

U.S. House Natural Resources Subcommittee on Energy and Mineral Resources

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Legislative Hearing on “Discussion Draft Legislation to Overhaul Federal Lands Energy Policy”

Prepared Testimony of David Holt

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Chairman Gosar, Ranking Member Lowenthal, and Members of the Subcommittee, it is an honor and a privilege to be here today, on behalf of Consumer Energy Alliance, to testify in support of Federal Lands Energy Policy and the benefits to both consumers and businesses surrounding the significant increases in safety, technology, and innovation both onshore and in America’s federal waters.

We would like to thank Representative Steve Scalise for his leadership on energy issues and this legislative initiative, as well as for his service and sacrifice to our nation.

We also recognize and support the Trump Administration’s realization that energy is a key economic driver in the United States, and that a robust, sensible energy policy will create jobs, improve our economy, and support our manufacturing sector.

CONSUMER ENERGY ALLIANCE

Consumer Energy Alliance is a nationwide non-profit, non-partisan trade association that represents families and businesses by advocating for balanced policies that support access to affordable, reliable energy. CEA’s membership includes over 280 affiliate company members that represent truckers, farmers, manufacturers and nearly every sector of the U.S. economy along with more than 450,000 individual members across the country who favor policies that promote affordable and reliable energy and thoughtful environmental stewardship.

Throughout our 12 year history, CEA has advocated for a sensible “all-of-the-above” strategy to meeting our energy needs, diversifying our energy portfolio and constantly striving to improve our personal and national energy security.

The Energy Revolution – led by onshore and offshore energy production, as well as advancements in alternative energy and energy efficiency – that is occurring in this country is nothing short of astounding. It has and will continue to fundamentally alter the geo-politics of energy – creating U.S. jobs and sustained economic opportunity for decades to come. This Revolution has systematically improved economies across the country by creating jobs with family-supporting wages, delivering affordable energy for families, providing low cost fuel for businesses and in some states reinvigorating entire industries that were once on the verge of collapse.

FORGOTTEN VOICES

In recent years, we have closely observed that the national dialogue around energy has – like so many other discussions – become increasingly polarized. Small, yet vocal groups have led protests against energy projects across the country – ranging from transmission lines, onshore energy production, wind projects, energy delivery systems such as pipelines, and offshore energy production. A thoughtful national discussion that leads to sensible solutions is always to the nation’s benefit, but our principle concern is that this increasingly partisan national discussion is failing because it has somehow forgotten to include its most important participants – families and small businesses. Everyday citizens – regardless of political affiliation, demographics, or socio-economic background – who are profoundly impacted by energy policy and production.

For example, *Inside Energy* notes that economists consider energy “affordable” when the average household spends roughly six percent of income on electricity, gasoline and other energy uses. Yet, households with incomes below 50 percent of the federal poverty level often spend 30-40 percent of their income on energy, and in some extreme cases they are spending in excess of 60 percent of their income on energy.¹

ENVIRONMENTAL STEWARDSHIP

Like other groups, CEA strongly supports continued environmental improvements. The innovation, technology, and safety improvements that are being discussed today are absolutely vital to protecting our environment. In fact, the United States is a world leader in meeting and exceeding environmental standards related to energy production. This “high bar” that we have set must continue and we must strive to do even more.

Across the board, the U.S. energy industry – in coordination and at the behest of the federal and state governments and under the watchful eye of those of us concerned about our environment – has shown the ability to achieve significant environmental gains.

