BIPARTISAN POLICY CENTER

Written Testimony
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Chairman Whitfield, Ranking Member Rush, and members of the subcommittee, thank you for the opportunity to join in this critical assessment of the economic and policy architecture governing our nation's energy abundance. I appreciate the opportunity to share some specific thoughts on the Energy Diplomacy title and to broadly explore the opportunity to advance our economic, security, and environmental interests based on a foundation power and strength. America's energy resurgence is not an inevitable result of good fortune, but reflects a combination of natural resources, effective markets, largely coherent regulatory structures, and a culture of discovery and innovation. Sustaining this success demands that we modernize several aspects of our outdated governing framework and increase investment in key infrastructure and technological innovation.

My testimony can be summarized in three main points:

1) The greatest near-term opportunities lie in strengthening North American energy integration and collaboration. North American energy self-sufficiency is a realistic goal that must be vigorously pursued and not taken for granted.

2) Increased North American energy cooperation is a critical component of a larger effort to promote efficient markets, enhance North America's role in global energy trade, and project U.S. global interests.

3) We must seize the opportunity to translate the blessing of abundance into a long-term, sustainable energy strategy, and not allow strength to result in complacency.

Introduction

A decade ago, Congress secured broad bipartisan support in passing the Energy Policy Act of 2005. At the time, the majority of energy experts and advocates were resigned to an inexorable decline in domestic production, compounding growth in energy demand, and a resulting increase in dependence on foreign energy supplies. While there were multiple motivations for this legislation, the central theme in most discussions was confronting volatile natural gas and oil prices and the general sense of national energy insecurity. Today, Congress

is once again working towards bipartisan energy legislation, but the past several years have realized a dramatic reversal in our energy fortunes. We now face a new and unique challenge: How do we manage success and ensure that our newfound energy abundance provides the foundation for lasting economic, environmental and security benefits?

It is well understood that the United States is in the midst of an unprecedented resurgence in energy production. Domestic oil, natural gas, and renewable energy production have grown far beyond expectation while breakthroughs in end-use energy efficiency have slowed the growth in domestic demand and significantly improved our overall energy productivity. While most recent attention has focused on breakthroughs in domestic production, the gains in efficiency are equally unprecedented. When adjusted for economic growth and inflation, the United States has cut its energy needs by more than 50 percent since 1973, and this trend shows no sign of slowing.

But these striking developments are not limited to the United States. Our neighbors to the north and south are also in the midst of their own energy booms, and North American energy self-sufficiency is within reach. The United States, Canada and Mexico can secure substantial benefits from further integrating North American energy markets, but realizing this vision will require more than just sitting back and watching the oil and gas flow. Capitalizing on our energy abundance will require significant strategic investments in critical infrastructure and greater cooperation among all three nations. The provisions in this legislation to promote data quality and sharing, coordinated planning, and improved permitting and siting processes are essential to achieving the promise of North American energy self-sufficiency.

1. North American Energy Integration and Collaboration

North America has one again become an energy powerhouse and could remain a dominant force in global energy markets for decades. Since 2005, North American oil & natural gas production has increased by over 20 percent, while renewable energy production has risen nearly 40 percent.[1] In the United States, the 2014 growth in oil and other liquids production was the largest in U.S. history, and the fourth largest recorded for any country in at least the past 40 years.[2] Canada's proved reserves of oil rank third globally, and they are the world's fifth-largest producer of dry natural gas.[3]

With effective management, North American oil production is expected to grow by over one

[1] BP Energy Outlook 2035. February 2015. http://www.bp.com/content/dam/bp/pdf/Energy-economics/energy-outlook-2015/Energy_Outlook_2035_booklet.pdf

[2] BP Energy Outlook 2035. February 2015. http://www.bp.com/content/dam/bp/pdf/Energy-economics/energy-outlook-2015/Energy_Outlook_2035_booklet.pdf

[3] U.S. Energy Information Administration. Canada Country Analysis Brief. http://www.eia.gov/beta/international/country.cfm?iso=CAN

third by 2025. In fact, North American oil production accounts for nearly 60 percent of the projected increase in global oil production during this time period.[4] Projections are similar for natural gas. North American natural gas production increases 36 percent by 2025, and accounts for nearly one-third of the total increase in global natural gas production.[5]

While Mexico's oil and gas production has declined for years, the country recent energy sector reforms could bring a welcome change in this trend. For more than 60 years, Mexico's Constitution prohibited private sector entities from competing with Pemex, Mexico's national oil company, to develop oil and gas resources in Mexico. In 2014, President Peña Nieto signed into law an historic set of energy sector reforms that open the doors to private and foreign investment, and could reverse the declines in production. The U.S. Energy Information Administration (EIA) estimates Mexico has the fourth largest shale gas potential in the world. Many of the most productive oil and gas plays in the Eagle Ford shale in South Texas extend into Mexico, and significant shale reserves lie along Mexico's Gulf Coast.[6]

