in demand and prices caused a major drop in rig counts in both New Mexico and Texas, rig counts are now steadily increasing. The total rig count fell from nearly 400 in mid-March 2020 to a low of 117 on August 14, 2020. Since that time, the number of rigs has rebounded to a total of 350 on July 15, 2022. According to Rystad Energy, the total completed lateral footage of wells in the Permian is expected to reach a record high of 50 million feet in 2022, beating 2021's total of 45.8 million feet and racing past pre-COVID-19 levels of 47.5 million feet seen in 2019. Ongoing gains in rig count, frac count and operational efficiencies are to be expected.

Liquefied Natural Gas (LNG) is a rapidly growing segment of the international energy market and represents an emerging growth opportunity within the Permian Basin. The United States is now the world's leading exporter of LNG as Europe's energy crisis, Russia/Ukraine supply issues and shortages in China, and a growing demand for cleaner fuels, send demand for American shipments soaring. The U.S. Energy Information Administration (EIA) projects U.S. LNG exports will reach 11.4 billion cubic feet per day (bcfd) in 2022. This would account for roughly 22% of expected world LNG demand of 53.3 bcfd next year, according to Goldman Sachs analysts, and would outpace both Australia and Qatar, the two other largest exporters at present.

### Production for the Permian Has Increased From

**1.59b → 1.64b**

Barrels from 2019 to 2021

**5.5 TCF → 6.5 TCF**

in Overall Annual Natural Gas Production from  
2019 to 2021



Because LNG has opened the distribution of natural gas to areas well beyond the traditional pipeline network, it is rapidly creating a global natural gas market. The total number of U.S. cargoes shipped to Europe and Turkey in the first two months of 2022 reached a record of 164, according to Independent Commodity Intelligence Services (ICIS), a data intelligence firm. The previous record was 125 cargoes in the first quarter of 2020. LNG exports from the United States topped 7.7 million tons in December, according to ship-tracking data from ICIS LNG Edge, narrowly edging out rival producers Qatar and Australia for the first time. The U.S. only shipped its first LNG cargo from the lower 48 states in 2016 and has risen to become the world's top exporter in just six years, as a shale gas revolution boosted domestic production and turned the country into a powerful force in global energy markets.

<sup>7</sup> Texas oil production data is from the Texas Railroad Commission Production Query System. New Mexico oil production data is from the State of New Mexico Oil Conservation Division Monthly County Production Summary. Sums were calculated by The Perryman Group.

<sup>8</sup> Texas gas production data is from the Texas Railroad Commission Production Query System and New Mexico gas production data is from the State of New Mexico Oil Conservation Division Monthly County Production Summary. Sums were calculated by The Perryman Group.

The ports along the Texas Gulf Coast are home to the majority of active LNG facilities in the U.S., with others currently under development. In 2021, more than 46% of natural gas produced in Texas was produced in the Permian Basin.<sup>9</sup> The resources within the region are well connected via pipeline to the areas where LNG facilities are located, and Permian Basin production supports LNG exports. This segment is still in its early stages (the first shipment from the Port of Corpus Christi occurred in December 2018), but it will be vital in future efforts to deliver clean energy throughout the world.

The Permian Basin holds significant oil and gas resources, clean energy sources and sources for LNG potential. This positions the region to provide much-needed energy to support global growth and prosperity, while addressing concerns of climate change and energy security.

<sup>9</sup> <https://www.rrc.texas.gov/oil-and-gas/research-and-statistics/production-data/texas-monthly-oil-gas-production/> for Texas total, Texas Railroad Commission for Permian Basin total, calculated percent

## Clean Energy

The Permian Basin's contribution to U.S. clean energy and renewable energy capacity is significant and growing. One particularly attractive aspect of the Permian Basin energy complex which should influence future growth is the low-carbon nature of the crude oil native to the region. The carbon dioxide (CO<sub>2</sub>) content is 22.8% lower than the average of the remainder of world production. Permian oil has 57.6% less CO<sub>2</sub> content than Middle Eastern oil and contains 74.4% less CO<sub>2</sub> content than tight sand formations. It is also substantially cleaner than the Mayan oil from Mexico and the production from Nigeria.<sup>10</sup>

In fact, the petroleum from the Permian Basin has the most attractive low carbon characteristics of any major onshore formation in the world. On an energy equivalent basis, Permian Basin low-carbon oil has 42.5% lower CO<sub>2</sub> emissions than coal (as compared with only 25.2% for the remainder of the world's oil). Natural gas emissions relative to coal are 46.2% lower (or 60.0% when supplemented with carbon capture technology).<sup>11</sup>

Texas' growth in renewable energy over the past decade is considerable, with wind and solar power (combined) comprising 7.8% of overall power generation in Texas in 2010 to 25.2% in 2020.<sup>12</sup> New Mexico is another growing renewable energy center, with the fifth-highest new installations in 2021, adding 1,374 MW.<sup>13</sup>

Texas ranks first among all U.S. states for installed wind capacity and is adding new facilities at a faster rate than other areas. Of the U.S. total wind capacity of 121,770 MW in 2020, a total of 32,600 MW (27%) came from Texas.<sup>14</sup> For context, only four countries (China, the United States, Germany, and India) have

higher installed wind capacity than Texas.<sup>15</sup> In addition, Texas installed the most wind capacity of any state in 2020, adding 4,137 MW. Wind capacity in the Permian Basin has more than doubled in the past decade, increasing from less than 1,663 MW in 2010 to nearly 4,003 MW in 2020. Additional projects are anticipated in the future.

In 2020, approximately 93% of all Texas solar capacity was in the Permian Basin.<sup>16</sup> Solar capacity in the Permian Basin as of 2020 was 4,524 MW. The capacity in all of Texas in 2020 was 4,869 MW. Texas ranks second to California with 12,332 MW. However, when it comes to capacity additions, Texas outpaced California with 2,459 capacity additions in 2020, compared to California's 1,610 MW additions. Solar capacity in Texas has been expanding rapidly, reaching 13,845 in late 2021.<sup>17</sup> About 30% of the state's currently planned solar capacity is scheduled to be built in the Permian Basin.<sup>18</sup> New Mexico also has a small solar footprint with 1,288 MW installed as of 2021.<sup>19</sup>

Major players in the Permian Basin are continuing to innovate towards an even cleaner barrel via carbon capture and sequestration as well as facilities that will manufacture lower-carbon gasoline from natural gas.

Evidenced by the sheer magnitude of the region's oil and gas resources, abundant wind power investments and potential, emerging solar capabilities, and continued industry innovations, the Permian Basin is destined to be a major force in providing the energy needed to support global growth while addressing pressing climate challenges.

<sup>10</sup> "Oil Industry CO<sub>2</sub> per Barrel?" Thunder Said Energy, April 15, 2021. <https://thundersaidenergy.com/downloads/oil-industry-co2-per-barrel/>.

<sup>11</sup> The Perryman Group.

<sup>12</sup> Golding, Garrett. "Surging Renewable Energy in Texas Prompts Electricity Generation Adequacy Questions." Federal Reserve Bank of Dallas, August 17, 2021.

<sup>13</sup> "U.S. Surpasses 200 Gigawatts of Total Clean Power Capacity, but the Pace of Deployment Has Slowed According to ACP 4Q Report." American Clean Power, February 25, 2022. <https://cleanpower.org/news/u-s-surpasses-200-gigawatts-of-total-clean-power-capacity-but-the-pace-of-deployment-has-slowed-according-to-accp-4q-report>.

<sup>14</sup> "The US Wind Turbine Database." (n.d.). <https://eerscmapp.usgs.gov/uswtodb/>

<sup>15</sup> "Renewable Capacity Statistics 2021." International Renewable Energy Agency (IRENA), 2021. [https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2021/Apr/IRENA\\_RE\\_Capacity\\_Statistics\\_2021.pdf](https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2021/Apr/IRENA_RE_Capacity_Statistics_2021.pdf)

<sup>16</sup> [www.txrenewables.net](http://www.txrenewables.net)

<sup>17</sup> "State Solar Spotlight: Texas." Solar Energy Industries Association, <https://seia.org/sites/default/files/2022-03/Texas%20Solar-Factsheet-2021-Year-in-Review.pdf>

<sup>18</sup> "Texas Likely to Add Record Utility Scale Solar Capacity in the next Two Years," April 21, 2021. <https://www.eia.gov/todayinenergy/detail.php?id=47636>.

