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Testimony on "The New Domestic Energy Paradigm: Downstream Challenges for Small Energy Businesses"

> Committee on Small Business Subcommittee on Agriculture, Energy and Trade

> > 2361 Rayburn House Office Building June 26, 2014

Chairman Tipton, Ranking Member Murphy, and members of the Subcommittee, my name is Greg Dotson. I am the Vice President for Energy Policy at the Center for American Progress. Thank you for the opportunity to testify today regarding the future of the oil industry.

Visit any town in America and you can see that oil is a critical source of energy. Oil fuels over 90% of our transportation systems in the U.S.

Oil is necessarily a key focus of our national energy policy. International oil markets frame our relationships in the world. Retail gasoline prices are a kitchen table issue for American families.

For decades, oil in the U.S. had been characterized by ever-increasing demand and declining domestic production. We were relying more and more on imported oil.

But this has changed in recent years. Since 2008, we've experienced a transformation in our oil sector. The Obama Administration issued strong standards for new cars and trucks to curb their carbon pollution and increase their fuel economy. The result is that increasingly efficient vehicles are being brought to market. And our oil consumption is no longer on the rise. In fact, major automakers are now bringing some models to market that use little or no gasoline whatsoever.

And new technology and policy have unlocked additional oil supply. North Dakota is producing more oil than previously understood to be possible because of advances in drilling technology. Heavier and dirtier forms of oil, such as the Canadian tar sands, are also being brought to market. North America is awash in oil for the time being.

And the oil sector is thriving. Production is up. Profits are high. The sector enjoys a favorable tax structure and regulatory climate.

But this new oil supply doesn't ease the challenge of our nation's dependence on oil. Global demand for oil is still on the rise. And supply disruptions in far flung areas of the world still impact the prices we pay here. Just look at how events in Iraq have affected the global oil price.

The new supply doesn't diminish the need for important public health protections that ensure that American families don't suffer the adverse impacts associated with pollution.

New supplies of oil also complicate our response to climate change. The planet must use less oil in the future – not more – if we are going to address the serious threat of climate change and avoid the most serious impacts.

Our Dependence on Oil and Efforts to Promote Energy Independence

In the early 1950's, less than 10% of the oil we used was imported. By the 1970's, our imports had increased, nearing 50% at one point. After oil price shocks ravaged our economy, there was a drop off in imports for a few years. But as oil production declined in Texas and Alaska, we were importing over 50% of our oil by 2001. Our oil imports peaked at 60% in 2005.

Fortunately, bipartisan agreement has helped turn the tide on our oil dependence.

In 2006, President George W. Bush, stated in his State of the Union address that the U.S. was "addicted to oil." In 2007, Congress sent him the Energy Independence and Security Act to increase automobile efficiency and to expand the Renewable Fuels Standard, a policy explicitly aimed at increasing the use of alternatives to oil. President Bush signed EISA into law on December 19, 2007.

President Obama took the ball even further down the field. The Obama Administration finalized vehicle standards that will make cars and light trucks go twice as far on a gallon of gas and save families more than \$1.7 trillion in fuel costs in 2025. We'll save as much oil as we currently import from Saudi Arabia and Venezuela combined. Oil consumption in the United States has fallen as vehicles have become more fuel efficient. The Energy Department predicts that this trend will continue in the coming years.

In fact, EPA is currently working to cut pollution from medium and heavy duty vehicles by setting carbon pollution tailpipe standards. These standards would have the effect of reducing oil consumption by up to one million barrels per day by 2035. They build off the already successful first round of efficiency standards, which are projected to save 530 million barrels of oil while reducing greenhouse gas emissions by 270 million metric tons. These savings translate to \$50 billion in fuel cost savings for vehicle owners and operators on 2014-2018 model year trucks. This could save an individual truck operator a net \$73,000 in fuel costs over the lifetime of a model 2018 truck. Further, these greater efficiency standards will improve air quality and yield health benefits estimated between \$1.3 billion to \$4.2 billion by 2030

At the same time, advances in technology have dramatically increased oil production in shale formations, especially in North Dakota and Texas.

