

Testimony
Senate Committee on Energy and Natural Resources
Energy Supply Bill Hearing

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Good morning Chairman Murkowski, Ranking Member Cantwell and members of the committee. I am Erik Milito, Upstream Director at the American Petroleum Institute.

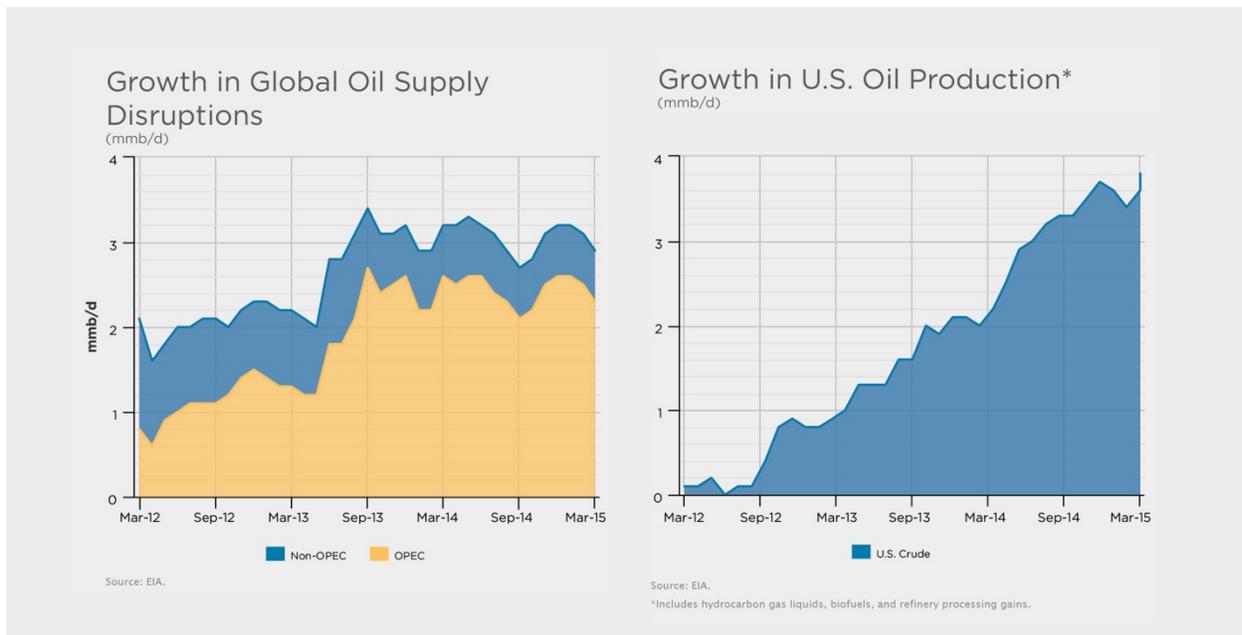
API has more than 625 member companies and represents all sectors of America's oil and natural gas industry. Our industry supports 9.8 million American jobs and 8.0 percent of the U.S. economy. It also provides most of the energy we need to power our economy and way of life and delivers tens of millions of dollars a day in revenue to the federal government. On the upstream side of the industry, we have successfully developed and advanced technologies to allow us to safely and responsibly explore for and produce the oil, natural gas, and natural gas liquids that are vital to every aspect of our economy. In fact, because of American ingenuity and engineering prowess, the U.S. is now firmly established as a global energy superpower.

We are pleased to see the Senate Energy and Natural Resources Committee moving forward with a robust debate to move the country toward a comprehensive energy strategy. We as a nation truly need a comprehensive approach to energy shaped by reason, commonsense and experience – an approach based on competition in the marketplace and state-of-the-art technology. As the committee considers and debates the pillars of infrastructure, supply, efficiency, and accountability, the U.S. is well-positioned to lead the world in the production of all energy sources, and particularly in the production of oil and natural gas. As both the U.S. and global economies grow, the U.S. – with its abundant supplies – can effectively provide economic and energy stability to domestic and global markets through continued and expanded development of oil and natural gas.

Our nation can and should be producing more of the oil and natural gas Americans need here at home. This would strengthen our energy security and help put downward pressure on prices while also providing many thousands of new jobs for Americans and billions of dollars in additional revenue for our government. According to the Energy Information Administration (EIA), we produced about 5 million barrels of oil a day in 2008, and we are now producing more than 9 million barrels per day. Simultaneously, we are reducing the amount of oil that we import. But we can and should do more.