<sup>19</sup> <https://seia.org/sites/default/files/2022-06/New%20Mexico%20Solar-Factsheet-2022-Q2.pdf>



## Permian Infrastructure

The Permian Basin has a growing economy and workforce, and more families are relocating there for new opportunities. Transportation volumes are growing and demand is increasing for basic services, yet the existing infrastructure is strained and requires significant investment.

The Permian Basin spans 86,000 square miles with over 17,000 centerline miles of road and highway running through it. Safe, well-built roads are essential for millions of Americans to travel to work or school each day, and for businesses to transport goods and services that drive the economy. However, most roads in the Permian Basin were built decades ago and designed for light use across smaller communities. Economic activity has dramatically increased roadway use, and as more large trucks and vehicles travel through the area each day, the existing infrastructure is not only insufficient, but unsafe.

Hydraulic fracturing has unlocked great reserves, improving energy security and stability for the U.S. However, horizontal drilling requires the increased use of heavy vehicles, stressing Permian roadways. For each horizontal well, roughly 4,000 to 7,000 truck trips are needed over 45 to 75 days.<sup>20</sup> The Permian Basin peaked at 568 rigs in fall of 2014, requiring more than 3.8 million trips. Rig counts dropped during the COVID-19 pandemic but have rebounded. The total rig count on July 15, 2022 was 350 and is expected to continue rising. To support this growth, existing Permian infrastructure requires improvement.

The growing population is leading to increased traffic on Permian roadways, which has caused a spike in fatal and serious-injury crashes. However, recent improvements made possible by the Texas Department of Transportation's **Permian Promise** program and increased awareness in the Permian Basin are beginning

Rig Count vs. Fatal Crashes





to show results. The latest infusion of \$600 million in TxDOT funding provided by the Commission for Permian Basin priority projects has gained wide support at local, regional, state, and federal levels for increased investment in road safety issues and energy roads. During the 2019-2021 time period, the Midland/Odessa area experienced a 23% reduction in fatalities and a 30% reduction in overall vehicular crashes.

New Mexico Department of Transportation led commitments under the Governor's administration of \$241 million in Lea and Eddy counties.

A recent Texas A&M University study showed that a \$1 billion investment in the Permian Basin's transportation infrastructure, including widening roads and adding passing or turn lanes, could prevent more than 4,000 crashes and nearly 180 fatalities over a 30-year period. The investment would also reduce traffic delays by more than 270,000 hours each year.

Public awareness is also key to reducing crashes. As fatalities continue to increase statewide, it is imperative that Permian Basin communities prioritize and encourage traffic safety while highway improvement projects are developed and constructed.

In addition to transportation investments to promote road safety and support the physical economy, the region's information technology infrastructure also requires funding, including expanded access to broadband internet service. Broadband is no longer a luxury, it is a basic public utility for families, students, and at-home workers.

A significant investment in the Permian Basin's broadband infrastructure would make a tremendous impact on education, economic and workforce development. A study conducted

by Connected Nation showed that for each household with reliable internet access, the economic benefit equaled \$1,850 per household. The rural sections of the Permian Basin are predominantly served by fixed wireless and satellite broadband providers. These are generally considered the slowest and least reliable of broadband options and are very costly (up to \$150/month for 3Mbps service).

The Texas Education Agency's Operations Connectivity Task Force estimates that 2.3 million of their 5.2 million students do not have access to reliable and affordable internet service (unserved or underserved). A majority of these students are in rural communities. New Mexico's statistics are very similar with more than 30% of students without reliable internet access. New Mexico Department of IT estimates that the cost to connect New Mexico would be from \$1 to \$5.5 billion.

The Permian Basin's most treasured resource is not energy, but the talented and hardworking people who call the region home. Critical investments are needed to support and protect the people who live and work here. Thanks to investment from the Texas Department of Transportation, the New Mexico Department of Transportation, and other agencies, we are seeing more orange cones of progress on our highways. However, significant work remains to ensure the Permian Promise supports the projected growth of the Permian's industry activities. Highway infrastructure must continue to be improved and maintained to ensure the safety of our residents and the reliability of our complex freight and supply chain networks. Investments in reliable and affordable internet service will enhance economic development, healthcare and education to all residents across the region.

Proper planning and strategic funding for critical infrastructure can save lives and support livelihoods.

<sup>28</sup> <https://ftp.txdot.gov/pub/txdot/get-involved/oda/P8FP/110120-pbfp-executive-summary.pdf>

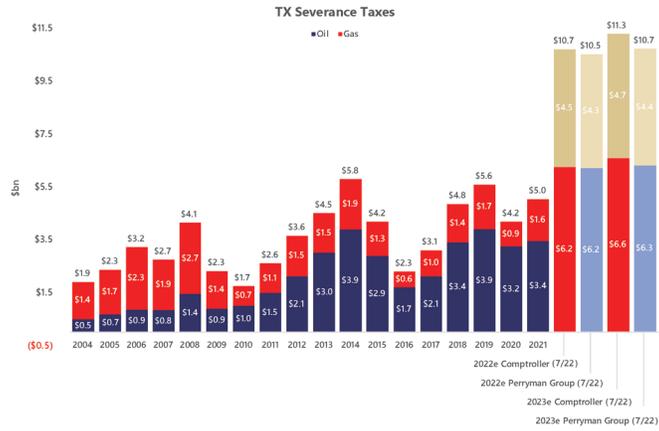
## Tax Revenues and Royalties

The Permian Basin contributes billions each year in tax and royalty revenues to federal, state and local governments. In 2021, the Permian contributed \$11.8 billion in total taxes to the State of Texas, and \$3.3 billion to New Mexico. These funds directly support public schools and teachers, police and fire departments, community hospitals, universities, road improvements, and other essential services.

In July of 2022, the Texas Comptroller estimates that in 2022, the oil and natural gas industry will pay a record ~\$10.7 billion in Texas oil and gas severance taxes, the highest amount ever recorded. This will translate into an estimated ~\$3.58 billion in deposits to the State Highway Fund and another ~\$3.58 billion to the Rainy Day Fund. The Permian Basin represents an estimated 59% of total state severance taxes in fiscal 2019 and about 64% in fiscal 2020 and 2021.

In July of 2022, the Comptroller estimated that in 2023 Texas will receive ~\$11.3 billion in Texas oil and gas severance taxes, which will result in an estimated ~\$3.8 billion in deposits to the State Highway Fund and another ~\$3.8 billion to the Rainy Day Fund. As of July 2022, the Perryman Group projected 2022e and 2023e severance taxes to be \$10.5 billion and \$10.7 billion, respectively. These estimates are record setting and will be the highest collections ever recorded.

Severance taxes are allocated to the following: the Foundation School Fund, General Revenue Fund, Economic Stabilization Fund, State Highway Fund and the Texas Comptroller of Public Accounts. These funds support school districts, road maintenance, and state projects in Texas and New Mexico.



Deposits to State Highway Fund (\$bn)	2015	2016	2017	2018	2019	2020	2021	2022	2023e	2024e
Texas Comptroller Estimates	\$1.74	\$1.14	\$0.43	\$0.73	\$1.38	\$1.67	\$1.13	\$1.46	\$3.58	\$3.80
The Perryman Group Estimates									\$3.51	\$3.59

### Estimated New Mexico Permian Basin Oil and Gas Production Taxes (in millions)

	School Tax	Severance Tax	Conservation Tax	Production Tax	Total
2021	\$601.1	\$745.1	\$33.6	\$237.7	\$1,617.5

Note: Based on data from the New Mexico Tax Research Institute and The Perryman Group's estimates of the proportion related to the Permian Basin.  
Source: New Mexico Tax Research Institution and The Perryman Group

Oil and gas production on state-owned lands provides another source of revenue for states, which receive royalty payments. In Texas, these royalties are distributed across funds for education, highway construction and maintenance, and state parks and wildlife. Revenues from mineral rights have grown in recent years, due to increases in production from horizontal drilling. In fiscal year 2021, approximately \$979 million in mineral royalties were collected and contributed to the Texas Permanent University Fund (PUF) and 2022 is estimated to be \$1.9 billion in mineral income to the PUF. This supports students at the state's two largest public universities, Texas A&M and the University of Texas.<sup>21</sup>