For example:

- Net greenhouse gas emissions in 2015 were 11.5% lower than they were in 2005. This includes a ~12% fall in carbon dioxide emissions, a 4% reduction in methane emissions, and a ~7.5% decrease in nitrous oxide emissions over that same period.²
- The International Energy Agency noted that the United States had the biggest drop in carbon dioxide emissions in 2016, with emissions reaching their lowest level since 1992 over a time in which our economy expanded by 80%.³

¹ <http://insideenergy.org/2016/05/08/high-utility-costs-force-hard-decisions-for-the-poor/>

² https://www.epa.gov/sites/production/files/2017-02/documents/2017_complete_report.pdf

³ <https://www.iea.org/newsroom/news/2017/march/iea-finds-co2-emissions-flat-for-third-straight-year-even-as-global-economy-grew.html>

- Emissions from volatile organic compounds, which along with nitrogen oxides contribute to city ozone – or smog – fell 47% between 1990 and 2011.⁴
- Prior to 1974, over 40% of U.S. drinking water systems did not meet basic health standards. Today, EPA reports that over 90% of the country’s water systems consistently meet standards that have been established for more than 90 contaminants,⁵ with the Centers for Disease Control & Prevention noting that the United States “has one of the safest drinking water supplies in the world.”⁶

The development, transportation, and transmission of affordable, reliable energy would not be possible without the unending American ingenuity that has paved the way for new technology, environmental controls, innovative construction and equipment, and advanced education. Because of these modern advances we have been able to safely and responsibly develop American energy.

ENERGY SOLUTIONS

With these environmental achievements in the forefront of our approach, CEA is also concerned that some groups engaged in our energy discussion continue to fail at offering sensible solutions to meet our energy needs. It seems to us that too much of our national discussion appears to try and divide us into a forced choice between protecting the environment OR meeting our energy needs. We fundamentally disagree with this argument. Our great nation can, and must, meet our environmental challenges AND our energy needs.

We have clearly shown that we can do both. And households, families, and our neighbors on fixed incomes all deserve a thoughtful, balanced approach to achieving BOTH environmental stewardship and meeting our nation’s energy needs.

NON-PARTISAN

With the understanding that we represent families all across the nation, CEA is striving to bring a more non-partisan voice to the energy discussion and focus on sensible solutions to providing reliable access to our energy. These non-partisan solutions must consider all sources of energy - like wind, solar, hydro, oil, natural gas, nuclear, coal and energy efficiency – to meet our country’s most basic energy needs each and every day.

As shown in the focus of our testimony today, CEA strongly supports actions that will increase and enhance access to the vast quantities of clean, affordable energy resources available on federally owned lands – onshore and offshore – using new and existing safe, innovative, and the continued technological advancements being shaped by the energy industry.

⁴ https://cfpub.epa.gov/roe/indicator_pdf.cfm?i=23

⁵ <https://blog.epa.gov/blog/2016/04/moving-forward-for-americas-drinking-water/>

⁶ <https://www.cdc.gov/features/drinkingwater/index.html>

ONSHORE ENERGY DEVELOPMENT

Much of our onshore energy success today is due in part to the combination of two long-established technologies - hydraulic fracturing and horizontal drilling – that have transformed the world of onshore oil and shale gas production. Through opportunities created by these two tried-and-true techniques, operators have increased well productivity and efficiency gains through safe, responsible drilling that has made our domestic energy accessible at lower prices compared to only a few years ago.

Producers are now able to develop energy resources that were once considered technically or economically impossible. This achievement has contributed to our Energy Revolution, which is helping to spur U.S. economic growth, opportunity, and independence. Through enhanced production of tight oil and shale gas reserves, energy resources have contributed significantly to overall U.S. energy security and have been a driving economic force across the country.

Take Ohio, for example. The Buckeye State has become one of the leading energy producing states in the country, while also upholding some of the most stringent state environmental standards enacted, not just in America, but in the world. This has allowed the manufacturing sector to thrive, supporting 700,000 jobs, \$39 billion in annual payroll, and \$50 billion in products.⁷ And that's just one industry, in one state.

And the industry is constantly improving and innovating. Since the oil price down-turn in 2014-15, we have seen innovative improvements in hydraulic fracturing processes, decreased use of diesel engines to help reduce emissions, improved water purification technologies, improved distribution techniques, and overall greatly improved efficiencies and operational cost reductions.