As we have seen throughout this current energy renaissance, increased production of U.S. oil and natural gas drives many benefits for the country, including billions of dollars in capital investments, creation of thousands upon thousands of well-paying jobs, continued improvement in our balance of trade, and increased energy security for the U.S. and our allies abroad. Unplanned supply disruptions in the global crude oil market have grown in recent years, peaking at 3.3 million barrels a day in September 2013 and again in May 2014. According to the Energy Information Administration, this is the highest level of supply disruption since the Iraq-Kuwait War (1990-91), when prices spiked to new highs. By April 2015, the amount taken off the market had fallen to 3 million barrels per day.

U.S. production growth has made all the difference. It has largely offset the loss from unplanned production outages around the world and put downward pressure on prices to the great benefit of American consumers and businesses. See the graphs below for more information on this key, positive impact of U.S. energy production.



Fundamentals of economics are quite evident in oil and gas markets, with growing U.S. supplies putting downward pressure on the price of oil and natural gas. The Henry Hub price of natural gas has remained at \$6.00 per mmbtu or less since December 2008, with most months since then with an average price in the \$2 to \$4 range. Abundant supplies of natural gas in the U.S. and the ability of U.S. producers to efficiently produce these resources has led the EIA and other analysts to predict that natural gas prices will remain relatively low for many years. The low price of natural gas led IHS to conclude that the average household had \$1,200 additional disposable income in 2012, expected to increase to \$3,500 in 2025.

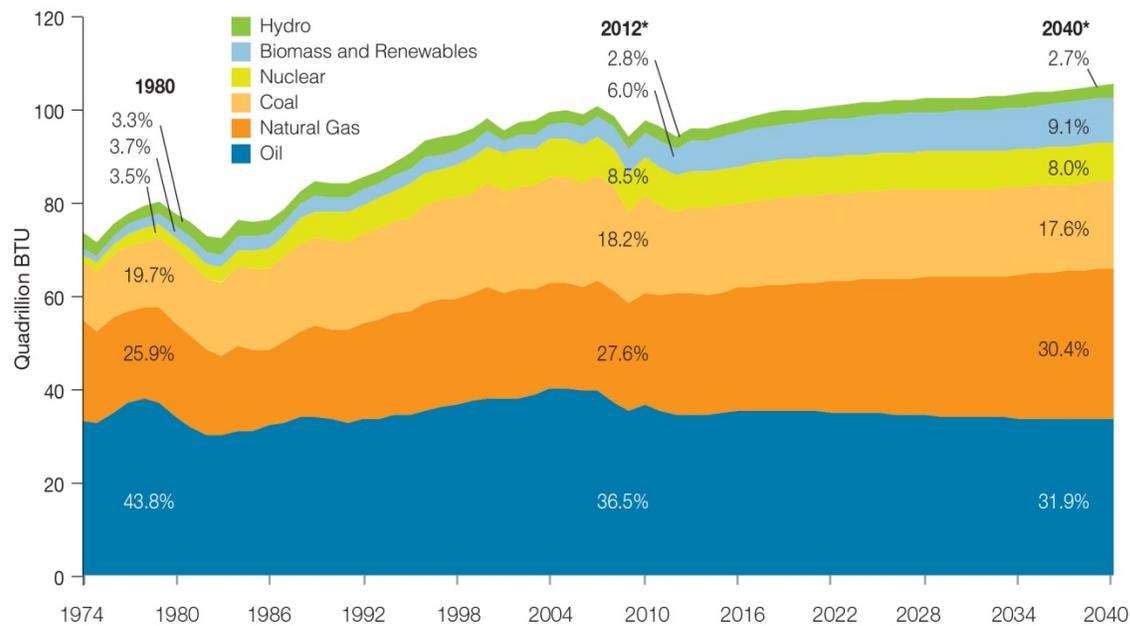
Similarly, the price of crude oil has come down significantly. The spot price for West Texas Intermediate crude oil averaged \$95 per barrel in January 2014. By December 2014 it was down to \$59, and in January 2015 it was at \$47. According to The Economist in its “Sheikhs vs. Shale” article: “Cheaper oil should act like a shot of adrenaline to global growth.... A typical American motorist, who spent \$3,000 in 2013 at the pumps, might be \$800 a year better off – equivalent to a 2% pay rise.” Affordable energy helps drive the economy, and affordability comes with increased access to U.S. oil and natural gas supplies.

