



BEFORE THE SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES

COMMITTEE ON NATURAL RESOURCES

**HEARING ON U.S.-MEXICO TRANSBOUNDARY HYDROCARBON
AGREEMENT AND STEPS NEEDED FOR IMPLEMENTATION**

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TESTIMONY OF DANIEL R SIMMONS

THE INSTITUTE FOR ENERGY RESEARCH

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Introduction

Discussion of the Transboundary Agreement requires some background on the relative energy positions of the countries of North America, and therefore, I will include today a discussion of the situation we find ourselves in. It is in fact a great situation, if government policies adjust to allow the benefits to flow. The United States and Mexico are energy rich countries, especially when the combined oil, natural gas, and coal endowments are considered together. There is no reason why North America's energy resources cannot meet the needs of our nations for generations to come, except government policies. That is why the Committee's focus on ensuring the Transboundary Agreement works to benefit all of our citizens is welcome.

Total recoverable oil in North America exceeds 1.7 trillion barrels. The total recoverable North American natural gas is approximately 4.2 quadrillion (4,244 trillion) cubic feet and North America has over 497 billion short tons of recoverable

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coal. For comparison's sake, the U.S. uses roughly 7 billion barrels of oil, 24 trillion cubic feet and 1 billion short tons of coal annually. North America is not limited by energy resources, but instead by access to these vast energy resources. Trade between the United States and Mexico only makes our nations stronger and raises our combined economic welfare.

Mexico is America's third largest trading partner¹ and has been one of the largest sources of oil exports to the United States.² Mexico is the largest recipient of U.S. gasoline exports³ and the second largest recipient of our natural gas exports.⁴

The energy trade between the United States and Mexico is growing, especially for America's finished petroleum and natural gas exports. Mexico's heavy oil production is falling, but that means more spare refining capacity on the Gulf Coast if Canadian oil sands can be transported to the Gulf Coast.

The energy and economic welfare of the United States and Mexico are intertwined by our shared geography, geology, and peoples. The Transboundary Hydrocarbon Agreement will help to tie our countries together and grow our economies. North America does not lack energy resources, but what we do lack, at times, is the necessary political will that could lead to greater economic growth and prosperity.

North American Energy Inventory

North America has vast energy resources and more discoveries continue to be made. The United States alone has the world's largest combined oil, natural gas, and coal resources,⁵ and both Canada and Mexico have large oil and natural gas resources. To better understand the North America's energy potential, The Institute for Energy Research compiled the North American Energy Inventory⁶ in which we catalogued the known oil, coal, and natural gas resources in Canada, the United States, and Mexico using government reports. In the report we found that:

- North America is blessed with enough energy supplies to promote and sustain economic growth for many generations. The government's own reports detail this, and Congress was advised of our energy wealth when the Congressional Research Service of the Library of Congress released a report showing that the United States' combined recoverable oil, natural gas, and coal endowment is the largest on Earth.
- The amount of oil that is technically recoverable in the United States is more than 1.4 trillion barrels, with the largest deposits located offshore, in portions of Alaska, and in shale in the Rocky Mountain West. When combined with resources from Canada and Mexico, total recoverable oil in North America exceeds 1.7 trillion barrels.
- That is more than the world has used since the first oil well was drilled over 150 years ago in Titusville, Pennsylvania. To put this in context, Saudi Arabia

has about 260 billion barrels of oil in proved reserves. For comparative purposes, the technically recoverable oil in North America could fuel the present needs in the United States of about seven billion barrels per year for around 250 years.

- Moreover, it is important to note that that “reserves” estimates are constantly in flux. For example, in 1980, the U.S. had oil reserves of roughly 30 billion barrels. Yet from 1980 through 2010, we produced over 77 billion barrels of oil. In other words, over the last 30 years, we produced over 150 percent of our proved reserves and still had over 20 billion barrels of oil reserves.
- Restrictions in the form of federal bans and leasing combined with declining offerings of lease acreage mean only about 2.2 percent of America’s offshore acreage is currently leased for production.
- Proved reserves of natural gas in the United States and throughout North America are enormous, and the total amount of recoverable natural gas is even more impressive. The EIA estimates that the United States has 304.6 trillion cubic feet of proved reserves of natural gas.⁷ The total amount of natural gas that is recoverable in North America is approximately 4.2 quadrillion (4,244 trillion) cubic feet.
- Given that U.S. consumption is currently [as of December 2011] about 24 trillion cubic feet per year, there is enough natural gas in North America to last the United States for over 175 years at current rates of consumption.
- Total supplies of natural gas in North America dwarf those of other countries. The United States, Canada, and Mexico have more technically recoverable natural gas resources than the combined total proved natural gas reserves found in Russia, Iran, Qatar, Saudi Arabia, and Turkmenistan.
- With respect to total recoverable resources, however, North America’s combined coal supplies are even more staggering. The United States, Canada, and Mexico have over 497 billion short tons of recoverable coal, or nearly three times as much as Russia, which has the world’s second largest reserves. North America’s recoverable coal resources are bigger than the five largest non-North American countries’ reserves combined (Russia, China, Australia, India, Ukraine).
- North American recoverable coal could provide enough electricity for the United States for about 500 years at current levels of consumption.
- While the United States and North America contain enormous energy wealth, U.S. policies have increasingly made exploration, development, production and consumption of that energy more difficult.