In October 2016, key onshore production regions in the Lower 48 states produced 4.4 million barrels per day of oil and almost 4.6 billion cubic feet per day of natural gas.⁸ In just one year our domestic production grew to 6.1 million barrels per day of oil and almost 6.1 billion cubic feet per day of natural gas.⁹

Energy consumers such as families, small businesses, agriculture, manufacturing and transportation have continued to benefit from abundant and reliable sources of oil and natural gas. In fact, a recent study concluded that onshore oil and gas production is worth a net of \$1,900 per year for households in regions with higher production activity.¹⁰ For energy-intensive manufacturers like fertilizer, steel, and petrochemical producers, access to lower cost natural gas has spurred sizeable expansion in America's manufacturing sector – just like in Ohio.

⁷ http://www.ohiomfg.com/wp-content/uploads/OMA_ManufacturingCounts_LoRes.pdf

⁸ <https://www.eia.gov/petroleum/drilling/#tabs-summary-2>

⁹ <https://www.eia.gov/petroleum/drilling/archive/2016/10/#tabs-summary-2>

¹⁰ <https://ssrn.com/abstract=2692197>

TECHNOLOGY

Despite this impressive record, U.S. operators, their employees, and bright minds across our country in technology-related fields are working to improve resource extraction rates while striving to reduce the environmental footprint of onshore exploration and production. By continually seeking and developing advancements in technology, operators and ancillary organizations have deployed equipment that is safer, lower emitting, and less obtrusive to surrounding areas by utilizing a new generation of engines powered by natural gas or a combination of natural gas, electricity, and diesel. These same power systems have also enabled faster and more efficient well completions.

To do this, operators developed the ability to monitor wells and production in real time by utilizing communication technologies and sensors that ensure improved efficiency, reduce emissions, and help to identify any problems such as potential leaks or spills before they occur.

Just a few examples of new innovation include:

- Because of technological innovation, a well today takes less than half the time to drill than the average well did just 3 years ago;
- A well operation today has a significantly smaller footprint than it did just 9 years ago.
- Rigs and completion equipment are quieter and safer;
- Rigs are more efficient, with fewer emissions, because of a new generation of engines, many of which are powered by natural gas or a combination of natural gas, electricity, and diesel;
- The industry is using FracFocus, a website, to be more transparent with their fracturing operations;¹¹
- New sensor and communication technology allows operators to monitor all their wells and production real time. This keeps wells producing more efficiently, identifies problems before they happen, reduces emissions, and reduces unnecessary truck traffic;
- There is still more to do - wells are only recovering around 10 % of the oil and 15% of the gas in a shale well. That means, industry research and development departments are focused on this to make additional improvements.

ENERGY DELIVERY

This innovation does not stop at the well head. Modernization has swept through our infrastructure system and changed the way we deliver energy. These new delivery systems focus on enhanced pipeline fitness, leak detection, monitoring, and damage prevention.

With demand increasing and more energy needed by communities all across the nation, delivering energy safely and responsibly is critical. Energy delivery systems, such as pipelines,

¹¹ <https://fracfocus.org/>

are by far the safest way to transport oil, with a 99.999 percent safety rating, according to the Association of Oil Pipe Lines.

Through the use of “smart pig” technologies and other innovation, modern pipelines are more efficient, environmentally secure, and cost-effective than ever before. Operators can monitor in real-time, inside of the pipeline, to determine any threats to the system as well as ensuring its effectiveness.¹² This modernized risk assessment allows crews to be able to monitor the 2.5 million miles of pipelines that run beneath the surface, delivering billions of barrels of energy a year.

That technology is critical for operators and employees who carefully assess and monitor these pipelines and report incidents, no matter how small, to regulators. It is a goal of the industry to continuously learn and improve its practices to reduce the number of incidents and risks to the public and environment. There is no other way to transport that much energy, that safely or efficiently with the environmental and economic benefits like pipelines.

Modernizing our energy infrastructure does more than just ensure families can make ends-meet by providing affordable energy – it also creates jobs that pay significantly more than a living wage. Equally important, the environmental benefits our communities receive from modernizing our nation’s infrastructure.

Years of study and analysis – from federal safety regulators – has shown that pipelines are the safest, most efficient, and most environmentally sound way to deliver energy – and delivering energy is made even safer by the development of modern technology which provides for 24/7 monitoring, early warning systems, automated shut-off valves, and improved materials and training for employees and laborers.