The U.S. energy boom has also been a catalyst to resurgent manufacturing and petrochemical sectors, which rely on low cost energy to fuel operations and on natural gas and natural gas liquids as feedstock for production. For example, the American Chemistry Council (ACC) identified 225 chemical industry investment projects valued at \$138 billion that have been announced as of March 2015. According to ACC, during peak investment years, these projects could support 383,000 jobs, \$266 billion in new economic output and \$19 billion in new tax revenue by 2023.

To maintain these benefits, we must plan for the future, and the most sensible approach is to pursue safe and responsible energy development here at home. Given expected global economic and population growth, more total energy will be needed both in the U.S. and globally. The EIA forecasts that U.S. energy demand will grow by 9 percent between 2013 and 2040, with more than 60 percent of the energy demand expected to be met by oil and natural gas, as is the case today. The graph below provides this data.

Future U.S. Energy Demand

The U.S. will require 12 percent more energy in 2040 than in 2012.

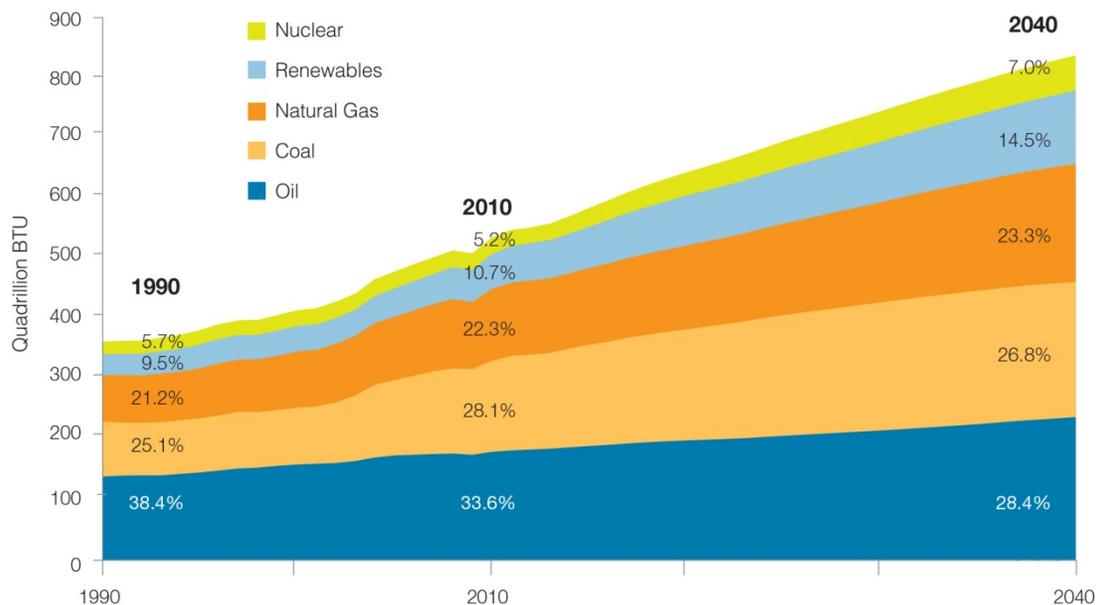


*Excludes non-biogenic municipal waste and net electricity imports. Source: EIA, *Annual Energy Outlook 2014*, Tables A1 and A17.

Globally, the change in energy demand is much greater, and when it comes to liquid petroleum products, the U.S. competes on a global basis for these resources. Recent forecasts by the EIA estimate that sustaining a 3.6 percent annual growth in the global economy from 2014 to 2040 will require an expansion of about 28 million barrels per day in global oil supplies. That is an increase roughly equivalent to the current consumption of the U.S., Canada, Mexico and Japan. The growth in demand for natural gas worldwide is expected to be even larger, increasing by 64 percent from 2010 to 2040. Despite significant growth of renewable energy and improvements in energy efficiency, more than half the world's energy demand will be met in 2040 by oil and natural gas, as is the case today. The graph below provides this data.