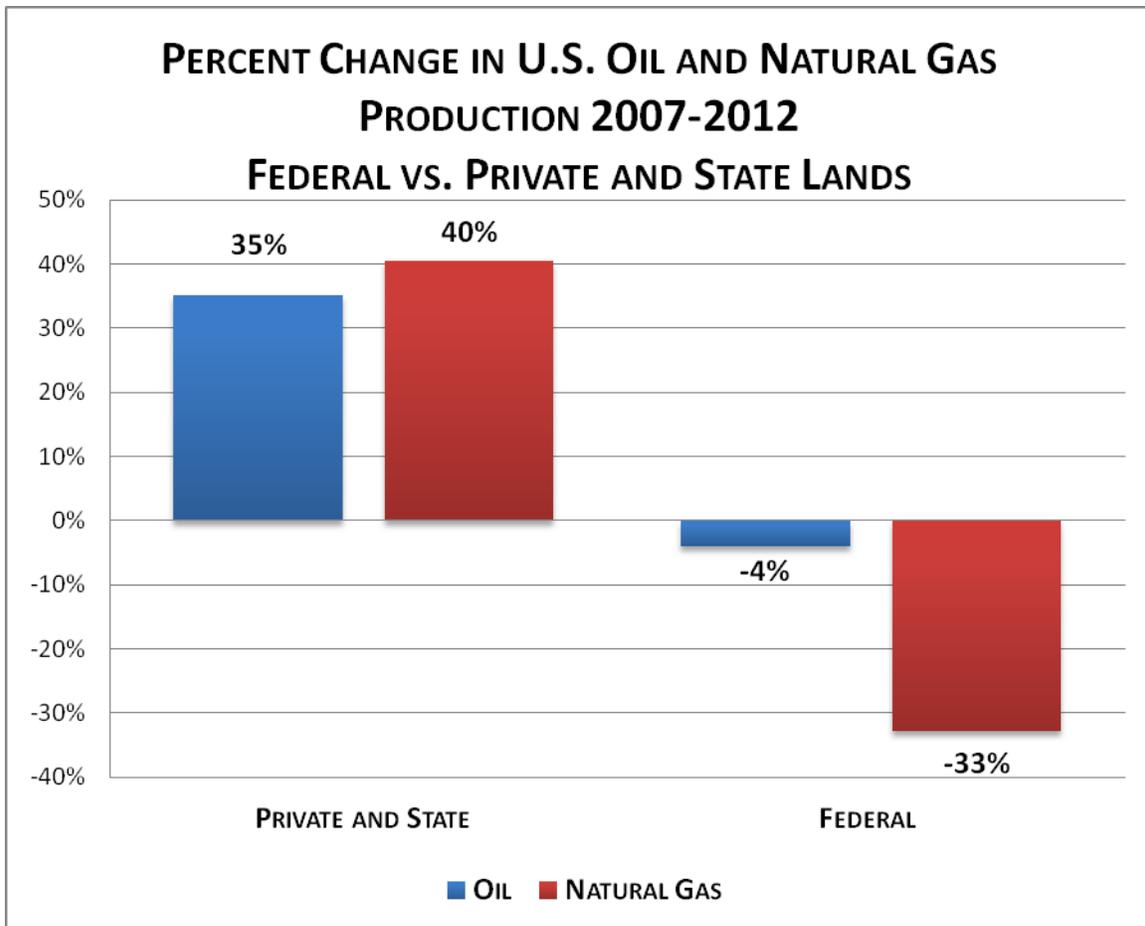
- Therefore, a scarcity of good policies, not a scarcity of energy, is responsible for U.S. energy insecurity.

