



December 11, 2017

TO: Members, Subcommittee on Energy

FROM: Committee Majority Staff

RE: Hearing entitled “The Impacts and Future of North American Energy Trade”

I. INTRODUCTION

The Subcommittee on Energy will hold a hearing on Wednesday, December 13, 2017, at 10:15 a.m. in 2322 Rayburn House Office Building. The hearing is entitled “The Impacts and Future of North American Energy Trade.” The hearing will examine the changing energy landscape and the potential for continued economic growth and job creation.

II. WITNESSES

- **Karen Harbert**, President and CEO, Global Energy Institute, U.S. Chamber of Commerce;
- **Chet Thompson**, President, American Fuel and Petrochemical Manufacturers;
- **Allen Burchett**, Global Head of Strategic Projects, ABB, on behalf of the National Association of Manufacturers; and,
- **Alan Krupnick**, Senior Fellow, Resources for the Future.

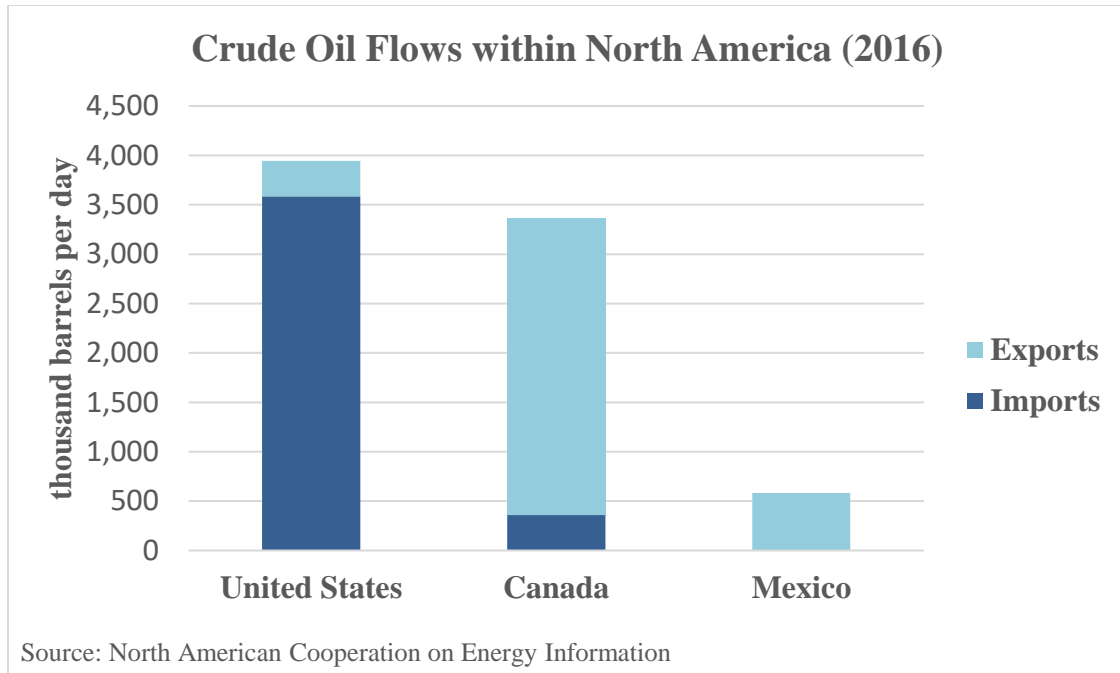
III. BACKGROUND

Trade of oil, gas, and electricity among the United States, Canada, and Mexico has resulted in one large, integrated North American market. According to the Congressional Research Service (CRS), the value of energy trade between the United States and its North American neighbors exceeded \$140 billion in 2015, with \$100 billion in U.S. energy imports and over \$40 billion in exports.¹ The expansion of cross-border energy transportation infrastructure – pipelines for oil and natural gas and transmission lines for electricity – is required to enable increased energy trade.

¹ CRS, Cross-Border Energy Trade in North America: Present and Potential (January 30, 2017).

Crude Oil

The North American energy landscape for crude oil has undergone remarkable changes over the past decade. The U.S. is now the leading producer of oil in the world, while reliance on imports is at a historic low.² Imports from Canada and Mexico now account for almost half of total U.S. imports and now exceed imports from all OPEC countries combined.³