Future Global Energy Demand

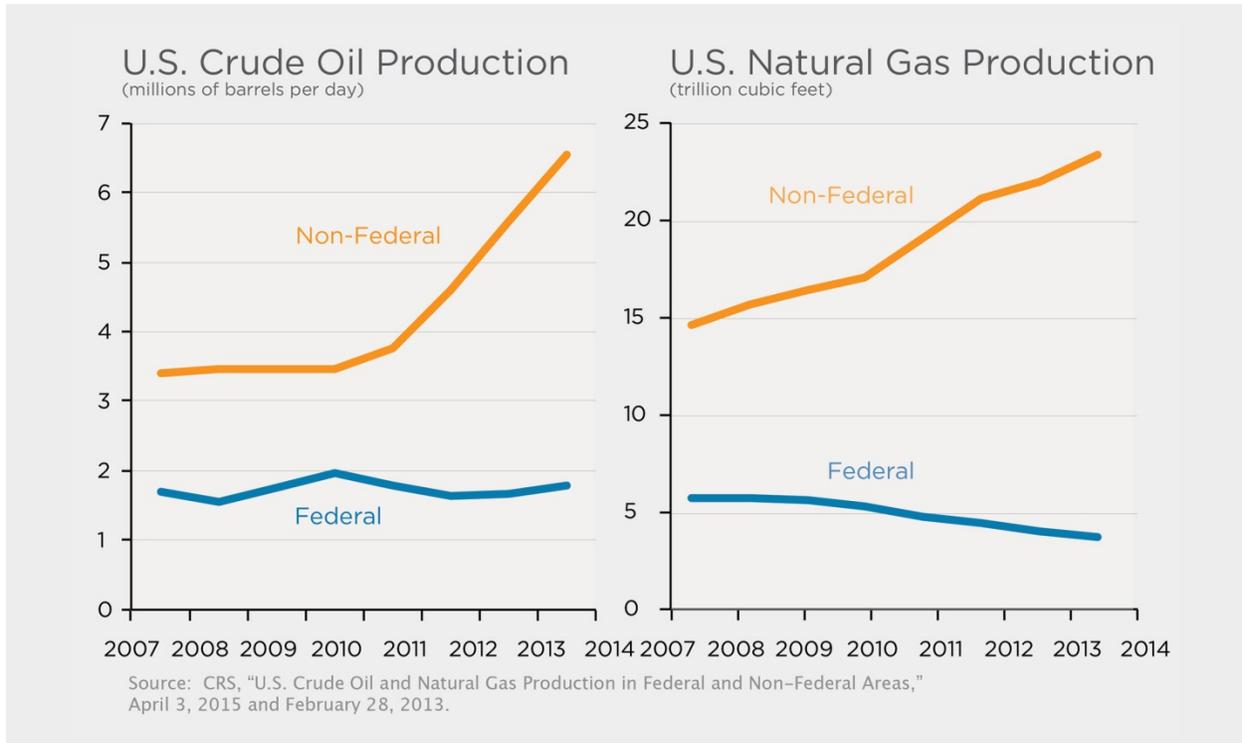
The world will require 56 percent more energy in 2040 than in 2010.



Source: EIA, *International Energy Outlook 2013*.

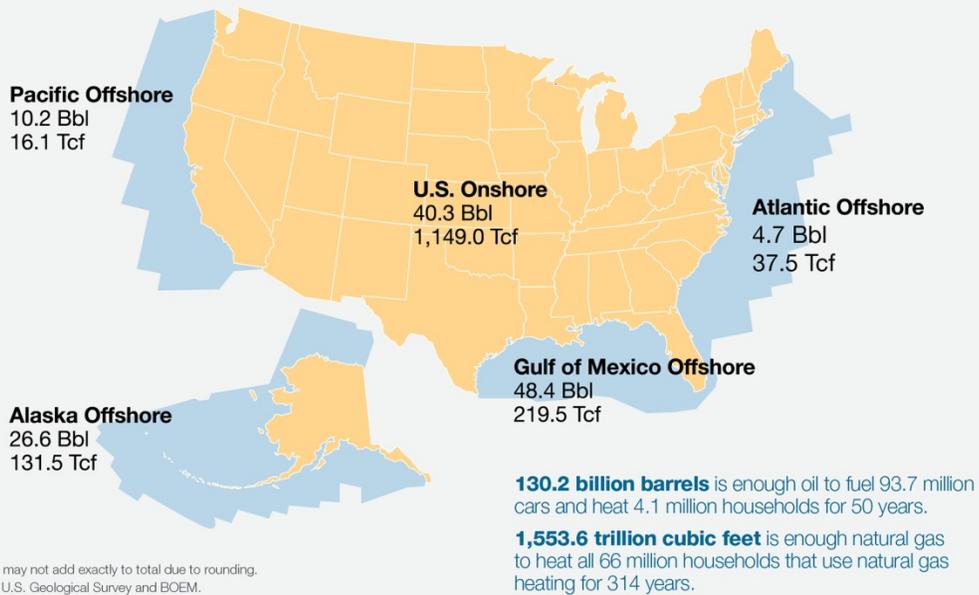
Government policy plays a substantial role in the ability of the U.S. to tap its own supplies and help meet the projected growth in U.S. and global demand. The effect of government policy on energy production is strikingly evident when comparing production on federally controlled lands and production on state and private lands. The dramatic increase that we have seen in oil and natural gas production is occurring on state and private lands. Production of oil and natural gas has decreased in areas under federal control. The lack of growth in production on federal

lands is the result of policies that have effectively discouraged investment in those areas. See the graphs below.