U.S. Oil and Natural Gas Production Trends

The federal estate contains vast energy resources, but the federal government allows energy production on a very small percentage of taxpayer-owned federal lands. The Interior Department has leased just 2 percent of federal offshore areas and less than 6 percent of federal onshore lands for oil and gas development.⁸ This is particularly important because, while the entire U.S. including Alaska and Hawaii is 2.271 billion acres, the government owns mineral access to 2.4 billion acres because of the Outer Continental Shelf.

Despite a large endowment of oil and natural gas resources on federal lands, which include offshore resources, oil and natural gas production is declining on federal lands in the United States. According to a recent report from the Congressional Research Service, from 2007 through 2012, oil production fell 4 percent and natural gas production fell 33 percent on federal lands.⁹

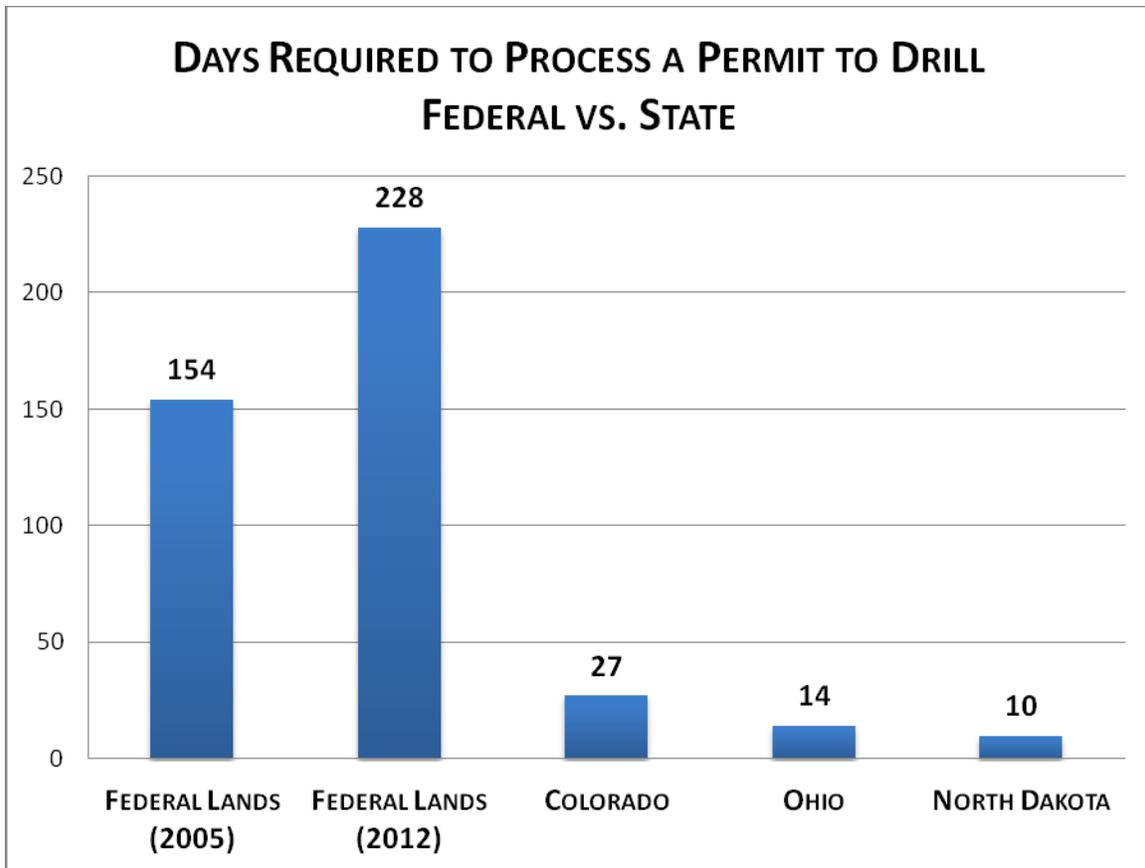
The falling production on federal lands is in stark contrast to the dramatically increasing production on private and state lands. Over the same time period, oil production grew by 35 percent and natural gas production grew by 40 percent.



The historic increase in oil and gas production from non-federal lands is the reason President Obama could say in his State of the Union address, “We produce more oil at home than we have in 15 years.” We produce more natural gas than ever before—and nearly everyone’s energy bill is lower because of it.”

The President is right, but the federal government has had nothing to do with that success. The reason that oil and natural gas is increasing on private and state lands while falling on federal lands is because of a major difference in policies. The states understand that it is possible to protect the environment and produce oil and natural gas, while red tape on federal lands continues to increase.