And that is important for people like Tim McCort, an educator at Canton (Ohio) Electrical Joint Apprenticeship and Training, who works with electrical apprentices and journeymen in the industry who said,

“We have this fantastic opportunity in the energy development space and it’s our mission to continue embracing and leading improvement to maintain rigorous standards. We don’t tolerate breaches in safety or quality. Skilled labor will continue to fight for that and it’s a long-term commitment to make our society safer, better, and more prosperous for everyone. We need to continue to dialogue with our policymakers and the business leaders on the incredible need for a highly trained workforce – not just in Ohio or West Virginia- that’s ready to tackle the huge needs we are seeing for skilled labor, and encouraging young people to take the training opportunities that are abundant in the energy industry for a challenging, high-tech job.”

¹² http://www.aopl.org/wp-content/uploads/2017/04/2017-API-AOPL-Pipeline-Safety-Report_low-1.pdf

OFFSHORE PRODUCTION

CEA strongly supports expanded offshore development, of both our conventional and renewable energy resources, to meet our growing needs as a critical piece of a robust, rational, balanced all-of-the-above energy policy, through actions to expand and remove hurdles to access, which set the conditions necessary to encourage investment in American energy.

As the Energy Information Administration has forecast, energy demand is expected to increase in the coming decade, and the need for oil and natural gas will continue to grow.¹³ That is why access and affordability through these safe, technological innovations will be so important.

With 94 percent of federal waters currently inaccessible, expanding opportunities to access these resources - in regions like the Gulf of Mexico, Alaska, and the Atlantic - would provide great benefits to these regions, generate significant economic impacts for families and small businesses across the United States, and can be done safely.

Nationally, expanded access to areas currently unavailable could create more than 893,000 jobs, \$450 billion in new private sector spending, \$550 billion in increased economic activity nationwide, and more than \$395 billion in increased government revenues.¹⁴

Greater access to our own offshore resources can ensure a stable, steady supply of American energy. This helps to reduce reliance on imports from foreign, and sometimes hostile, governments - giving Americans more energy security.

After all, the Gulf of Mexico has been producing oil and natural gas since 1940, yielding more than 13 billion barrels of oil and 154 trillion cubic feet of natural gas. To put that in perspective, 1 billion barrels of oil would generate enough energy to meet the electricity needs of all 326 million Americans and millions of businesses in the country for six months.¹⁵

It should be noted, however, that worldwide, deep-water oil and gas production is becoming an increasingly important element of the global energy portfolio. The U.S. needs to remain the technical leader. However, increasing research investments in the North Sea countries and Brazil, coupled with decreasing research and development investments in the U.S., are causing the balance to shift.

¹³ [https://www.eia.gov/outlooks/aeo/pdf/0383\(2017\).pdf](https://www.eia.gov/outlooks/aeo/pdf/0383(2017).pdf)

¹⁴ <http://www.noia.org/wp-content/uploads/2013/12/The-Economic-Benefits-of-Increasing-US-Access-to-Offshore-Oil-andNatura...pdf>; <http://www.noia.org/wp-content/uploads/2014/11/The-Economic-Benefits-of-Increasing-US-Access-to-Offshore-Oil-Natural-Gas-Resources-in-the-Eastern-GoM.pdf>; <http://www.noia.org/wp-content/uploads/2014/11/The-Economic-Benefits-of-Increasing-U.S.-Access-to-Offshore-Oil-and-Natural-Gas-Resources-in-the-Pacific.pdf>; and <http://arcticenergycenter.com/wp-content/uploads/2015/08/National-Effects-Report-FINAL.pdf>

¹⁵ In 2015, 3,758,992,000 megawatt hours (3758.992 terrawatt hours) of electricity was sold to consumers in the U.S. (https://www.eia.gov/electricity/annual/html/epa_01_02.html). One billion barrels of oil equivalent is equal to 1699.41 terrawatt hours.

