ONE HUNDRED FIFTEENTH CONGRESS

Congress of the United States House of Representatives

COMMITTEE ON ENERGY AND COMMERCE 2125 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515-6115

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MEMORANDUM

December 11, 2017

To: Subcommittee on Energy Democratic Members and Staff

Fr: Committee on Energy and Commerce Democratic Staff

Re: Hearing on "The Impacts and Future of North American Energy Trade"

On <u>Wednesday</u>, <u>December 13</u>, <u>2017</u>, <u>at 10:15 a.m. in room 2322 of the Rayburn</u> <u>House Office Building</u>, the Subcommittee on Energy will hold a hearing on "The Impacts and Future of North American Energy Trade."

I. BACKGROUND

Energy trade between the U.S., Canada, and Mexico has been a significant factor in trilateral cooperation and policy development for North America. In addition to the energy commodities traded across North American borders; the U.S., Canada and Mexico rely on interconnected infrastructure that are regulated under divergent frameworks. As a result, there are fundamental gaps in policies, regulations and energy markets. The three countries rely heavily upon the development of various energy products and imports from this partnership. The Energy Information Administration (EIA) estimates that energy trade between the North American countries exceeded \$140 billion in 2015. During this time, the U.S. imported approximately \$100 billion and exported over \$40 billion in energy products with its neighboring countries. Figure 1 further depicts the economic landscape of North American energy commodity trading.

¹ Congressional Research Service, Cross Border Energy Trade in North America: Present and Potential (Jan. 2017) (R44747).

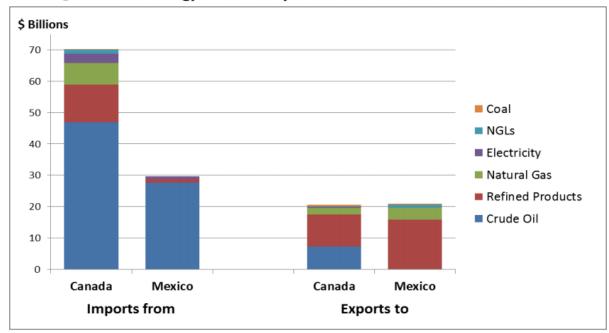


Figure 1. U.S. Energy Commodity Trade with Canada and Mexico—2015

Source: CRS analysis of data from the U.S. Energy Information Administration, U.S. Bureau of the Census, National Energy Board of Canada, and Mexico Secretería de Energía, December 2016.

Regarding crude oil, Canada is the leader in North American reserves, with approximately 173 billion barrels as of 2015. The U.S. and Mexico have significantly smaller reserves, with approximately 35 billion barrels and 10 billion barrels, respectively.² U.S. production of crude oil has expanded due to technological advancements, making it the largest producer of crude oil in North America. However, U.S. reserves are minimal in comparison. The U.S. continues to be heavily dependent on crude oil exported from Canada, with imports worth approximately \$47 billion.³ The U.S. is the continental leader and a net global exporter of refined petroleum products as a result of crude oil trade with Canada and Mexico.

The emergence of the U.S. as a dominant natural gas producer has shifted the continental and global trade dynamics of that commodity. North America accounts for 30 percent of global natural gas production, with the U.S. as the leading producer and growth projected through 2020.⁴ On the other hand, Canada and Mexico have experienced declining natural gas production. Nonetheless, the U.S. is a net importer of natural gas from Canada.⁵ The majority of natural gas exported from the U.S. goes to Mexico.

² *Id*.

³ U.S. Census Bureau, *Country and Product Trade Data* (www.census.gov/foreign-trade/statistics/country/index.html) (accessed Dec. 9, 2017).

⁴ See note 1.

⁵ *Id*.

The U.S. electricity sector is interconnected to both Canada and Mexico, even though the countries vary in their electricity generation mix. Limited cross-border interconnection and transmission infrastructure contribute to the difficulties of electricity trade among the three countries. Canada and the U.S. have the most integrated electric grid system, allowing for more trade to occur between the two countries. There is potential for increased renewable electricity trade across North America as each country continues to expand its renewable generation capacity. Canada already exports significant hydroelectric energy to the U.S., providing power to the Northeast and Midwest regions.⁶

In 2014, the three countries signed a memorandum of understanding on energy information cooperation which, among other things, created an institutional framework for sharing publicly available information among the participants.⁷ The North American Cooperation on Energy Information (NACEI) website provides additional information about the agreement and the countries' energy commodities and trading activities.