Consider one example of the time required to get a permit to drill on federal land versus some energy producing states. It takes an average of 228 days for the Bureau of Land Management to process a permit to drill, up from 154 days in 2005,¹⁰ but only 27 days for Colorado,¹¹ 14 days for Ohio,¹² and 10 days in North Dakota. It should come as no surprise why oil and natural gas production is rapidly increasing even while energy production on federal lands is declining. The federal government has vast energy resources, but the federal government’s current energy plans result in limiting energy production on federal lands.



The federal government's land use policies have reduced oil and natural gas production on federal lands because federal regulations make it much more difficult to work on federal lands. Instead of following the example of the states, the federal government continues to slow down energy production.

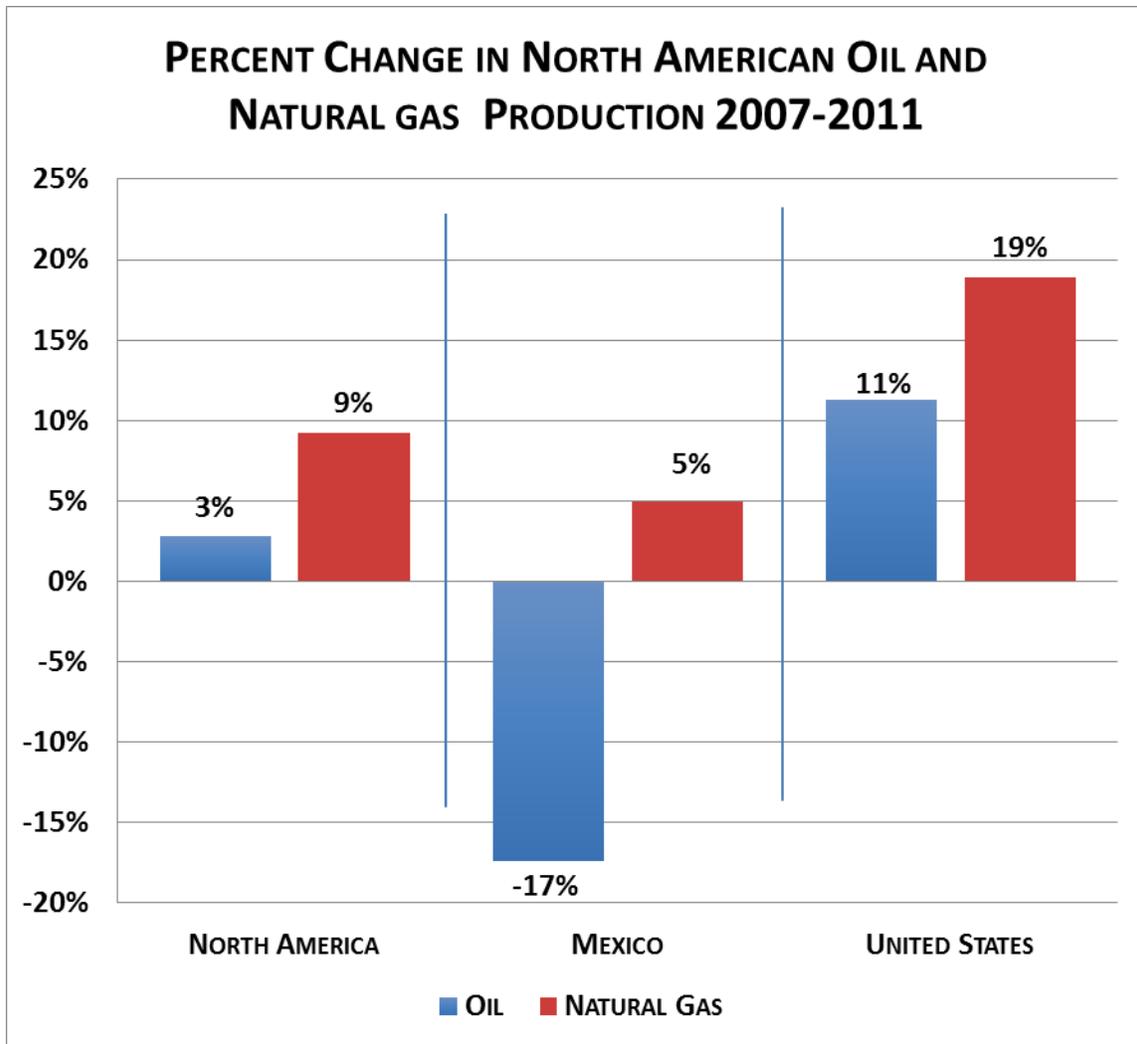
Some argue that the reason oil and natural production is increasing on federal lands is because shale resources are located on private lands.¹³ There are a few problems with this argument. First, it overlooks that the fact that it is more expensive to produce oil and natural gas from unconventional resources like shale. Because it is less expensive to produce oil and natural gas from conventional resources, undoubtedly conventional oil production would be occurring in the Pacific, the Atlantic, parts of the Gulf of Mexico, offshore Alaska, in ANWR, in the National Petroleum Reserve-Alaska if the federal government had allowed access to these conventional resources.