Along with providing hundreds of thousands of high-paying jobs and adding billions of dollars to the American economy, domestic offshore oil and natural gas production has helped to keep energy prices more affordable and has greatly enhanced our national energy security by providing additional barrels of oil that would have otherwise been imported by foreign nations.

Over the past 12 years, CEA has worked with the Bush and Obama Administrations, and now the Trump Administration, as well as dozens of governors, hundreds of state legislators and stakeholders, and hundreds of thousands of individual energy consumers to support expanded access in the Gulf of Mexico, Alaska and Atlantic Outer Continental Shelf Regions.

By opening up more offshore areas, the U.S. could produce enough energy to replace more than 55 percent of the crude oil and petroleum products that we import today, including 100 percent of the crude oil and petroleum products that we import from OPEC.¹⁶

It is also important to note that the United States military – the single largest energy user in the world – relies on oil, bunker fuel, and jet fuel to protect our interests around the world. In Fiscal Year 2014, the Department of Defense used over 87 million barrels of fuel, at a cost of nearly \$14 billion.¹⁷ With oil hovering around \$100 per barrel below the prices we saw in 2008, we are spending \$8.7 billion per year less in fuel – which can now be spent on body armor, new weapons systems, or other critical programs. Increased domestic production can also provide U.S. allies and their citizens with energy supplies, in turn reducing their dependence on foreign, and sometimes hostile, regimes.

And thanks again to human ingenuity and technological innovation, offshore energy development is safe – and getting safer every day. In addition to ensuring that proper investments in technology are being made to continue these improvements, it is important to CEA and our members that both the industry and the federal government continue to work together to ensure that any exploration and development of our offshore energy resources are done safely and responsibly.

Both the federal government and the offshore energy industry have made great strides in improving all aspects of offshore energy production. Among these changes are:

- The creation of new collaborative containment companies which stand ready to deploy state of the art containment technology at the first sign of any wellhead spill;
- The development of more than 100 new and revised industry standards;

¹⁶ <http://www.noia.org/wp-content/uploads/2013/12/The-Economic-Benefits-of-Increasing-US-Access-to-Offshore-Oil-andNatura....pdf>; <http://www.noia.org/wp-content/uploads/2014/11/The-Economic-Benefits-of-Increasing-US-Access-to-Offshore-Oil-Natural-Gas-Resources-in-the-Eastern-GoM.pdf>; <http://www.noia.org/wp-content/uploads/2014/11/The-Economic-Benefits-of-Increasing-U.S.-Access-to-Offshore-Oil-and-Natural-Gas-Resources-in-the-Pacific.pdf>; <http://arcticenergycenter.com/wp-content/uploads/2015/08/National-Effects-Report-FINAL.pdf>; and https://www.eia.gov/dnav/pet/pet_move_impqus_a2_nus_ep00_im0_mbbldpd_m.htm

¹⁷ https://www.acq.osd.mil/eie/OE/OE_index.html

- The creation of the Center for Offshore Safety, which works with independent third-party auditors and government regulators to create an industry-wide culture of continuous safety improvements;
- Advances to well sensor technology now allows the immediate detection of hydrocarbons and abnormal pore pressure to prevent well control problems;
- Real time data of the drilling process is industry standard today and makes drilling more efficient and safer.

The U.S. energy revolution and the innovation that has been born from it, coincides with the country making environmental strides, with net U.S. greenhouse gas emissions in 2015 being 11.5 percent lower than they were in 2005.¹⁸ As the U.S. Department of the Interior concluded last year, allowing access to our offshore resources will remove environmental and social costs that would otherwise result from our reliance on other sources for energy.¹⁹

REVENUE SHARING

Robust energy development can also protect our environment by generating both federal and state revenue, including revenue that is shared through the Gulf of Mexico Energy Security Act to further coastal restoration and conservation initiatives. CEA strongly supports revenue-sharing and efforts to ensure that all participating states and coastal communities can receive an appropriate share of the revenue generated by energy leasing and development in adjacent waters.

Across the country, both coastal and non-coastal states benefit significantly from the revenue generated by domestic energy activity.