II. NORTH AMERICAN CLIMATE, CLEAN ENERGY, AND ENVIRONMENT PARTNERSHIP

On June 29, 2016, former President Barack Obama, along with Canadian Prime Minister Justin Trudeau, and Mexican President Enrique Peña Nieto, announced a North American Climate, Clean Energy, and Environment Partnership. The partnership outlined numerous goals and benchmarks that the three countries agreed to meet in an effort to reduce climate pollutants and advance clean energy. Specifically, the partnership established a goal of 50 percent clean power generation by 2025 and aimed to develop cross-border transmission projects and improve and align appliance and equipment efficiency standards. The partnership further outlined several climate change related goals, including the reduction of methane emissions attributable to the oil and gas sector by 40-45 percent by 2025, and commitments to reduce black carbon (soot) and hydrofluorocarbons (HFCs).⁸

With the election of President Donald Trump, the future of the U.S. role in this partnership is uncertain. While the U.S. has not formally withdrawn from the partnership, President Trump's withdrawal from the Paris Climate Agreement demonstrates that his administration is willing to walk away from multinational agreements on climate and clean energy issues.

With the U.S. disengaging from international action on climate and clean energy, states have stepped into a leadership role. California and Mexico, for example, maintain a

⁶ *Id*.

⁷ North American Cooperation on Energy Information, *About NACEI* (nacei.org/?src=home-b2#!/about) (accessed Dec. 9, 2017).

⁸ The White House, *North American Climate, Clean Energy and Environment Partnership* (https://obamawhitehouse.archives.gov/the-press-office/2016/06/29/north-american-climate-clean-energy-and-environment-partnership-action) (accessed Dec. 8, 2017).

memorandum of understanding on greenhouse gas pollution mitigation and clean vehicle support. California, Oregon and Washington have joined together with the province of British Columbia in the Pacific Coast Action Plan on Climate and Energy, in which all parties agree to lead national and international policy on climate change, transition the West Coast to clean modes of transportation and invest in clean energy and climate-resilient infrastructure.

III. ENERGY TRADE AND THE NORTH AMERICAN FREE TRADE AGREEMENT

On November 17, 1993, President Bill Clinton signed the North American Free Trade Agreement (NAFTA) Implementation Act into law, which went into effect the following year. NAFTA prohibits most import and export restrictions on energy commodities flowing between the U.S. and Canada. These restrictions do not apply, however, to Mexico due to Mexican constitutional provisions that were in existence when NAFTA was negotiated. U.S. and Canadian energy markets substantially integrated following NAFTA's establishment. Mexico recently began energy regulation reforms in the hydrocarbon and electricity sectors in order to open its energy markets and attract foreign investment. These changes represent an opportunity for increased harmonization between all three NAFTA partners.

President Trump's statements on NAFTA, both as candidate and president, have thrown the future of harmonization into flux. In May 2017, U.S. Trade Representative Robert Lighthizer notified Congress that the White House intends to renegotiate NAFTA. The administration has yet to make clear what its precise policy goals for such a renegotiation would be, and how they would impact trade between energy markets in the U.S., Canada and Mexico.

⁹ Center for American Progress, *North American Climate Cooperation at a Crossroads* (www.americanprogress.org/issues/green/news/2017/02/16/415340/north-american-climate-cooperation-at-a-crossroads/) (Accessed Dec. 8, 2017).

¹⁰ The Governments of California, British Columbia, Oregon and Washington, *Pacific Coast Action Plan on Climate and Energy* (Oct. 28, 2013) (pacificcoastcollaborative.org/Documents/Pacific%20Coast%20Climate%20Action%20Plan.pdf).

¹¹ North American Free Trade Agreement Implementation Act. P.L. 103-182.

¹² Department of Energy, *Quadrennial Energy Review Report: Energy Transmission*, *Storage, and Distribution Infrastructure – Chapter IV*, at 6-3 (Apr. 2015) (https://energy.gov/sites/prod/files/2015/08/f25/QER%20Chapter%20VI%20North%20America%20April%202015.pdf).

¹³ Resources for the Future, *North American Energy Integration: Assessing Oil and Gas Policy Issues Ahead of NAFTA Renegotiation* (Aug. 2017).

¹⁴ Office of the United States Trade Representative, *USTR: Trump Administration Announces Intent to Renegotiate the North American Free Trade Agreement* (May 2017) (https://ustr.gov/about-us/policy-offices/press-office/press-releases/2017/may/ustr-trump-administration-announces).

IV. WITNESSES

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