As a result, the Energy Information Administration predicts that the United States will import just 29% of the oil it consumes in 2014. That's the lowest level since 1985 and a dramatic and swift decline from the peak of 60% in 2005.

But this decrease in oil imports has not solved our energy problems.

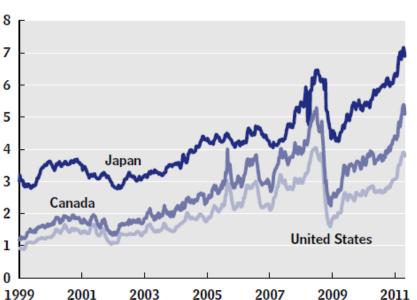
The United States is vulnerable to oil price shocks.

Even though the United States has increased its domestic oil production, that doesn't mean the country is immune from oil price shocks. Oil is a global commodity, and, absent unique regional market conditions, prices are generally set by the world market.

For years, we've heard arguments that greater domestic oil production can shield the United States from price shocks associated with the global oil market. However, these arguments do not stand up to examination.

Experiences in other countries show that price spikes are not prevented or mitigated by higher levels of domestic oil production nor guaranteed supplies of imports. The nonpartisan Congressional Budget Office examined gasoline prices in Canada, the United States, and Japan over the last decade. CBO found that gasoline prices in those countries rose and fell in tandem with the world market, even though Japan produced almost no oil, Canada was a net oil exporter, and the United States produced less than half of its oil. More domestic supply did not protect Canadian consumers from price shocks.

Average Retail Gasoline Prices in Three Countries (Nominal dollars per gallon)



Source: Congressional Budget Office, Energy Security in the United States (May 2012)

CBO has stated that even if the United States were to develop additional resources, this process could take years, and oil producers around the globe would likely respond by constraining their development, dampening the effects of increased production on prices. CBO stated that "increasing production of oil in the United States might not increase the world's oil supply substantially or lower the price of oil significantly."

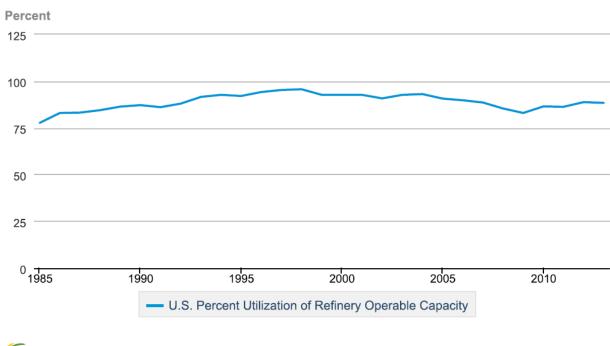
An AP analysis examined 36 years of oil production and price data. Similarly the analysis found no statistical correlation between monthly, inflation adjusted gasoline prices and U.S. oil production.

That's why we need to reduce our dependence on oil overall, not just oil from other countries. The less oil we use as a nation, the less impact we will feel from international disruptions in oil markets.

The oil sector has relied upon a market-based approach to develop infrastructure.

In the United States, unlike some other nations, investments in oil infrastructure, such as pipelines and refineries, are market decisions. The oil industry brings capital to bear based upon market conditions and projections. When one set of market participants come to Congress and argues for government intervention to benefit them at the expense of other market participants, Congress should be cautious and carefully evaluate whether this market intervention would be in the public interest.

According to EIA, refinery utilization is within historic norms. In fact, there is more excess refinery capacity than there was 15 or 20 years ago. This capacity may not be optimized in all cases for light, tight oil, such as the oil produced in North Dakota, but one might want to ask why a U.S. refinery would invest in optimization for this type of oil when there are aggressive efforts to bypass the U.S. refining industry all together by proposing to lift the ban on crude oil exports. If a refiner were to invest to optimize its ability to refine light, tight oil and the crude oil export ban was subsequently lifted, that refiner could face stranded investments.