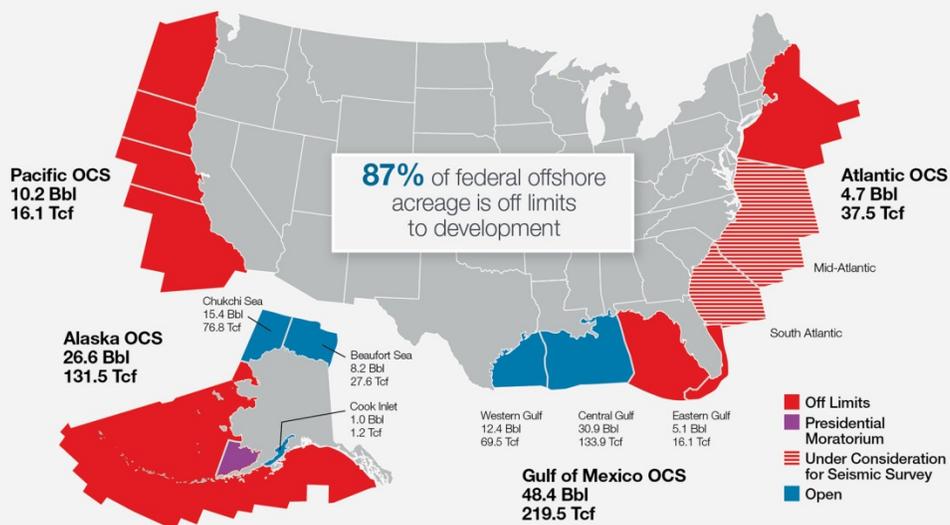
Nevertheless, we have a tremendous resource base with which to meet our growing energy needs. Based upon conservative estimates, we have enough oil and natural gas resources to fuel 93.7 million cars for 50 years and heat 66 million households for more than three centuries. And there is very likely much more oil and natural gas than previously known in areas where the industry has been unable to explore, and new technologies allow us to access resources previously thought unreachable. The graphic below demonstrates the geographic diversity and abundance of undiscovered, technically recoverable resources in the country.

U.S. Undiscovered Technically Recoverable Crude Oil and Natural Gas Resources
(billion barrels - Bbl and trillion cubic feet - Tcf)*



The U.S. Outer Continental Shelf (OCS) is estimated to contain some of the greatest quantities of undiscovered oil and natural gas resources. Unfortunately, the federal government has placed most of the OCS – approximately 87 percent of it – off-limits to oil and natural gas development.

U.S. Offshore Undiscovered Technically Recoverable Federal Oil and Natural Gas Resources
(billion barrels — Bbl and trillion cubic feet — Tcf)



The U.S. has kept areas like the Atlantic off-limits while our neighbors continue to move forward in an effort to develop oil and gas off their shores. Just to the North, Canada has secured tremendous economic and energy security advantages by developing oil and natural gas off the coasts of Nova Scotia, Newfoundland and Labrador, effectively reviving seaports that were considered “near-extinct,” like the town of St. Johns. Also, Cuba and the Bahamas have both moved forward with exploratory drilling or development planning. And the rest of the Atlantic continues to seize this opportunity, including Norway, the U.K., Venezuela, Brazil and Nigeria.

Fortunately, three of the supply bills that are being discussed today will effectively move us past self-imposed energy prohibitions. S. 1276, S. 1278, and S. 1279 would open highly promising areas in Alaska, the Gulf of Mexico, and the Atlantic OCS to energy exploration and production. Provisions are also included to provide revenue sharing to coastal states, much like the revenue sharing currently provided to those states that see federal onshore production within their borders. It is these types of legislative proposals that acknowledge that we will need oil and natural gas for decades to come and recognize our strong capacity to safely and responsibly produce those resources here at home. These bills embrace a long-term, comprehensive approach to energy policy, because steps like these will help ensure we have the necessary energy for our citizens five, ten, 15 and more than 20 years down the road. To be sure, the offshore energy that we produce today is available because of smart policy decisions made ten to 15 years ago. And we need smart energy decisions today to provide energy stability for the generations to come.