Natural Gas

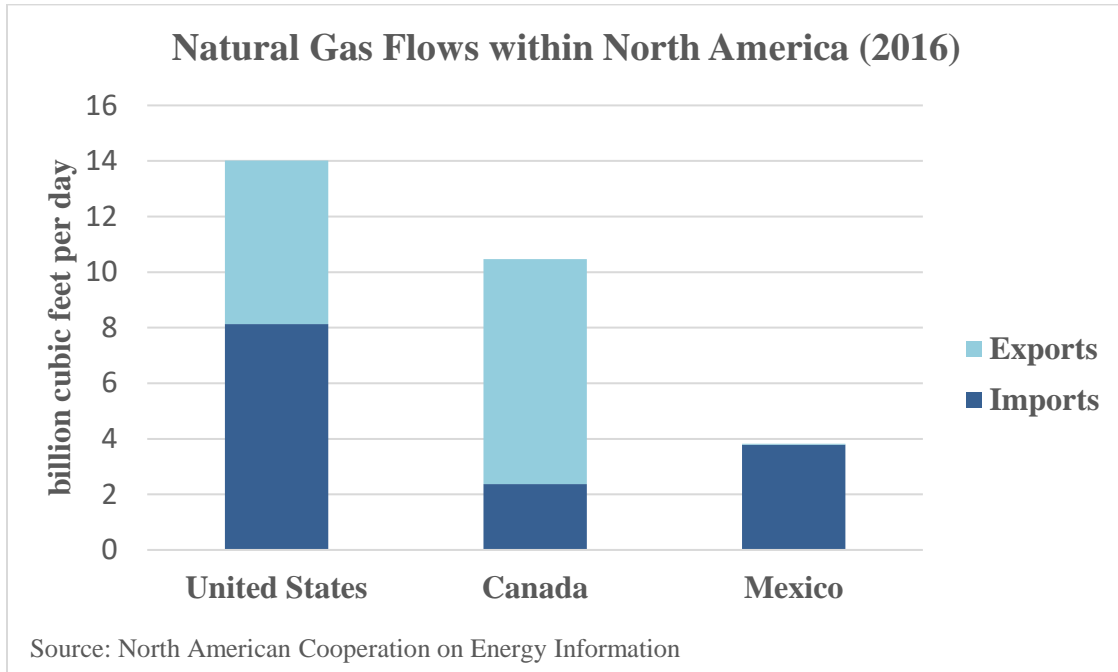
The U.S. is also the world's leading producer of natural gas.⁴ The U.S. produces 90 percent of the gas it consumes. The North American energy markets for natural gas are highly interconnected. U.S. pipeline capacity for natural gas exports to Mexico has rapidly expanded in recent years. U.S. natural gas exports to Mexico totaled nearly 2.9 billion cubic feet per day (Bcf/d) in 2015, or almost 60 percent of all U.S. natural gas exports, and are growing rapidly.⁵

² U.S. crude oil production averaged about 8.9 million barrels per day (MMbbl/d) in 2016; See, [U.S. Energy Information Administration, U.S. Field Production of Crude Oil](#); U.S. net imports of crude oil and petroleum products averaged 4.8MMbbl/d in 2016, more than a 60 percent decline from 2005. See, [U.S. Energy Information Administration, U.S. Net Imports of Crude Oil and Petroleum Products](#).

³ Imports from Canada and Mexico averaged about 3.8 Mmbbl/day in 2016. Total U.S. imports averaged 7.8 Mmbbl/day in 2016. See [U.S. Energy Information Administration, U.S. Imports by Country of Origin](#).

⁴ U.S. dry natural gas production grew from 18 trillion cubic feet (Tcf) in 2015 to 26.6 trillion Tcf in 2016. See, [U.S. Energy Information Administration, U.S. Dry Natural Gas Production](#)

⁵ See [U.S. Energy Information Administration, Today in Energy, February 9, 2017](#).