Second, oil and natural gas producers go to where there is access to the resources. With the federal government restricting access, oil production is increasingly occurring on private and state lands where access is permitted and delays allow investment dollars to be spent. This is why the shale revolution is occurring in the North Dakota, Texas, Arkansas, Louisiana, and Pennsylvania—and not on federal

lands or in states like California. The Monterey shale in California is larger than the Bakken and the Eagle Ford combined, but production is occurring elsewhere.

Third, with 982 billion barrels of recoverable oil shale, if R&D is successful, what matters is a path to commercial production because there is no guarantee the federal government will permit commercial leasing if R&D does indeed go well. Companies will not be willing to invest the hundreds of millions and billions of dollars necessary to make production economical if they are not able to reap the rewards from production. The government's approach is akin to inviting pharmaceutical companies to invent new drugs without a patenting system. Few believe companies would invest if there was no potential for a reward after all one's risk.

This example of potential resources in the United States shows that the regulatory environment is critical to exploration, and oil production increases can occur if people have access to resources. We know it can happen because it is happening.



Mexican Oil and Natural Gas Production Trends

In Mexico, oil and natural gas production is controlled by *Petróleos Mexicanos* or Pemex—the state-owned oil company. According to the Energy Information Administration, over the past 5 years, oil production in Mexico has fallen by 17 percent,¹⁴ while natural gas production has increased by 5 percent.¹⁵

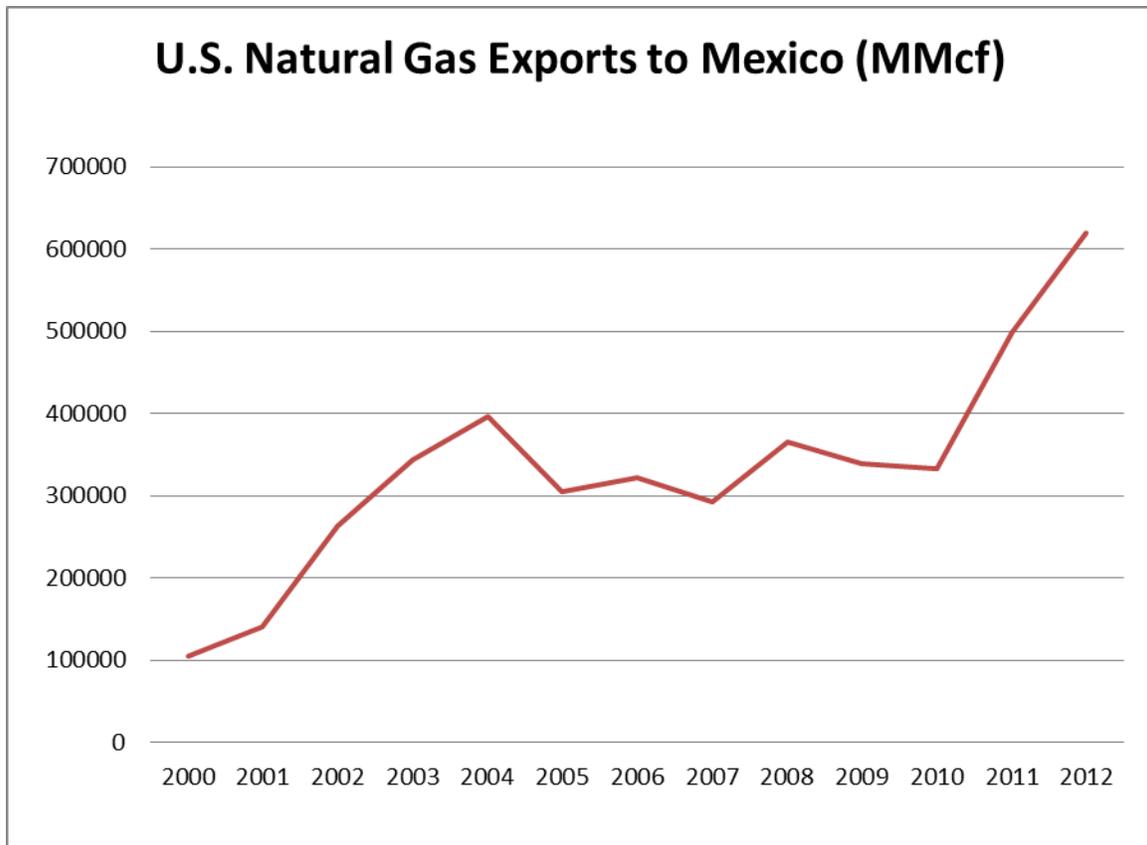
According to Mexican Finance Minister Luis Videgaray, there is no plan to privatize Pemex, but the company’s performance shows that it “cannot do everything itself.”¹⁶ Videgaray continued, explaining “private participation—particularly in those fields where there is opportunity because of nature and geology but where Pemex clearly doesn’t have either the capital or the expertise.”¹⁷