In New Mexico, oil and natural gas production accounts for 31.5%, a significantly large part of the state's General Fund revenue.²⁰ And in Louisiana, mineral revenue accounts for up to 15% of the state's revenues.²¹

These revenues provide vital dollars that fund improvements to critical infrastructure - like hospitals and schools and help the states provide critical services to their residents.

States like Virginia could benefit significantly from access to nearby resources and expanded revenue-sharing. For example, thoughtful and environmentally prudent Atlantic conventional energy development could generate nearly \$2.2 billion in economic activity in Virginia. In addition, expanded revenue-sharing could provide an additional ~\$1.9 billion in new revenue to the Commonwealth.²² To put it in perspective, expanded revenue sharing could have provided

¹⁸ https://www.epa.gov/sites/production/files/2017-02/documents/2017_complete_report.pdf

¹⁹ <https://www.boem.gov/2017-2022-Proposed-Program-Decision/>

²⁰ <https://www.nmlegis.gov/lcs/lfc/lfcdocs/Oil%20and%20Gas%20Production%20and%20the%20NM%20State%20Budget%202015.pdf>

²¹ http://revenue.louisiana.gov/Miscellaneous/TaskForceMeetingMaterials_20160318_LouisianaTaxStudy2015.pdf

²² <http://www.noia.org/wp-content/uploads/2013/12/The-Economic-Benefits-of-Increasing-US-Access-to-Offshore-Oil-and-Natura....pdf>

enough revenue in one year to more than cover the \$266 million budget shortfall that Virginia experienced in FY 2016.²³

REDUNDANT REGULATIONS

To further our goals of environmental stewardship and meet our basic energy needs, it is vital that state, local and federal officials collaborate on prudent regulatory controls. Maintaining adequate governmental-industry communications is essential to assist in consistently moving forward with the best available technology and standards. This is the essence of sound governmental and industry coordination.

It is equally important that local, state, and federal governments refrain from excessive, redundant, conflicting, confusing or just-in-time regulations. A duplicative approach has demonstrated that it can have a negative impact on safety, environmental performance, and the production and delivery of energy. In that regard, we commend the current Administration and Members of Congress for efforts to review and remove regulatory redundancies and develop ways to improve efficiencies. It is our view that improved and more transparent regulations will help improve both environmental performance and energy access.

SUPPORT FROM RESEARCH AND DEVELOPMENT

Innovation has been key to the success of the U.S. oil and gas industry. No nation in the world has more know-how and ingenuity when it comes to discovering, developing, and delivering oil and gas resources safely and efficiently.

This is in large part due to the investment our companies, research universities, and national laboratories have made to research and development (R&D) in areas like deep-water advancements, unconventional resources, and the efficient development of marginal wells.

R&D has and should continue to lead to innovations that reduce our environmental footprint, reduce emissions in the field, enable more efficient use of water, increase recovery factors across various plays, and enable safer operations both onshore and offshore. This R&D will, in turn, provide U.S. leadership for the rest of the world in overall environmental stewardship and standards.

The federal government has played a critical role in making this R&D possible through the funding of public private partnerships. These projects have helped create jobs and have a direct positive impact on the economy of over \$150 billion and environmental damage mitigation benefits of over \$40 billion. CEA believes the federal government should continue to support and fund these advanced R&D programs, as well as public private partnerships.

²³ <http://wtvr.com/2016/07/08/virginia-closes-2016-fiscal-year-with-266-3-million-budget-shortfall/>

CONCLUSION

American energy development and a healthy environment clearly go hand-in-hand, and human ingenuity and technological innovation have allowed the United States to become a leader in energy to the benefit of families and businesses across America, all while improving our environment and making operations safer for our workers.

These actions, combined with the hearts and minds of our present as well as the passion and drive of our future – being educated in classrooms across the country - can help America continue to develop our national resources safely and responsibly so that families and businesses across this country can be secure and successful.

Again, it is an honor to be here today on behalf of Consumer Energy Alliance, our members, and the forgotten voices across the country who depend on new, innovative, technological solutions to develop the energy they need every day and the environmental progress we all support.