New Mexico also receives considerable tax and royalty revenue from the oil and gas industry. Revenues collected through the Oil and Gas Emergency School Tax, the Oil Conservation Tax, and the Natural Gas Processors Tax are deposited into the New Mexico General Fund, which is used for approved projects and the annual state budget. Funds from oil and gas production typically comprise 30% or more of total General Fund revenue for the state.<sup>22</sup> The New Mexico General Fund received \$802.9 million from federal mineral leases in 2021.<sup>23</sup>

New Mexico Severance Taxes are deposited into the New Mexico Severance Tax Bonding Fund and the Severance Tax Permanent Fund. These funds support capital projects for the state. New Mexico residents benefit from lower taxes as a result of these revenues. It has been estimated that each New Mexico household saves \$1,000 per year through lowered taxes, without a reduction in state services.<sup>24</sup> In fiscal year 2021, oil and gas production taxes contributed more than \$1.6 billion to the state of New Mexico.<sup>25</sup>

Royalties for oil and natural gas production on state-owned land support the New Mexico Land Grant Permanent Fund. In 2021, the Fund received \$1.2 billion from oil and gas revenues.<sup>26</sup>

Increased business and economic activity in the Permian Basin also generates tax revenue, above and beyond the funds provided through severance, direct taxes and royalties. The Perryman Group estimates that business activity associated with the Permian Basin oil and gas industry generates annual indirect and induced tax receipts of approximately \$2.6 billion to Texas, \$2.4 billion to local government entities across Texas, \$576.6 million to New Mexico, and \$518.2 million to local government entities across New Mexico.

Permian Basin tax revenues are expected to continue growing well into the future. The Perryman Group calculated potential future tax collections under a range of assumptions, with baseline calculations indicating \$32.2 billion (2021) in direct federal taxes projected for 2050.

Tax and royalty revenue generated by oil and gas production in the Permian Basin plays an essential role in funding state operations in Texas and New Mexico. These funds support public schools, state universities, roadways and state services. Permian oil and gas producers also contribute considerably to federal taxes. Without these valuable contributions, the cost of state services and education would increase, placing a major tax burden on Texas and New Mexico residents, and dramatically raising the cost of college tuition.

<sup>21</sup> Texas Oil & Gas Industry Annual Energy & Economic Impact Report 2021, Texas Oil and Gas Association. <https://www.utimco.org/media/3642/2021-puf-audited-financial-statements.pdf>

<sup>22</sup> [https://www.nmoga.org/new\\_mexico\\_tax\\_research\\_institute\\_state\\_and\\_local\\_revenue\\_impacts\\_of\\_the\\_oil\\_and\\_gas\\_industry](https://www.nmoga.org/new_mexico_tax_research_institute_state_and_local_revenue_impacts_of_the_oil_and_gas_industry)

<sup>23</sup> [https://d3h8a8pro7hmx.cloudfront.net/nmoga/pages/849/attachments/original/1639515970/NMCGA\\_Fueling\\_New\\_Mexico\\_2021\\_Full\\_Report.pdf?1639515970](https://d3h8a8pro7hmx.cloudfront.net/nmoga/pages/849/attachments/original/1639515970/NMCGA_Fueling_New_Mexico_2021_Full_Report.pdf?1639515970)

<sup>24</sup> <https://www.sic.state.nm.us/severance-tax-permanent-fund.aspx>

<sup>25</sup> Oil and gas production taxes were determined based on data from the New Mexico Tax Research Institution. Analyzed by The Perryman Group.

<sup>26</sup> <https://www.nmstatelands.org/wp-content/uploads/2021/12/New-Mexico-State-Land-Office-FY21-Annual-Report.pdf>

## School Funding

### Texas

Since the earliest days of its founding as a state, Texas has prioritized higher education. The Permian Basin’s oil and gas industry has been a major supporter for the success of the state’s two most prominent university systems. In 1876, the state created the Texas Permanent University Fund (PUF) to support the Texas A&M System and the University of Texas System.

May 2023 will mark the centennial anniversary of the Santa Rita Oil Well #1, which tapped into the vast and prolific field on University Lands. That’s nearly 100 years of industry contributing to higher education in the state of Texas.

The primary source of income for the PUF is 2.1 million acres of state-owned land, which generates two income streams: mineral income from oil and gas bonuses, rentals, and royalties; and surface income, including grazing leases, easements, and wind power generation. As of April 2022, the PUF’s net asset value is over \$30 billion, and ~\$16 billion comes from mineral interest contributions.<sup>27</sup>

The PUF also benefits the UT and A&M institutions through an annual distribution of revenue from PUF investment returns to the Available University Fund (AUF). In 2021, PUF distributions to the AUF totaled \$1.1 billion benefiting the state’s flagship research institutions and their students.

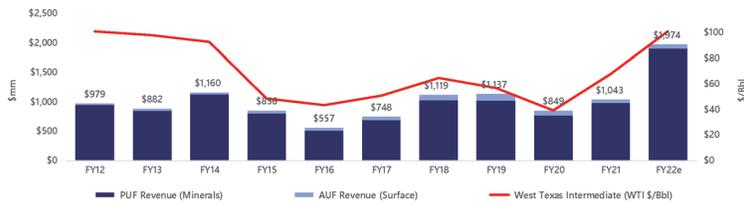
Looking at topline oil and gas revenues, 2022 is estimated to be a record year with approximately \$1.9 billion in PUF mineral revenues and approximately \$67 million in AUF surface revenue.<sup>28</sup>

Increased production and efficiency in the Permian Basin have transformed the PUF into an exemplary model that is without peer, and students from all socioeconomic backgrounds are the prime beneficiaries.

The University of Texas system—including UT-Permian Basin—offers tuition-free scholarships to low-income students. The majority of these programs are paid for through an endowment established by the PUF. The program made possible by revenues generated from oil and gas production covers nearly a quarter of undergraduates and provides financial assistance to another fifth of undergraduates.<sup>29</sup>

Similar to the PUF, public school students in Texas benefit from oil and gas revenue paid to the Permanent School Fund (PSF), which was established by the state in 1854. Mineral-related income from state-owned lands, including bonuses, delay rentals, and royalty payments, funds the PSF. In 2021, PSF receipts from oil and gas revenues totaled \$1.1 billion.<sup>30</sup>

Permanent University Fund (PUF) and Available University Fund (AUF) vs. Average Oil Price





## New Mexico

New Mexico also established state funds for education. When New Mexico entered the union in 1912, it established the Land Grant Permanent Fund (LGPF). The LGPF contributes more than half a billion dollars to New Mexico public schools, according to the New Mexico State Investment Officer. These funds provide annual support for community schools, colleges and universities. In FY 2022, the LGPF is expected to deliver approximately \$908 million to beneficiaries.<sup>27</sup>

The Permian Basin is a major source of revenue for the LGPF. In 2021, the New Mexico State Land Office alone received \$1.2 billion in oil and gas related revenue, the majority of which goes to the LGPF.<sup>28</sup>

In total, oil and gas pumped ~\$3.0 billion directly into the New Mexico state budget in 2021—35% of the state's budget. Total New Mexico education funding provided by oil and gas was \$1.4 billion; over a third of the funding for New Mexico schools.<sup>29</sup>

In 2022, New Mexico Governor Michelle Lujan Grisham proposed and the State Legislature passed the Opportunity Scholarship Act. The bill's passage allows a portion of General Fund dollars to fund the innovative Opportunity Scholarship program, which provides free tuition for up to 35,000 in-state students and non-traditional students at any of the state's 29 two-year and four-year public colleges and universities.<sup>30</sup>

“As the chair of the House Appropriations and Finance Committee, I can tell you it only takes one look at our state's budget to see that our economy would be only a fraction of what it is without a thriving energy industry and workforce.”