One example of where there is great potential, but where Pemex does not have expertise is in shale plays. The Eagle Ford shale extends into Mexico, but all of the production is on the U.S. side of the border.



In a way, Mexico has privatized their refining sector. Mexico exports crude oil to the United States and imports gasoline and refined products from Gulf coast refineries. Mexican oil imports to the United States peaked in 2006 and have since decreased by 30 percent.¹⁸ Despite the decrease in Mexican oil imports to the U.S., American gasoline exports have dramatically increased in recent years. From 2007 through 2011, U.S. gasoline exports to Mexico have more than tripled.¹⁹

Despite the rise in Mexico's natural gas production, Mexico is a net natural gas importer.²⁰ U.S. natural gas exports by pipeline have increased by 86 percent from 2010–2012.²¹



The Transboundary Hydrocarbons Agreement

The Gulf of Mexico is one of the most prolific hydrocarbon-producing areas for both the United States and Mexico. Oil production, especially in deepwater on the U.S. side of the border, has moved closer to the U.S.-Mexico maritime border in recent years. Until last year, however, there was no agreement on how to divide resources between the United States and Mexico for resources that straddle the border.

The Transboundary Hydrocarbon Agreement comes after decades of indecision between Mexico and the United States. This decision allows oil and natural gas production on 1.5 million acres in the Gulf of Mexico that was previously off-limits because of border issues.

The Transboundary Hydrocarbon Agreement itself will not lead to a revolution in hydrocarbon production for the United States and Mexico. This is not to say that the hydrocarbon resources are not important—they are. But more important than the oil and natural gas resources along the border is greater cooperation between the United States and Mexico and American companies and PEMEX.

Mexico has long been a leading oil producer, but as explained above, oil production in Mexico is falling. This is not from a lack of resources. Mexico has an estimated 10.5 billion barrels of proven oil reserves, but that amount could double when

unconventional and deepwater resources become proven reserves.²² And if the private sector is allowed to become more involved in Mexico, their resources could expand greatly, as our own have. The Transboundary Hydrocarbon Agreement is important for the production of some of these deepwater resources.

Not only can the Transboundary Hydrocarbon Agreement lead to greater production in the Gulf of Mexico, it will foster greater cooperation between Mexico and American companies. This is critical because the United States is the leader in accessing unconventional and deepwater resources. Working together, we can increase Mexico's oil production and reverse their oil production decline. This is especially true if U.S. hydraulic fracturing technologies are used to access Mexico's shale oil and gas resources. For example, one of America's most prolific shale fields, the Eagle Ford, extends into Mexico, but all of the activity is on the U.S. side of the border. This is similar to areas throughout the U.S. where production is skyrocketing on private and state lands but remaining dormant on federal government lands.

After the Obama administration did the important work of negotiating the Transboundary Hydrocarbon Agreement, they took over a year to decide whether the agreement was a treaty or an Executive Agreement. The United States needs secure energy supplies from its neighbors and allies. It should not take over a year for the administration to decide whether an agreement is a treaty or an executive agreement, and therefore it is good that the Committee is providing oversight and direction consistent with its enumerated powers under the Constitution.

Concerns about a Potential Conflict Between the Transboundary Hydrocarbon Agreement and Section 1504 of Dodd-Frank

While the Transboundary Hydrocarbon Agreement is a good agreement that will aid both the United States and Mexico, one potential problem is a conflict between Article 20 of the agreement and the Security and Exchange Commission's Rule 13q-1 regarding Resource Extraction Payments.