U.S. Percent Utilization of Refinery Operable Capacity

Source: U.S. Energy Information Administration

Producing oil without adequate infrastructure is resulting in wasteful practices.

Some argue that the government should adopt policies to increase the rate of domestic crude oil production. However, there is strong evidence that the rush to produce oil is wasting substantial quantities or valuable natural resources. Encouraging even faster development will only exacerbate this waste.

As oil production in the Bakken Shale has increased, so have natural gas byproducts. This has caused the proportion of nonmarketed natural gas to steadily increase, and now averages 0.31 billion cubic feet per day, almost twice as much as in 2011 (0.16 Bcf/d). Most of this nonmarketed gas is flared. It's simply burned to no productive use whatsoever.

Between 2008 and 2012, North Dakota accounted for one-half of one percent of total gross natural gas withdrawals in the United States, but 22% of all natural gas flared or vented in the United States. In March 2014, 33% of natural gas produced was flared. In April 30% was flared.

This is a loss for the country and government policies shouldn't encourage it. It's just common sense. We shouldn't be wasting our natural resources.

Increased oil supply does not diminish the need to protect public health from pollution.

More than 149 million Americans suffer from unhealthy levels of air pollution. It should go without saying that the increase in oil production does not diminish the need to address this serious problem and protect public health from pollution.

Fortunately, the U.S. Environmental Protection Agency is taking action. For example, on March 3, 2014, the EPA announced Tier 3 standards to strengthen tailpipe standards for cars and trucks and to reduce the sulfur content of gasoline. These standards will reduce NO_x emissions by 10% in 2018 and 25% by 2030. These standards are estimated to generate between \$6.7 and \$19 billion in annual health benefits and prevent up to 2,000 premature deaths annually, at a cost of approximately \$1.5 billion through 2030.

Furthermore, the EPA has taken steps to accommodate the concerns of small refiners, delaying the start date for sulfur control requirements for approximately 30 small refineries until 2030. This gives refiners producing less than 75,000 barrels per day six years of flexibility to meet the new standards.

Rising levels of oil consumption make it more difficult to address climate change.

Just because it is possible to get growing quantities of oil out of the ground, doesn't mean we should. The more oil we burn, the more carbon pollution we emit. And there are some wild places that are too historical, irreplaceable, or economically valuable to drill.

Numerous reports have sounded the alarm on climate change. The National Climate Assessment, released in May 2014, is one of the most-recent and most-thorough scientific evaluations of the climate change threat. The assessment was produced by a team of more than 300 experts guided by a 60-member Federal Advisory Committee. The report was extensively reviewed by the public and scientists, including federal agencies and a panel of the National Academy of Sciences. The National Assessment states that:

Climate change, once considered an issue for a distant future, has moved firmly into the present. Corn producers in Iowa, oyster growers in Washington State, and maple syrup producers in Vermont are all observing climate-related changes that are outside of recent experience. So, too, are coastal planners in Florida, water managers in the arid Southwest, city dwellers from Phoenix to New York, and Native Peoples on tribal lands from Louisiana to Alaska. This National Climate Assessment concludes that the evidence of human-induced climate change continues to strengthen and that impacts are increasing across the country. The report concludes however that the future severity of climate change is yet to be determined:

The amount of future climate change, however, will still largely be determined by choices society makes about emissions. Lower emissions of heat-trapping gases and particles mean less future warming and less-severe impacts; higher emissions mean more warming and more severe impacts.

The Center for American Progress urges Congress to take this scientific assessment seriously. We are experiencing the impacts of climate change today. Our children will experience more significant impacts of climate change tomorrow. Every ton of avoidable carbon pollution emitted today is a missed opportunity to provide our children and grandchildren with a brighter future.

The world's top climate scientists have warned over and over—we can only emit so much carbon pollution before the world faces irreversible and potentially catastrophic impacts from climate change. That's why we must continue to reduce our dependence on all oil, no matter the source.