Rep. Patty Lundstrom, from an opinion piece in the *Santa Fe New Mexican* in 2022

<sup>27</sup> <https://www.utimco.org/funds-managed/endorsement-funds/permanent-university-fund-puf/>

<sup>28</sup> <https://www.utimco.org/media/3642/2021-puf-audited-financial-statements.pdf> and <https://www.utsystem.edu/sites/default/files/documents/report-state/2021-available-university-fund-report-fy-2021fy-2021-ut-system-auf-report.pdf>

<sup>29</sup> <https://news.utexas.edu/2019/07/09/regents-make-ut-austin-even-more-affordable-2/> and <https://www.texastribune.org/2021/10/20/ut-rgv-tuition/>

<sup>30</sup> <https://www.glo.texas.gov/the-glo/reports/budget/index.html>

<sup>31</sup> [https://www.sic.state.nm.us/wp-content/uploads/2021/08/SIC-Stakeholders-Report\\_20210818\\_WEB.pdf](https://www.sic.state.nm.us/wp-content/uploads/2021/08/SIC-Stakeholders-Report_20210818_WEB.pdf)

<sup>32</sup> <https://www.nmstatelands.org/wp-content/uploads/2021/12/New-Mexico-State-Land-Office-FY21-Annual-Report.pdf>

<sup>33</sup> [https://d3n8a8pr07hmx.cloudfront.net/nmoga/pages/849/attachments/original/1639515970/NMOGA\\_Fueling\\_New\\_Mexico\\_2021\\_Full\\_Report.pdf?1639515970](https://d3n8a8pr07hmx.cloudfront.net/nmoga/pages/849/attachments/original/1639515970/NMOGA_Fueling_New_Mexico_2021_Full_Report.pdf?1639515970)

<sup>34</sup> [https://hed.state.nm.us/uploads/documents/OS\\_FAQ\\_%28003%29.pdf](https://hed.state.nm.us/uploads/documents/OS_FAQ_%28003%29.pdf)

New Mexico Opportunity Scholarship  
<https://www.governor.state.nm.us/2022/02/13/governor-celebrates-bipartisan-passage-of-priority-bill-opportunity-scholarship-act-in-senate/>

## Jobs and Local Economy

The Permian Basin creates thousands of jobs every year that support families and local businesses across West Texas and southeast New Mexico, with a long tail of stimulus throughout the entire U.S. economy and across all major industries.

The Perryman Group estimates that, including multiplier effects, the total annual economic benefits of Permian oil and gas activity include \$129.2 billion in gross product and 508,800 jobs in Texas, \$17.2 billion in gross product and 110,900 jobs in New Mexico, and \$153.2 billion in gross product and over 673,900 jobs across the United States.

This creates activity in supply chains that run through every state and spreads across industries including agriculture, mining, utilities, construction, manufacturing, wholesale and retail trade, transportation and warehousing, information, financial activities, business services, and health services.

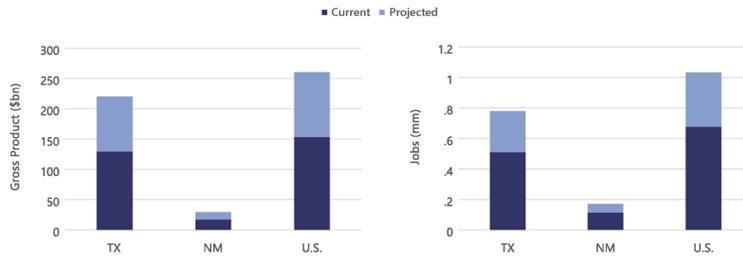
The Permian Basin punches above its weight in contributing to the economies of Texas and New Mexico. Permian Basin counties in Texas represent just 1.6% of the state's population,

yet contribute up to 7.8% of Texas private-sector gross product. In New Mexico, Eddy and Lea counties only comprise 6.3% of the state's population, but contribute 21.3% of New Mexico's private-sector gross product.<sup>35</sup>

The Perryman Group estimated the total economic impact of the Permian Basin in 2050 under scenarios reflecting varying growth rates, oil prices, incentives, and climate policy. Depending on the assumed scenario, the projected 2050 impact of the Permian Basin (in constant 2021 dollars and including multiplier effects) was found to be \$146 billion to \$220 billion in gross product and 557,566 to 778,270 jobs in Texas, \$19 billion to \$29 billion in gross product and 121,553 to 169,668 jobs in New Mexico, and \$173 billion to \$260 billion in gross product and 738,580 to 1,030,935 jobs for the United States.

The Permian Basin will continue to be a force in job creations and economic growth for decades to come.

Projected 2050 Permian Basin Impact for Gross Product and Jobs



<sup>35</sup> <https://www.census.gov/quickfacts/eddycountynewmexico>  
<https://www.census.gov/quickfacts/table/escountynewmexico/PST045221>  
<https://www.census.gov/quickfacts/NM>

## Conclusion

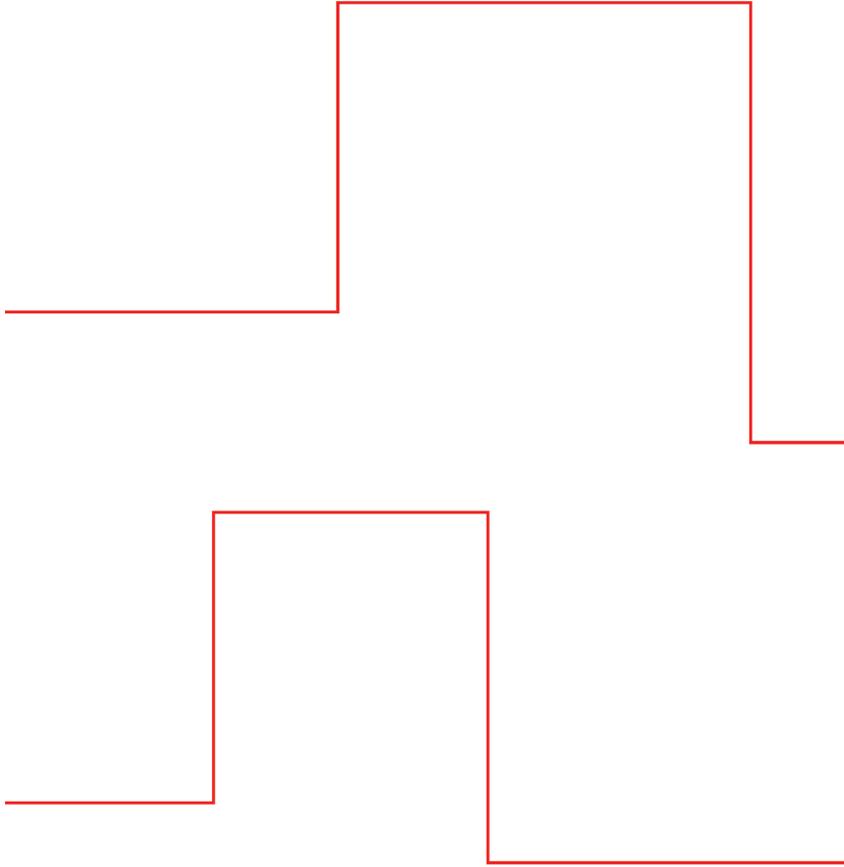
As the world faces complex energy and geopolitical challenges, the Permian Basin provides clarity and stability and remains an essential—and trusted—global partner. Great potential exists in the region, with reserves of 94.5 billion barrels of recoverable oil and 213.3 trillion cubic feet of recoverable natural gas. The low-carbon oil produced in the Permian Basin is cleaner and more environmentally friendly than other major production areas, and the region has emerged as a leader in wind and solar generation.

When multiplier effects are considered, oil and gas and related industry activity supports about 7.8% of private-sector gross product in Texas and 21.3% in New Mexico. The region's oil and gas industry generates billions in taxes, both directly and through incremental spinoff business activity.

The future of the Permian Basin is bright and promising, abounding with the natural resources necessary to ensure America's energy, economic, and national security for generations to come. However, the region cannot meet the moment without investments to match its strategic importance. The needs are clear. Proactive investment in the region's critical infrastructure will help ensure the region continues to prosper and thrive. Safer roads, higher quality healthcare, better schools, and increased commerce will benefit residents across Texas and New Mexico, while saving lives and supporting livelihoods of those who make the Permian Basin a special place.

By investing in the Permian Basin today, America makes a significant investment to secure its future.

**That's the Power of the Permian.**



THE ENVIRONMENTAL  
QUALITY INDEX  
Environmental Quality Weighted  
Oil and Gas Production

# The Environmental Quality Index

## **Environmental Quality Weighted Oil and Gas Production**

Written by  
**David W. Kreutzer, Ph.D.**  
& **Paige Lambermont**

**February 2023**

# EXECUTIVE SUMMARY

For many years there has been a political movement centered in North America and Europe seeking to halt oil and gas production in those regions.

Proponents claim this effort is justified in the name of protecting the environment and saving the earth from climate change. But this political movement has done little to eliminate the need for those products in developed countries. Nearly every facet of modern developed economies require petroleum products and natural gas to function and provide the comfortable lifestyles that citizens of developed countries have come to expect. These resources are necessary for agriculture, heavy industry, transportation by all modes – road, rail, air, or ship – and a great number of the products that we take for granted. They're ingrained in almost everything. Thus, efforts to reduce or eliminate oil and gas production in developed countries will simply shift production to other countries in order to meet ongoing global demand.