Article 20 states:

To the extent consistent with their national laws, the Parties shall maintain confidential, and obligate their Licensees to maintain confidential, all Confidential Data and other information obtained from the other Party or its Licensees in accordance with this Agreement.

Together with Rule 13q-1, requiring "resource extraction issuers" to disclose payments made to foreign governments, Article 20 can create an impossible situation for American companies operating on transboundary hydrocarbon resources. For example, Mexican confidentiality requirements may forbid the disclosure of the very information that Rule 13q-1 requires American companies²³

to disclose. This would lead to a situation where companies regulated by the SEC have, at very least, uncertainty about compliance with both Mexican and American disclosure laws. This uncertainty and potential disclosure conflict would place foreign state-owned oil companies, who are not regulated by the SEC, at a competitive advantage to the companies which operate in the United States are regulated by the SEC.

Because much of the transboundary area is deepwater, it would require multi-billion dollar investments to produce the hydrocarbon resources. Any legal uncertainty brought about by disclosure law could easily dissuade American companies from undertaking what is already an expensive decision, in turn reducing opportunities for new jobs for Americans.

Rule 13q-1 also creates a different type of competitive disadvantage for American companies operating in in the Gulf of Mexico Transboundary area. The rule would allow foreign state-owned oil companies with a competitive advantage to consider business-sensitive information about American companies' operations. If Mexico were to allow foreign-owned companies to extract oil along the deepwater transboundary area, there could very well be competition between U.S. private companies and foreign-state owned companies. Even though the deepwater technology was developed in the U.S. deepwater, the U.S. companies would be at a disadvantage. This is like playing poker but being required to show your cards to your fellow card-players.

Therefore, the authors of HR 1613 are to be commended for recognizing this and taking proper steps to isolate this unique agreement from the uncertainties surrounding 13q.

Conclusion

North America is an energy rich continent. Our energy issues are not issues of a lack of supply, but a lack of access to energy resources. The Transboundary Hydrocarbon Agreement is one way the federal government should be moving forward to grant more access to taxpayer-owned energy resources. The agreement is a good agreement and should expeditiously move forward, but it should not have taken more than a year for the Administration to submit Transboundary Hydrocarbon Agreement to Congress.

Affordable, reliable energy is critical for the welfare of all Americans and Mexicans. Hopefully our countries will work better together in the future to enhance our energy security and our economic welfare as well.

¹ U.S. Census, *Top Trading Partners—Total Trade, Exports, Imports*, <http://www.census.gov/foreign-trade/statistics/highlights/toppartners.html>.

² Energy Information Administration, *U.S. Total Crude Oil and Products Imports*, http://www.eia.gov/dnav/pet/pet_move_impcus_a2_nus_ep00_im0_mbbldpd_a.htm.

³ Energy Information Administration, *Finished Motor Gasoline Exports by Destination*, http://www.eia.gov/dnav/pet/pet_move_expc_a_epm0f_eex_mbbldpd_a.htm.

⁴ Energy Information Administration, *U.S. Natural Gas Exports by Country*, http://www.eia.gov/dnav/ng/ng_move_expc_s1_a.htm; Energy Information Administration, *U.S. Natural Gas Imports by Country*, http://www.eia.gov/dnav/ng/ng_move_impcc_s1_a.htm.

⁵ Gene Whitney et. al., *U.S. Fossil Fuel Resources: Terminology, Reporting, and Summary*, Congressional Research Service, Nov. 30, 2010, http://epw.senate.gov/public/index.cfm?FuseAction=Files.view&FileStore_id=04212e22-c1b3-41f2-b0ba-0da5eaead952.

⁶ Institute for Energy Research, *North American Energy Inventory*, Dec. 2011, <http://www.energyforamerica.org/wp-content/uploads/2012/06/Energy-InventoryFINAL.pdf>.

⁷ Energy Information Administration, *Natural Gas Reserves Summary as of Dec. 31*, http://www.eia.gov/dnav/ng/ng_enr_sum_a_EPG0_R11_BCF_a.htm.