Moreover, the ability to produce oil and natural gas within our own borders reverberates prominently around the globe. The positive geopolitical and national security implications of America’s emergence as a global energy superpower are huge. Fundamentally, the more oil and natural gas that the U.S. produces here at home, the less the U.S. and the rest of the world need to buy from unfriendly regimes that often use energy as a political weapon. General

Martin Dempsey, Chairman of the Joint Chiefs of Staff, had this to say during a hearing of the Subcommittee on Defense Appropriations in the U.S. House of Representatives in March 2014:

An energy independent [U.S.] and net exporter of energy as a nation has the potential to change the security environment around the world – notably in Europe and the Middle East. And so, as we look at our strategies for the future, I think we’ve got to pay more and particular attention to energy as an instrument of national power. And because it will very soon in the next few years potentially become one of our more prominent tools.ⁱ

Our allies in places like Central and Eastern Europe and in Southeast Asia have a significant policy interest in seeing the U.S. produce and export more oil and natural gas. On the oil side, the U.S. is importing far less because of increased domestic production. The trade balance, which can weigh heavily on the economy, has improved and less oil is purchased from foreign nations. On the natural gas side, the fact that the United States is not importing significant quantities of natural gas means that there is substantially more on the global market, giving nations around the world access to a greater diversity of supply from which to choose.

Unfriendly regimes rely upon their own oil and natural gas to fund their governments and militaries and to exercise power over neighboring countries. This is particularly true for much of Eastern Europe, which is almost fully dependent upon Russian natural gas, while the rest of Europe is tied to that market as well. According to a January 10, 2013 editorial in the Wall Street Journal, “in Europe, American LNG exports will be a welcome source of diversification to cut energy dependence on Russia.”

With respect to oil, both increased supplies and the decrease in the price resulting from America’s energy boom weigh heavily on certain oil producing regimes. According to The Economist’s editorial “Many winners, a few bad losers” published on October 25, 2014, “For those governments that have used the windfall revenues from higher prices to run aggressive

foreign policies... things could get uncomfortable. The most vulnerable are Venezuela, Iran and Russia.” According to The Economist, Iran requires oil prices of \$140 per barrel, Venezuela requires \$120 per barrel, and Russia too requires high prices to meet government budgets. The U.S. energy revolution has helped to drive prices well below those levels.

The energy renaissance has put the U.S. in a better geopolitical position than few could ever have imagined. Increased U.S. production alone is having a significant impact on the balance of global power. By opening up its borders to the free trade of oil and natural gas, the U.S. could have an even greater impact, and we would be responding directly and positively to the pleas of our allies. Exports of these commodities will not only serve our national security interests as described by General Dempsey, but they will also allow for greater production of oil and natural gas in the United States, spurring additional spending and job growth throughout the country. However, applications to export LNG linger in government bureaucracy, and crude oil exports are subject to a 1970s era ban that has long outlived any purpose it may have served. It is in the best interests of the nation to make the necessary decisions to expedite exports of both oil and natural gas. Fortunately, we have seen positive movement on the legislative front and leadership from the members of this committee to advance these critical free trade policies. But time is of the essence.

In conclusion, what is needed today are policy choices to increase, not decrease, energy production. Barriers to oil and natural gas production only contribute to volatile energy prices, slower economic growth, and lost American jobs. Our history is replete with short-term energy “fixes” and false promises of “silver bullets” to solve our nation’s energy problems. Today, we need to take positive steps to ensure that we will meet America’s energy needs in the decades ahead. These policy decisions should include a commitment to the following:

- Increase, not decrease energy production by promoting all sources.
- Encourage energy efficiency.
- Encourage investment in advanced energy technologies and long-term energy initiatives.

- Allow market forces to allocate products and adjust to changing conditions.
- Refrain from new taxes that make it more expensive to develop domestic supplies.
- Support participation in global energy markets.

Over the past 6 years, we have seen increasing U.S. oil and natural gas production drive economic growth and global energy security. We now need policy decisions to secure this path for the decades ahead. This hearing and many of the proposed bills are constructive steps forward.

Thank you again to the Chairman and to the Committee, and I look forward to your questions.

ⁱSee *Wall Street Journal*, A Gas Export Strategy, March 19, 2014.