The great irony is that this political movement – which purports to be about protecting the environment – results in oil and natural gas production moving from countries with the highest environmental standards to countries with lower, or even functionally zero, environmental standards.

The contradictions of this approach are most apparent in the case of the United States, the largest producer of both oil and natural gas in the world. Reductions or limitations on domestic U.S. oil production must be made up elsewhere in the remaining major oil producing countries, which have far lower environmental standards than the U.S. This paper seeks to quantify that environmental gap by creating an environmental quality score, weighted by production, for oil and gas production in countries around the world using the well-known Environmental

Performance Index (EPI) produced by Yale University. The results show that purely as a matter of environmental protection, replacing U.S. domestic production with foreign supply would be an overwhelmingly negative tradeoff.

The major points highlighted by this analysis are:

- For the 20 largest oil producing countries outside the United States, the average EPI environmental score, weighted by liquid fuels production, is 39. When compared to the U.S. EPI score of 51.1, it means the average barrel of non-U.S. petroleum is produced in a country with an environmental score that is 23.6% lower than that of the U.S.
- For the 20 largest non-U.S. natural gas producers, the average EPI environmental score weighted by production is only 38.6. So compared to the 51.1 EPI score of the U.S., the average bcf of natural gas is produced in a country with an environmental score that is 24.5% lower than that of the U.S.
- The United States, the world's largest producer of both oil and natural gas, is only outranked on environmental quality by 3 of the top 20 oil producers and 3 of the top gas producers. None of those countries produce even one quarter of the volumes of oil or natural gas coming from the U.S. Indeed, all oil production from countries scoring higher on environmental quality amounts to only 35.7% of U.S. production, and that from gas producing countries is only 33.4% of U.S. production. The sheer size of U.S. production combined with its excellent environmental standards means that U.S. production disproportionately reduces the environmental harms of oil and gas production on a global scale.
- U.S. production of crude oil and natural gas has increased over the last 40 years, while at the same time pollution and emissions have steadily declined across sources.
- Contrary to popular media characterizations, wealth created by energy development in free economies enhances environmental performance while making people's lives better.

## SECTION 01 INTRODUCTION



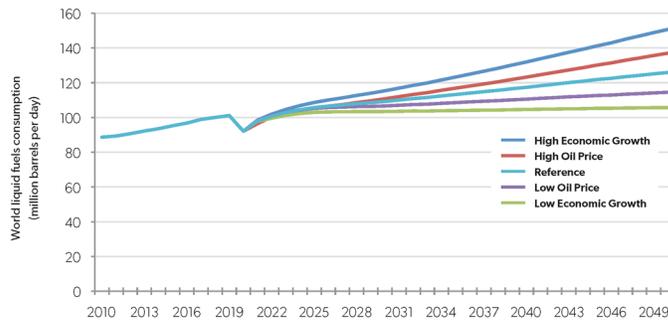
In general, freer economies are wealthier economies. This greater wealth allows people to consume more of the things they like, which includes environmental quality. It may seem counterintuitive but less overall government interference in the economy leads to greater environmental quality.<sup>1</sup> In large part this is due to the greater wealth that economic freedom creates. Economic freedom adds to environmental quality in other ways as well, such as allowing greater freedom to innovate.<sup>2</sup>

However, there is a disturbing movement, primarily in developed countries, that views economic growth as the enemy of environmental quality.<sup>3</sup> Proponents of this idea think that population growth and economic growth will result in resource demands that the planet is unable to meet. These proponents believe that growth should be halted in order to prevent this. Paul Ehrlich's *Population Bomb*, a book that outlines fears surrounding overpopulation, is an example of this new Malthusianism, but it comes in many forms. In addition to overt degrowth philosophy, there are others, while not explicitly supporting degrowth, who want

to cut conventional energy production both in the U.S. and in Europe. Their policies masquerade as environmental protection, but the clear intent is to hobble and block production of oil and natural gas through lease cancellations, dragging out the permitting process, filing spurious lawsuits, and other tactics. These efforts are unlikely to improve the world's environment.

Efforts to restrict petroleum production in the U.S. could yield perverse impacts on the global environment. Economic growth is powered by energy. Most of the world is energy poor and few are willing to forego the poverty-ending growth we can achieve with abundant energy in the decades ahead. Due to a phenomenon called the environmental Kuznets curve,<sup>4</sup> as societies get richer, they begin to prize a clean environment more highly. This has certainly been true in the U.S. By maintaining its position as the world's largest conventional energy provider, the U.S. can continue to satisfy its own energy needs and contribute to the economic growth of the developing world as well. Doing so is not only good for our economy and the world's

FIGURE 1: LIQUID FUELS CONSUMPTION RISES FROM 2020 IN ALL IEO CASES



Source: U.S. Energy Information Administration International Energy Outlook 2021, <https://www.eia.gov/outlooks/ieo/consumption/sub-topic-OI.php>

economy, but also better for the world’s environment than the alternative.

*Limiting oil production in the U.S. shifts production to countries who, for the most part, have significantly lower environmental standards.*

Limiting oil production in the U.S. shifts production to countries who, for the most part, have significantly lower environmental standards. Pretending that domestic production cuts will somehow be offset by intermittent energy sources like wind and solar only promises more

extended poverty and more environmental degradation.

The Organization for Economic Cooperation and Development (OECD) projects the world economy will double by 2050.<sup>5</sup> Given this growth, it is no surprise that the Energy Information Administration projects global liquid fuels consumption will rise as much as 50 percent by 2050 as shown in Figure 1 above.<sup>6</sup>

The U.S. is not only the world’s leading liquid fuels producer, it is one of the few major petroleum producers with high environmental standards. Of course, there are other countries that perform just as well as the U.S., and some perform somewhat better. However, the U.S. is the world’s largest producer and isn’t outranked on environmental quality by any country that produces even one quarter of its output for either oil or natural gas. Because of its high standards and even higher production, it makes sense to compare U.S. production to the remainder of top world producers.

## SECTION 02

ENVIRONMENTAL QUALITY  
WEIGHTED BY PETROLEUM AND  
NATURAL GAS PRODUCTION

In order to compare the environmental quality of fuel production between countries, we selected the Environmental Performance Index (EPI) produced annually by the Yale Center for Environmental Law & Policy to use as our proxy for national environmental standards. "Using 40 performance indicators across 11 issue categories, the EPI ranks 180 countries on climate change performance, environmental health, and ecosystem vitality." Though the index does not directly measure the impact of oil production, we use it as a proxy under the assumption that the internal demand for a country's environmental quality is broad based. These national EPI scores are then multiplied by national production volumes to create a production weighted environmental quality score for a group of countries.

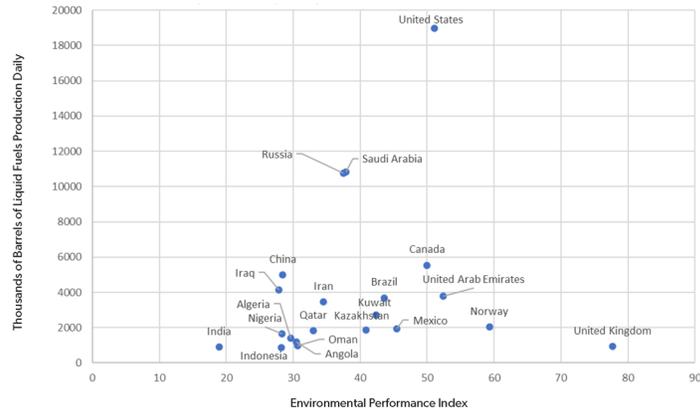
Figure 2 below shows 21 of the top 22 petroleum producers as of 2021 (Since Libya is not ranked in the EPI,

they are omitted), their 2022 EPI rating, and their 2021 liquid fuels production.

For the 20 largest producers outside the U.S., the average EPI score, weighted by liquid fuels production, is 39. At the same time, the U.S. EPI score is 51.1. That is, the average barrel of non-U.S. petroleum is produced in a country with an EPI score that is 23.6% lower than the EPI score for the U.S.

To make the policy contrast even more stark, we can exclude other developed democracies like Canada and Norway, which face the same political pressure to halt domestic oil production. Without those countries' high environmental scores skewing the average, the weighted environmental score of the remaining oil production falls to just 36.5, 28.6% lower than the U.S. EPI score.