⁸ See Bureau of Ocean Energy Management, Regulation and Enforcement, *Offshore Energy and Minerals Management*, <http://www.boemre.gov/offshore/>. According to the administration's website, the outer continental shelf is 1.76 billion acres (<http://www.boemre.gov/ld/PDFs/GreenBook-LeasingDocument.pdf> page 1) and only 38 million acres are leased (*Department of Interior, Oil and Gas Lease Utilization – Onshore and Offshore*, <http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&pageid=239255> page 4). That is a mere 2.16% of the entire Outer Continental Shelf. According to the Department of Interior, 38 million acres of onshore lands are leased for oil and natural gas production. See Table 3 in Department of Interior, *Oil and Gas Lease Utilization—Onshore and Offshore*, <http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&pageid=239255>. According to the Congressional Research Service, the federal government owns just over 650 million acres of land. See Appendix A. Congressional Research Service, *Major Federal Land Management Agencies: Management of Our Nation's Lands and Resources*, May 15, 1995, <http://www.ncseonline.org/nle/crsreports/natural/nrgen-3.cfm>. The federal government also controls an additional 58 million acres of federal mineral estate below privately owned surface estate. See Bureau of Land Management, *Split Estate*, http://www.blm.gov/pgdata/etc/medialib/blm/wo/MINERALS_REALTY_AND_RESOURCE_PROTECTION/_bmps.Par.98100.File.dat/SplitEstate08finalWeb.pdf.

⁹ Marc Humphries, *U.S. Crude Oil and Natural Gas Production in Federal and Non-Federal Areas*, Feb. 28, 2013, <http://www.instituteforenergyresearch.org/wp-content/uploads/2013/03/CRS-report-on-oil-and-nat-gas-on-federal-lands.pdf>.

¹⁰ Bureau of Land Management, *Average Application for Permit to Drill (APD) Approval Timeframes: FY2005–FY2012*, http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/statistics/apd_chart.html

¹¹ Dave Neslin to Colorado Oil and Gas Conservation Commission, Apr. 25, 2011, http://cogcc.state.co.us/announcements/CommissionLtr4_25_11.pdf.

¹² Ohio Division of Oil and Gas Resources Management, *2011 Ohio Oil and Gas Summary*, <http://ohiodnr.com/portals/11/publications/pdf/oilgas11.pdf>.

¹³ See e.g. The Checks and Balances Project, *Senators get it wrong on oil & gas production at Jewell nomination hearing; Industry is following the oil to nonfederal lands*, Mar. 8, 2013, <http://checksandbalancesproject.org/2013/03/08/senators-get-it-wrong-on-oil-gas-production-at-jewell-nomination-hearing-industry-is-following-the-oil-to-nonfederal-lands/>

¹⁴ Energy Information Administration, *International Energy Statistics: Petroleum*, <http://www.eia.gov/cfapps/ipdbproject/iedindex3.cfm?tid=5&pid=57&aid=1&cid=regions&syid=1980&eyid=2011&unit=TBPD>.

¹⁵ Energy Information Administration, *International Energy Statistics: Natural Gas*, <http://www.eia.gov/cfapps/ipdbproject/iedindex3.cfm?tid=3&pid=26&aid=1&cid=regions&syid=1980&eyid=2011&unit=BCF>.

¹⁶ Mary Antastasia O'Grady, *O'Grady: Will Mexico Welcome Wildcatters?*, Wall Street Journal, Feb. 24, 2013, http://professional.wsj.com/article/SB10001424127887324503204578320191174967104.html?mod=WSJ_Opinion_BelowLEFTSecond&mg=reno64-wsj%5C.

¹⁷ *Id.*

¹⁸ Energy Information Administration, *U.S. Imports by Country of Origin*, http://www.eia.gov/dnav/pet/pet_move_impcus_a2_nus_ep00_im0_mbbldpd_a.htm.

¹⁹ Energy Information Administration, *Finished Motor Gasoline Exports by Destination*, http://www.eia.gov/dnav/pet/pet_move_expc_a_epm0f_eex_mbbldpd_a.htm.

²⁰ See Mary Antastasia O'Grady, *O'Grady: Will Mexico Welcome Wildcatters?*, Wall Street Journal, Feb. 24, 2013, http://professional.wsj.com/article/SB10001424127887324503204578320191174967104.html?mod=WSJ_Opinion_BelowLEFTSecond&mg=reno64-wsj%5C.

²¹ Energy Information Administration, *U.S. Natural Gas Exports by Country*, http://www.eia.gov/dnav/ng/ng_move_expc_s1_a.htm.

²² Minority Staff Report, United States Senate Committee on Foreign Relations, *Oil, Mexico, and the Transboundary Agreement*, Dec. 21, 2012, <http://www.foreign.senate.gov/publications/download/oil-mexico-and-the-transboundary-agreement>.

²³ I'm using the term "American companies" as shorthand for companies regulated by the SEC.