North American Energy Trade

In recent weeks, Congress has spent considerable time debating trade promotion authority with an eye toward expanding international trade both east and west. As we focus continued attention on the opportunities to strengthen relationships, global markets, and working conditions, we must not overlook the prospect of improved economic cooperation with our immediate neighbors. According to the Administration's Quadrennial Energy Review (QER) released several weeks ago, "In 2013, energy trade between the United States and Canada reached approximately $140 billion, and energy trade with Mexico exceeded $6.5 billion in 2012."[7]

North America is already a highly integrated energy market. There are currently more than 80 pipelines and 50 electric transmission lines operating at the border with Canada which is our largest source of oil imports. In 2014, the United States imported nearly 2.9 billion barrels of oil per day from Canada, accounting for nearly 40 percent of our total crude oil imports.[8] The U.S. and Canada's electric grids are also highly integrated, with the United States a net importer in the East, and a net exporter in the West. And for more than 50 years, the United States and

[4] BP Energy Outlook 2035. February 2015. http://www.bp.com/content/dam/bp/pdf/Energy-economics/energy-outlook-2015/Energy_Outlook_2035_booklet.pdf
[5] BP Energy Outlook 2035. February 2015. http://www.bp.com/content/dam/bp/pdf/Energy-economics/energy-outlook-2015/Energy_Outlook_2035_booklet.pdf
[6] Pete Domenici, Jason Grumet. "Mexico's Economy Key to Immigration Reform." Houston Chronicle. October 10, 2013. http://www.chron.com/opinion/outlook/article/Domenici-Grumet-Mexico-s-economy-key-to-4885280.php
[7] Quadrennial Energy Review: Energy Transmission, Storage, and Distribution Infrastructure. Washington, DC. April 2015.
[8] U.S. Energy Information Administration. U.S. Imports by Country of Origin. Washington, DC. April 29, 2015.

Canada have worked together to develop and operate the waters of the Columbia River for hydroelectricity generation (among other things) under the Columbia River Treaty.

Energy trade with Mexico has expanded rapidly in recent years, driven by U.S. shale gas production and the resulting low prices. In 2014, the United States exported nearly 750 billion cubic feet to Mexico via pipeline—an amount that has nearly tripled since 2005.[9] This trend is expected to continue. As the QER notes, "By 2016, EIA projects that the United States will be exporting more than 1 trillion cubic feet of natural gas to Mexico annually, and, by 2030, that amount is expected to almost double."[10]

Fostering North American Energy Cooperation

This legislation will build upon our existing collaboration with Canada and Mexico in several key ways.

1. Strengthening Diplomacy and Cooperation: While North America has a substantial resource base, there are many factors that have led to the successful development of these resources. These include clear regulatory structures, well-defined mineral rights, competitive markets that allow for the efficient flow of capital, and a highly-developed infrastructure and transportation system. The United States and Canada have a long history of cooperation on all of these issues, and the recent reforms in Mexico's energy sector now provide us the opportunity to expand these efforts across all of North America. The legislation will help move us to a truly integrated North American market by directing the Administration to develop a framework explicitly focused on improving North American energy security and promoting the efficient exploration, production, and regulation of North American energy resources.

   Increased collaboration between the U.S. and Mexico's energy sectors could not be more timely or welcome. By all accounts, Mexico's landmark energy reforms are proceeding quite well, and Mexico appears on track to meet its key milestones. In fact, less than two weeks ago, Pemex made its first sale of oil and gas infrastructure to a foreign investor—two U.S.-based investment funds, BlackRock and First Reserve. Pemex sold a 45 percent stake to these U.S. investors in a natural gas pipeline project that will transport shale gas from Texas to Mexico.

   It's hard to overstate the importance of energy production to the Mexican economy and the broader U.S. Mexico relationship. Even after years of decline, energy production remains a

[9] U.S. Energy Information Administration. Natural Gas Monthly. Washington, DC. April 30, 2015.
[10] Quadrennial Energy Review: Energy Transmission, Storage, and Distribution Infrastructure. Washington, DC. April 2015.

leading source of high-wage jobs in Mexico and funds over a third of all government activities. If modernization efforts succeed, energy production could be a significant driver of Mexican economic development and individual opportunity. The Bipartisan Policy Center (BPC) believes that our nation must reform its badly broken immigration system. While this hearing is not the appropriate forum to discuss the challenges and intricacies of securing our southern border and enhancing legal immigration, there is no question that improved economic opportunity in Mexico is an essential component of successful and lasting immigration reform.