**FIGURE 2: ENVIRONMENTAL PERFORMANCE INDEX AND PRODUCTION BY COUNTRY AMONG TOP LIQUID FUELS PRODUCERS IN 2021**



Source: Yale EPI data and U.S. Energy Information Administration data

The story of world natural gas production is similar. The production-weighted average for major non-U.S. natural gas producers is also well below that of the United States. Figure 4 below shows the dry-gas production (bcf in 2021) by the U.S. and the next twenty largest producers along with their EPI scores.

Similar to that of the non-U.S. oil producers, the production-weighted EPI score for the 20 largest non-U.S. natural gas producers is only 38.6 compared to the 51.1 EPI score of the U.S. Thus, the average bcf of non-U.S. natural gas is produced in a country with an EPI score 24.5% lower than that of the U.S. The U.S. score is 32.4% higher than the

average production-weighted EPI score. This value was arrived at by averaging the EPI score per billion cubic feet of production of the other countries on the list and comparing the two.

Here again, to make the policy contrast even more stark, we can exclude developed democracies like Canada, Australia, and Norway which face the same political pressure to halt domestic natural gas production. Without those countries' high environmental scores skewing the average, the weighted environmental score of the remaining natural gas production falls to just 35, 31.5% lower than the U.S. EPI score.

**FIG. 3 THE WORLD'S TOP PETROLEUM PRODUCERS IN 2021, THEIR EPI RATING, AND THEIR LIQUID FUELS PRODUCTION IN 2021**

Country	EPI	Production (Thousand barrels per day)
United States	51.1	18,981
Saudi Arabia	37.9	10,835
Russia	37.5	10,776
Canada	50	5,537
China	28.4	4,993
Iraq	27.8	4,149
United Arab Emirates	52.4	3,785
Brazil	43.6	3,689
Iran	34.5	3,457
Kuwait	42.4	2,716
Norway	59.3	2,030
Mexico	45.5	1,923
Kazakhstan	40.9	1,863
Qatar	33	1,822
Nigeria	28.3	1,650
Algeria	29.6	1,415
Angola	30.5	1,196
Oman	30.7	980
United Kingdom	77.7	935
India	18.9	891
Indonesia	28.2	858

Country	EPI
United States	51.1
20 Largest Non-U.S. Petroleum Producers (average)	39

Source: Yale EPI data and U.S. Energy Information Administration data, <https://www.eia.gov/international/data/world/petroleum-and-other-liquids/annual-refined-petroleum-products-consumption?>

**FIG. 4 THE WORLD'S TOP NATURAL GAS PRODUCERS IN 2021, THEIR EPI RATING, AND THEIR NATURAL GAS PRODUCTION IN 2021**

Country	EPI	Production (Billion cubic feet)
United States	51.1	34,518
Russia	37.5	24,775
Iran	34.5	8,767
China	28.4	7,486
Canada	50	6,435
Qatar	33	5,968
Australia	60.1	5,196
Saudi Arabia	37.9	4,082
Norway	59.3	4,066
Algeria	29.6	3,607
Turkmenistan	37.0	3,073
Malaysia	35.0	2,507
Indonesia	28.2	2,082
Egypt	35.5	2,452
United Arab Emirates	52.4	2,252
Uzbekistan	38.2	1,755
Nigeria	28.3	1,568
Argentina	41.1	1,428
Oman	24	1,383
Thailand	38.1	1,284
Pakistan	24.6	1,179

Country	EPI
United States	51.1
20 Largest Non-U.S. Natural Gas Producers (average)	38.6

Source: Yale EPI data and U.S. Energy Information Administration data, <https://www.eia.gov/international/data/world/natural-gas/dry-natural-gas-production>

## SECTION 03

PRODUCTION WEIGHTED AVERAGE  
BY FREEDOM SCORES

Perhaps even more troubling than potentially shifting production to countries with lower environmental standards is the possibility that constraining U.S. production shifts demand, wealth, and power to countries with much worse records on human freedom. Figure 5 shows the largest oil producers and their Freedom House Global Freedom score.

The production-weighted average Global Freedom score for the non-U.S. petroleum producers was only 34 versus 83 for the U.S. The average also obscures the worst of it. Saudi Arabia and Russia, with scores of 7 and 19 respectively, were the second and third largest oil producers after the U.S. They are also among the countries with the largest additional capacity which would replace U.S. production. Recent events only serve to emphasize the problems with increasing energy dependency from despotic regimes. There is of course a range of indices available to gauge the relative freedom of different

countries. It would be quite difficult to argue that either Russia or Saudi Arabia is a particularly free place to live and do business or that the world would be better off by shifting the balance of production towards them and away from the U.S.

*Recent events only serve to emphasize the problems with increasing energy dependency from despotic regimes.*

Many factors contribute to the environmental impacts of a country's oil and gas infrastructure. Political events can cause a situation in which it is impractical – or

even impossible – to produce in an effective manner. For some countries, this may originate with degrowth policies that undermine the economics of energy production.

These policies haven't come to fruition in the U.S. yet, but elsewhere there have been examples of these ideas failing already. The energy crisis in Europe provides a clear example of the consequences that rapid reduction in our baseload energy capacity can have. The idea of what could come from similar policies in the U.S. is a sobering one, and should be considered when the concept of degrowth is invoked. Further, some countries haven't reached the point in their economic development where it's possible to consider degrowth in the first place, so rather than squander existing prosperity, these policies instead prevent them from achieving it.

**FIG. 5 THE WORLD'S TOP PETROLEUM PRODUCERS IN 2021, THEIR FREEDOM HOUSE GLOBAL FREEDOM SCORES, AND THEIR LIQUID FUELS PRODUCTION IN 2021**

Country	Freedom House	Production (Thousand barrels per day)
United States	83	18,981
Saudi Arabia	7	10,835
Russia	19	10,776
Canada	98	5,537
China	9	4,993
Iraq	29	4,149
United Arab Emirates	17	3,785
Brazil	73	3,689
Iran	14	3,457
Kuwait	37	2,716
Norway	100	2,030
Mexico	60	1,923
Kazakhstan	23	1,863
Qatar	25	1,822
Nigeria	43	1,650
Algeria	32	1,415
Angola	30	1,196
Oman	24	980
United Kingdom	93	935
India	51	891
Indonesia	49	858

Source: Freedom House scores and U.S. Energy Information Administration data, <https://www.eia.gov/international/data/world/petroleum-and-other-liquids/annual-refined-petroleum-products-consumption/>

## SECTION 04

ECONOMIC FREEDOM AND POLITICAL  
STRUCTURE AS FACTORS

Repressive regimes often restrict property rights and take over businesses. Under these conditions, the incentive structures of a free market are turned on their head. When people own things, they usually take better care of them. When a person or company owns the mineral rights or has a lease in a particular area, it is in their best interest to steward that resource. They have a vested interest in the continued quality of the land, and the value that they can derive from it. Because of this, they're unlikely to squander that resource. But under repressive regimes, notably ones that have a collectivist bent, this incentive structure inverts. There are quotas to be hit, and anything that doesn't pertain to a particular directive is simply collateral damage. Two case studies involving regimes in this way are Russia, the world's third largest oil producer, as well as Venezuela, which has fallen off the list of top producers, but has the largest proven reserves of oil in the world.

## RUSSIA

The environmental and human freedom record of Russia is very clearly on display today. Following the start of the Russian invasion of Ukraine in February 2022 countries began applying sanctions to its products, notable among them, its oil and natural gas resources. At the same time, companies began voluntarily pulling their business out of the country, including some of the world's oil majors. In this situation, the pull out of Russia was because of military action. But that's not the only reason to deemphasize Russia in our oil and gas supply.

In 2019, the Trump Administration EPA administrator Andrew Wheeler told the audience at a Houston energy conference that Europe would do better environmentally to purchase its natural gas from the U.S. than from Russia

because of the cleaner practices used in the industry in the U.S.<sup>9</sup> Good practices, as captured in the EPI, aren't about the environment alone, they affect human health and safety, as well as reliability. Where poor practices exist, crisis tends not to be far behind.

In 2019, Russian oil exporters found themselves in a crisis after it was discovered that the oil they had been exporting was contaminated with more than twenty times the acceptable limit of organic chloride. The situation created chaos for international trade as tankers full of the contaminated oil sat at ports in Europe and Asia with buyers unwilling to take possession of the contaminated crude and risk damaging their equipment by processing it.<sup>9</sup> All told, more than 5 million metric tons of oil, approximately 36 million barrels, were involved and Transnet, the Russian pipeline giant, faced up to a billion dollars in claims from its buyers and distributors.<sup>10</sup>

*Russia's pipeline infrastructure also has issues with leaks, and the country has broader oil spill issues. The Russian Ministry of Energy identified 17,000 leaks in 2019 alone. For context, in 2018 the U.S. had 137 spills. Canada, with similar climate conditions to much of Russia, had 60 spills in 2019.*

Russia's pipeline infrastructure also has issues with leaks, and the country has broader oil spill issues. The Russian Ministry of Energy identified 17,000 leaks in 2019 alone. For context, in 2018 the U.S. had 137 spills. Canada, with similar climate conditions to much of Russia, had 60 spills in 2019.<sup>11</sup>

## VENEZUELA

From Figure 3, 4, and 5 above, it's abundantly clear that oil and gas are sometimes viewed as monolithic industries that produce the same product in the same manner everywhere in the world. This is far from the truth. The location of these activities has a huge impact on both the implications of the industry for regional and global economics, and for the environmental impacts that it produces. Venezuela, home to the world's largest oil reserves at 303 million barrels, is a clear example of this. PDVSA, the state run oil company, has a long history of environmental degradation. Decades of government mismanagement and poor investment has caused the industry to collapse. Further, the imposition of international sanctions, which followed human rights abuses by authoritarian President Nicholas Maduro, has starved the nation of key export markets. In March of 2022 it was estimated that it would take \$250 billion to restore the Venezuelan oil industry, and that it would take between 7 and 8 years.<sup>12</sup> Restarting Venezuelan oil would be more expensive, and worse for the environment, than making domestic investments.

Amid high U.S. gas prices, the Biden Administration has been working to adjust sanctions to allow U.S. companies to resume working on Venezuelan oil projects, and to open imports again. Rather than supporting domestic industry, or taking legislative or administrative action to improve domestic production, they're looking to Saudi Arabia, the rest of OPEC, and Venezuela to fill the gap from now missing Russian production. Meanwhile, the environmental impact of Venezuelan oil has become continually more severe. In 2016, PDVSA stopped reporting oil spills entirely.<sup>13</sup>

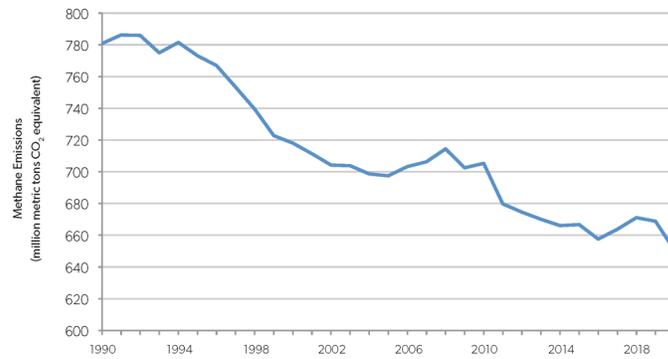
### U.S. IMPROVEMENTS

Over the last 30 years, methane emissions in the U.S. have seen a significant decrease. Over the same period of time both oil production and dry natural gas production have increased enormously. Figures 6, 7, and 8 below show this relationship.

The improvement in the technology of the domestic oil and gas industry over the decades has come in many forms. One important improvement has been the innovation of

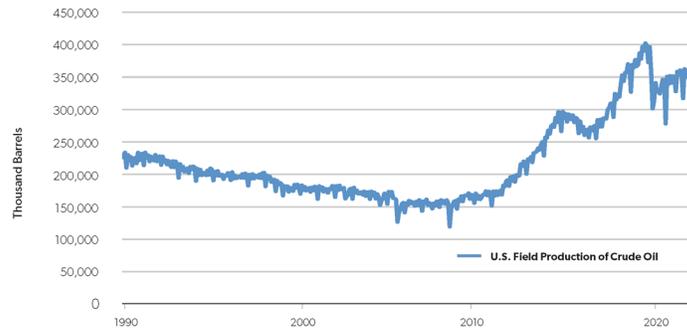
horizontal drilling technology. Drillers in the U.S. have moved to 3-mile lateral wells, meaning that they drill a single well downward, and are able to extend the well outward, covering that area from only a single site on the surface. This allows up to 30 square miles to be covered from a single 1-acre production site.<sup>17</sup> This is demonstrated in Figure 9 below. Although many mineral rights are purchased in rectangular rather than round plots, this figure displays what the maximum technologically possible radius of 3 miles would look like showing the area around the White House as an example of how much an area that size could encompass.

FIGURE 6: U.S. METHANE EMISSIONS FROM 1990-2020



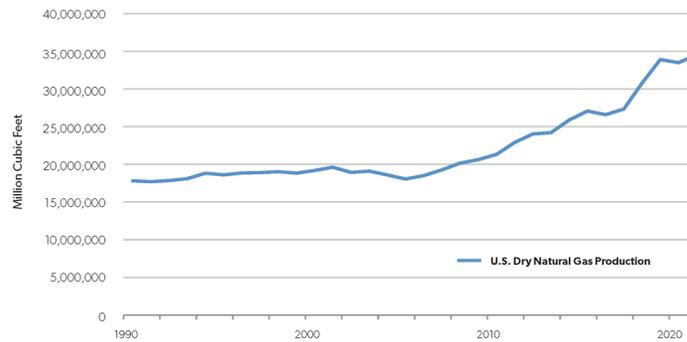
Source: U.S. Environmental Protection Agency, <https://www.epa.gov/climate-indicators/climate-change-indicators-us-greenhouse-gas-emissions>

FIGURE 7: U.S. FIELD PRODUCTION OF CRUDE OIL



Source: U.S. Energy Information Administration

FIGURE 8: U.S. DRY NATURAL GAS PRODUCTION



Source: U.S. Energy Information Administration

FIGURE 9: 3-MILE RADIUS AROUND WASHINGTON D.C.



Source: Google Earth

## SECTION 05

## OVERALL AIR QUALITY IMPROVEMENTS



For decades, air pollution across sources has been steadily declining in the U.S. The decline in the U.S. is an example of the environmental Kuznets curve in action. With both comparably low and declining emissions in the U.S., it is hard to make the argument that domestic production should be abandoned in favor of production in places with far lower Environmental Performance Index scores.

*For decades, air pollution across sources has been steadily declining in the United States.*

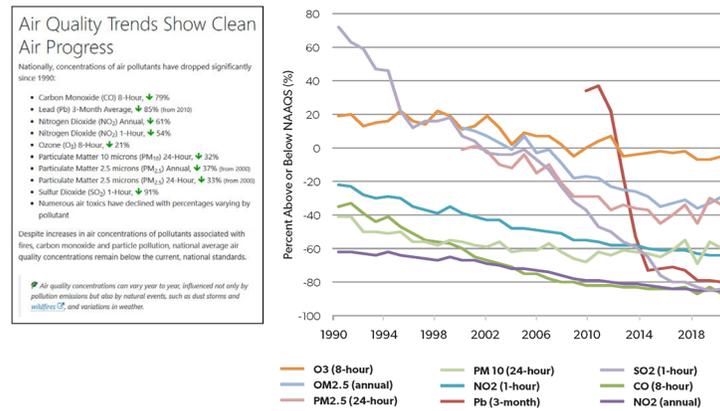
Particulate matter (PM) is a mixture of solid particles and droplets that are found in the air. Some of them are microscopic, while others are large enough to be visible

to the human eye. This category includes a variety of pollution like sulfur dioxide, carbon monoxide, and small particles of other materials. PM prevalence is a good proxy for understanding levels of air pollution.

Particulate matter data are available across many countries to enable cross-country air quality comparisons. According to data from the World Bank, high-income nations have dramatically lower particulate matter than any other income group showing that economic development could be a vehicle for global improvement on this and other air quality metrics.

Data from the World Bank shows that since 1990, PM levels are up in low-income, lower-middle-income, and middle-income countries. In upper-middle income and high-income countries, however, PM levels have fallen. This shows that as the economies of countries grow, air quality improves. In other words, there is a correlation between economic growth and environmental quality.