2. Harmonizing Data and Analysis: Information is the lifeblood of markets. Markets rely on good data and objective analysis to make decisions, and EIA is the gold standard for energy data and analysis in the United States. The QER includes explicit recommendations for EIA to "[i]ncrease the integration of energy data among the United States, Canada, and Mexico" and "[u]ndertake comparative and joint energy system modeling, planning, and forecasting." While such efforts might seem obvious, the development of consistent, high-quality data and analysis across all three countries is a major undertaking and essential to achieving the benefits of North America's energy abundance. BPC believes this effort should be a central feature of the work of the Interagency Task Force proposed in this legislation.

3. Permitting for Cross-Border Infrastructure Projects: While our technology for producing energy has evolved dramatically in the past four decades, our permitting policies are antiquated and poorly matched to our rapidly evolving needs. Here in the United States, the permitting process for oil pipelines that cross international borders is governed by a series of executive orders that date back to 1968. The orders empower the U.S. Secretary of State to determine whether these pipelines would serve the U.S. national interest and, after considering the input of other executive departments, to issue presidential permits to approve them. A separate series of executive orders, dating from 1953, grants authority over border-crossing natural gas pipelines and electric transmission facilities to the Federal Energy Regulatory Commission and the U.S. Department of Energy, respectively. The fact that these executive orders do not specify any particular time line or standards for making the national interest determination have created a process ill-suited for the continent's changing energy landscape.

   Efforts to further harmonize and integrate North American energy markets will only succeed if we demonstrate to our neighbors that we are reliable partners, capable of making timely and efficient decisions. Unfortunately, our track record on the Keystone XL pipeline does not inspire this confidence. No matter what your view on the desired outcome, the nearly seven year-long, political fixation on this single project has crowded out the ability for far more important discussions about our nation's energy and climate

future and cast a pall of indecision over U.S. energy policy. While opponents of the pipeline cheer their victory in delaying the KXL permit, U.S. imports of Canadian crude oil derived from oil sands have doubled from 2005 to 2013, from roughly 0.6 million barrels per day to 1.2 million barrels per day—an increase of nearly the same as the planned capacity of the pipeline (0.83 million barrels per day)—albeit it through less efficient means. [11]

BPC commends the Committee's substantive effort to make the cross border permitting process more transparent and predictable for future projects. Establishing explicit criteria and a time line for project approvals will enable greater integration in North American energy markets. The resulting resiliency and flexibility will enhance our collective economies and energy security during times of both abundance and during crises and supply interruptions

BPC also commends the Committee's political judgment in crafting this provision to exempt the still-pending Keystone decision. It is time to have a broad-based, bipartisan energy debate that is explicitly "Beyond Keystone." It is encouraging to see the Committee working diligently to avoid a focus on symbolic disagreements in favor of an agenda that can win broad support and be signed into law.

2. Promoting Efficient Markets and Strengthening America's Global Posture

The opportunity to strengthen North American Energy cooperation is an important component of the architecture of abundance and must be understood in a global context. U.S. policy, both foreign and domestic, has operated under an assumption of energy scarcity for the past three decades. Today, the rules of U.S. diplomacy are being rewritten for a future less dependent on foreign oil, with significant implications for the country's strategic posture and relationships with allies, trading partners, and rivals.

Our strategic interests and prospects for energy trade extend well beyond North America. In 2010, Sabine Pass Liquefaction, LLC filed an application with the U.S. Department of Energy (DOE) to export liquefied natural gas (LNG) to countries with which the United States does not have a free trade agreement. Sabine Pass was the first in a wave of new plans to build liquefaction plants to export LNG. The approval of Sabine Pass in 2011 sparked a major debate about the prospects for substantially higher LNG exports from the United States. Congress, the Administration, industry, and stakeholders spent roughly two years analyzing and debating the potential impacts on domestic U.S. natural gas prices while the process for approving LNG export applications ground to a halt. In general, experts concluded that LNG exports were unlikely to have a significant impact on domestic prices, and DOE once again began approving

[11] Bipartisan Policy Center. "U.S. Imports of Canadian Oil Sands Have Doubled Since 2005." March 28. 2014. http://bipartisanpolicy.org/blog/us-imports-canadian-oil-sands-have-doubled-2005/

applications in 2013. Sabine Pass is expected to send its first shipments of LNG exports later this year.