FIGURE 10: U.S. AIR POLLUTANT CONCENTRATION AVERAGES TREND DOWNWARD



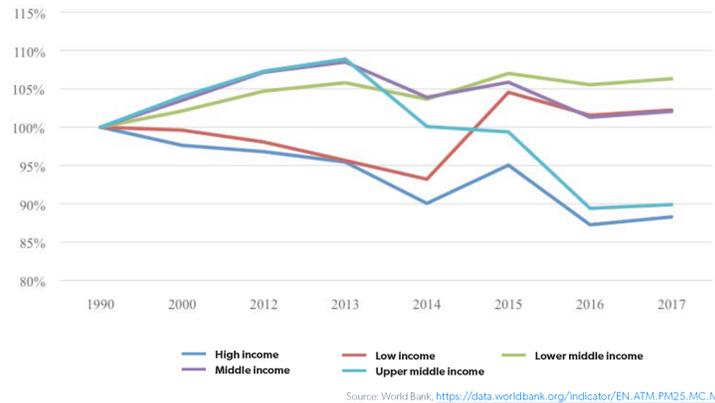
**THE PROBLEM WITH DEGROWTH**

We're already beginning to see the havoc that a degrowth mindset can wreak. The energy crisis that has been building in Europe is a prime example of this. European countries have been investing aggressively in wind and solar technologies, while largely shutting down many of the nuclear and coal power plants that provided the region's reliable energy for generations. Because much of the region's gas came from Russia, the war in Ukraine, and subsequent loss of that natural gas supply, revealed the poor state that the rest of Europe's energy grid was in.

Another prime example of the negative effects of the degrowth mindset is the famine in Sri Lanka. In a show of lower impact at any cost, Sri Lanka had embarked on a course to produce agricultural products with no fertilizers (for which natural gas is an important input). When this plan failed, widescale food shortages ensued.<sup>18</sup>

Degrowth ignores important human instincts. The first is that people tend to want to improve their quality of life. Central to this are the consistent availability of food and energy to allow us to carry out day to day activities in relative comfort and safety. Once people have experienced this state, it is very difficult to convince them to want

FIGURE 11: PERCENT CHANGE IN PM LEVELS BY COUNTRY INCOME 1990-2017



something else. It is also immoral to deprive developing countries of the ability to attain the same levels of prosperity that we have found through harnessing energy and agriculture.

The second failure of the degrowth concept is that it doesn't tend to take into account the fragility of human achievement. After generations, we tend to forget how

hard won energy prosperity is. The base state of man is abject poverty. Without the energy and food that we take for granted it is impossible to make the technological innovations necessary to meet any challenges that the world may face. Because of this, the attempt through degrowth to solve climate issues and other global problems would, if successful, actually prevent us from solving these issues in the long term.

## SECTION 06 CONCLUSION



Oil and natural gas production isn't a monolith. Production in one location does not have the same environmental, health, or social impacts as that of

*The world demands oil, natural gas, and their associated products. It is far better for the environment if that demand is met by production in countries like the United States with high environmental standards.*

production elsewhere. There is a stark difference between the environmental impacts of production in countries with high environmental standards like the U.S., Canada, the United Kingdom, or Norway, and those countries that either don't have these standards at all, or where widespread corruption leads to the de facto nonexistence of such standards. A barrel of oil produced in Saudi Arabia or Venezuela rather than the U.S. on net is more negatively impactful to the global environment. This inescapable fact must be part of the policy discussion in developed economies as loud special interest groups seek to shut down safe and clean domestic oil and natural gas production. The world demands oil, natural gas, and their associated products. It is far better for the environment if that demand is met by production in countries like the U.S. with high environmental standards.

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ONE HUNDRED EIGHTEENTH CONGRESS  
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**House of Representatives**  
COMMITTEE ON ENERGY AND COMMERCE  
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WASHINGTON, DC 20515-6115  
Majority (202) 225-3641  
Minority (202) 225-2927

March 10, 2023

The Honorable Lori Blong  
Mayor  
City of Midland  
310 W. Wall Street, Suite 300  
Midland, TX 79701

Dear Mayor Blong:

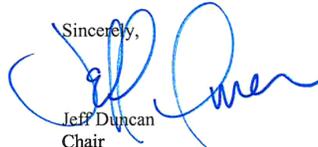
Thank you for appearing before the Subcommittee on Energy, Climate, and Grid Security on February 16, 2023, to testify at the field hearing entitled “American Energy Expansion: Improving Local Economies and Communities’ Way of Life.”

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Friday, March 24, 2023. Your responses should be mailed to Kaitlyn Peterson Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, D.C. 20515 and e-mailed to [Kaitlyn.Peterson@mail.house.gov](mailto:Kaitlyn.Peterson@mail.house.gov).

Letter to The Honorable Lori Blong  
Page 2

Thank you again for your time and effort preparing and delivering testimony before the Committee.

Sincerely,  
  
Jeff Duncan  
Chair  
Subcommittee on Energy,  
Climate, and Grid Security

cc: Rep. Diana DeGette, Ranking Member, Subcommittee on Energy, Climate, and Grid Security

Attachment

[Ms. Blong did not answer submitted questions for the record by the time of publication. Replies received after publication will be retained in committee files and made available at <https://docs.house.gov/Committee/Calendar/ByEvent.aspx?EventID=115349>.]

Attachment—Additional Questions for the Record

The Honorable Rick W. Allen

1. What are some positive impacts you have seen from investing in the oil and gas industry that have enhanced your communities?



March 16, 2023

Ms. Kaitlyn Peterson  
Committee on Energy and Commerce  
2125 Rayburn House Office Bldg.  
Washington, D.C. 20515

Via Email and Mail

Re: American Energy Expansion:  
"Improving Local Economies & Communities Way of Life"

Dear Ms. Peterson:

Responses to the questions you provided from our Congressmen follow:

The Honorable Rick W. Allen

**1. Can you discuss the positive employment effects of oil and gas development and how government policies have a negative impact on the workforce?**

Answer: The negative messaging by the Biden Administration regarding the phase-out of oil and gas in the next ten years or so has discouraged younger people from pursuing employment in the oil and gas industry that are needed to replace retiring "baby boomers." Further, delayed permitting for drilling and oil and gas transportation infrastructure, including indefinite NEPA review; lack of federal leasing for oil and gas development; increasing cost of regulatory compliance; and uncertain rulemaking by the EPA currently in process, has caused investors, management and corporate boards to be reluctant to make long-term investments in developing oil and gas resources and the infrastructure needed to process and transport the petroleum products to consumers.

The Honorable Mariannette Miller-Meeks, M.D.

**1. Can you speak to some challenges exploration and production companies have faced with respect to permitting, and what reforms may be helpful at the federal level?**

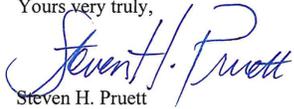
Answer: Whether it is due to inadequate staffing or intentional delays, the Permian Basin's BLM offices are backed up on permits for drilling and the easements and rights of way for necessary pipelines to get produced oil and gas to refineries and gas processing plants that manufacture petroleum products for consumers. Furthermore, the FERC has delayed approvals or the Federal Court systems responding to litigation, primarily related to protracted NEPA reviews, have delayed oil and natural gas pipeline projects needed to transport oil and natural gas to consumers. The Keystone XL Pipeline, cancelled by the President Biden, and the PennEast and Mountain

Page 2  
Answers  
March 16, 2023

Valley Pipelines are examples that would supply secure and affordable natural gas to areas not served or undersupplied by U.S. natural gas. The Keystone XL Pipeline would increase oil imports from Canada, and reduce the transport of oil by rail or truck across the border, which has safety and environmental concerns. Instead, our federal government is requesting increased oil supplies from Venezuela, an oppressive regime hostile to our country. Regarding natural gas supplies on the East Coast, LNG is imported from countries including Trinidad and Qatar, which is four times or more expensive than gas from Pennsylvania, Ohio and West Virginia where Americans are employed, and taxes and royalties are paid to states, counties and private landowners. The producing states mentioned would benefit as would the consumers of New Jersey, New York, and New England who are paying higher prices for heating and electricity as a result. The restrictive policies of the Biden Administration are hurting energy consumers in the U.S. as well as economic activity that creates jobs and tax revenues at the federal, state and local levels.

Should you have any further questions, please call me at (432) 685-7744 or email me at [spruett@elevationres.com](mailto:spruett@elevationres.com).

Yours very truly,



Steven H. Pruett  
President & CEO,  
Elevation Resources LLC  
Chairman,  
Independent Petroleum Association of America