Now attention has turned to the prospect of crude oil exports, and similar debates are taking place about the potential impact on gasoline prices. A key question for policymakers and voters is whether lifting restrictions on crude oil exports will meaningfully affect domestic gasoline prices. In short, the answer is no. Increased U.S. production in recent years has contributed to a far more resilient global market place that is reflected in lower global prices and greater resiliency against supply interruptions. While one cannot eliminate the possibility of minor, localized price impacts while domestic markets recalibrate, the price of gasoline in the United States is driven by the global price of oil. Adding a reliable supply of crude oil to the global market will exert downward pressure on prices and protect U.S. consumers from global supply disruptions.

The current restrictions on exporting crude oil are an anachronism. Forged in a bygone era of vulnerability, this policy is now inhibiting our ability to capitalize on America's energy strength. Export restrictions are a form of resource nationalism that undermines our nation's fundamental commitment to efficient markets and our ability to promote free and fair trade. Keeping U.S. resources and market power on the sidelines empowers our adversaries to use energy as a weapon, and diminishes our ability to pursue a myriad of policy and security interests. Lifting these market barriers will strengthen our domestic economy and protect consumers. Congress should move to lift these restrictions in a deliberate manner that is cognizant of the impact on those refiners that have come to rely on lower domestic crude prices.

3. Promoting Long Term Sustainability and Security

There is one broad critique of the abundance agenda that must be grappled with in order to secure broad-based support for effective national energy policy. The concern is that stable, low-cost supplies of oil and gas are undermining investment in the diverse array of energy technologies our nation and the world will require over the next century to meet growing global demand, protect our national security interests, and confront climate change.

This legitimate concern however leads to very different policy pathways—one approach that seeks to perpetuate weaknesses in our energy markets, and another that looks for opportunities to capitalize on our strengths. BPC believes that additional action is necessary to effectively address climate change, but rejects the idea that we should pursue a low-carbon future by intentionally undermining our resurgence in oil and gas production. Perpetuating inefficient markets and creating transportation and infrastructure bottlenecks in the hope of somehow reducing global reliance on fossil fuels is not an effective climate change strategy,

and if anything will result in increased global emissions. Instead, we should embrace our energy abundance and confront climate change with the strength of efficient markets and increased investment in innovative and non-carbon technologies.

As we work to reap the benefits of affordable oil and natural gas and reduced energy demand, we must acknowledge that our former energy insecurity created strong incentives for public and private investment and innovation. While production and efficiency gains are providing profound economic, security, and environmental benefits today, our future depends on accelerating development of a wide suite of technologies—from carbon capture and storage, to utility-scale solar, next-generation biofuels, advanced nuclear, energy storage, and an array of energy saving technologies.

The provision of safe, clean, affordable, and sustainable energy is, by virtually any standard, one of the foremost challenges we face. The United States has a historically unmatched record of successful energy RD&D. U.S. public and private RD&D investments have created the world's best natural gas turbines, the most sophisticated oil-drilling equipment, the world's most efficient solar cells, advanced glass and lighting, and much more. The costs of this RD&D are small compared with the benefits.

The history of unconventional gas technology development demonstrates the critical roles played by private and public resources in energy innovation. The federal government initially undertook R&D without being able to imagine the full scope of its applications. Many technologies developed in one area, ultimately proved essential in other domains. Tax credits for unconventional gas development in the early 1980s led private sector firms to pursue otherwise risky investments. This attracted new sources of capital and increased exploration and development activity, tripling production of unconventional gas from 1980 to 2002 and driving further technological innovations through learning-by-doing. Decades passed before the benefits of some technological advances were fully realized.

Today, we are reaping the benefits of these past investments, but we must not become complacent. Currently, the federal commitment to energy RD&D is less than one-half of 1 percent of the annual nationwide energy bill. This is insufficient to inspire the economic, security, and environmental options we will need in the future.

A variety of ideas have been proposed to encourage greater investment despite the current low-price environment. As our nation vigorously pursues the benefits of abundance agenda, we must be equally determined in conducting the research and creating the incentives necessary to develop and commercialize the next generation of energy technology. America's

hydrocarbon renaissance has given us the gift of time. The question before this Committee and the Congress is what we do with this time.

Conclusion

It is not a coincidence that the vast majority of energy innovations have occurred in the U.S. Our natural resource base is deep but not unique. What is unique is our commitment to the rule of law, the depth of financial markets, the quality of our research labs and universities, an economy that rewards for innovation, and the historic capacity of Congress to respond to changing global dynamics. Our nation has been blessed with a profound opportunity to work with our neighbors and trading partners to build a resilient and sustainable energy system that will enable shared and lasting prosperity. We must capitalize on this opportunity and build an architecture for abundance that grows our economy, enhances our security and confronts domestic and global environmental threats.

Thank you for the opportunity to testify. BPC looks forward to continuing to work with the Committee as you complete your Architecture of Abundance.