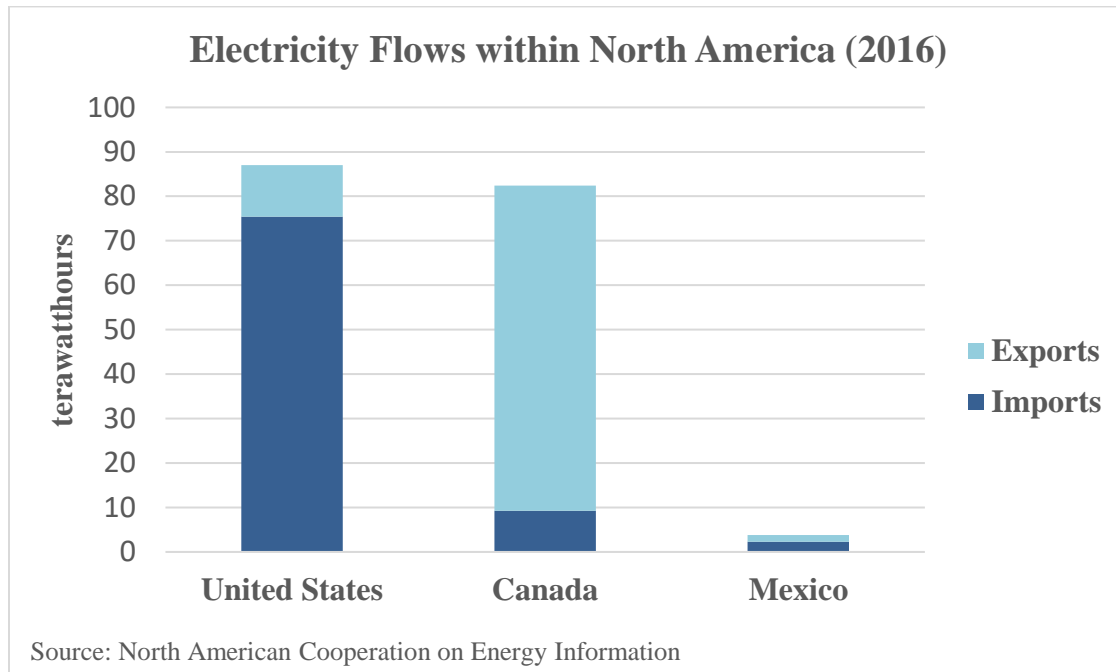


Electricity

Electricity transactions across the U.S. border have a long history, with the first interconnection of transmission lines between the U.S. and Canada in 1901, and with Mexico in 1905. Today, there are more than 30 major transmissions connections between the U.S. and Canada, and 11 electrical ties between the U.S. and Mexico. In terms of volume, in 2016, the United States imported 73.1 million megawatt hours (MWh) from Canada and 1.5 million MWh from Mexico, while exporting 9.3 million MWh and 2.3 million MWh to those countries, respectively.⁶ While the cross-border electricity trade with Canada and Mexico remains less than 2 percent of U.S. consumption according to the EIA, the physical interconnections between the grids help support electric system reliability on both sides of the border. If recent trends continue and additional cross-border transmission lines are developed, there will be increased electricity transactions, with the U.S. remaining a net importer of electricity over a ten-year horizon.⁷

⁶ See, [U.S. Energy Information Administration, Today in Energy, December 1, 2015.](#)

⁷ Net exports of electricity generation between the U.S., Mexico, and Canada. See [2015 Trilateral Energy Outlook Project](#) (Dec. 2015) at p. 17.



North American Energy Cooperation

Trilateral engagement on North American energy issues has accelerated in recent years. At the North American Energy Ministerial on November 14, 2017, U.S. Secretary of Energy Rick Perry, Canada’s Minister of Natural Resources James Gordon Carr, and Mexico’s Secretary of Energy Pedro Joaquin Coldwell launched the North American Cooperation on Energy Information website. The website consolidates energy-related data, maps, analyses, and references from the three countries in English, Spanish, and French. The goal of the initiative is to create an institutional framework for consultation and for sharing publicly available materials to improve energy information and energy outlooks for North America. Collaboration among the three countries has already improved data quality for some data series. The current areas of focus include: comparing, validating, and improving respective energy import and export information; sharing publicly available geospatial information related to energy infrastructure; exchanging views and information on projections of cross-border energy flows, and harmonizing terminology, concepts, and definitions of energy products.⁸

U.S.-Mexico-Canada Nuclear Cooperation Opportunities

In 2016, the Obama Administration announced that the U.S. and Mexico would enter into formal negotiations to enter into an agreement on the cooperation for peaceful use of nuclear technology, known as a “123 Agreement.” The completion of such an agreement would enable greater trade of civilian nuclear technology and services between United States’ industry and Mexico. Mexico currently has two operating nuclear power reactors and the Mexican government has considered opportunities to increase nuclear power usage. The United States

⁸ See Website of the North American Cooperation on Energy Information, available at: <http://nacei.org/#!/overview>

and Canada have a “123 Agreement” in place and are active partners in civil nuclear trade. Currently, several U.S. companies seeking to develop advanced nuclear technologies are in discussions with the Canadian Nuclear Safety Commission to gain regulatory approval for the new nuclear reactor designs.

Trade Trends Since NAFTA

The North American Free Trade Agreement (NAFTA) among the U.S., Canada, and Mexico, entered into force on January 1, 1994. U.S. trade with NAFTA partners has more than tripled since the agreement took effect, increasing more rapidly than trade with the rest of the world. Between 1993 and 2016, according to trade data reported by the U.S. International Trade Commission (ITC), U.S. trade with Mexico increased by 544 percent. In comparison, trade with Canada went up by 158 percent. In 2016, Canada was the leading market for U.S. exports, while Mexico ranked second. The two countries accounted for 34 percent of total U.S. exports in 2016. In imports, Canada and Mexico ranked second and third, respectively, as suppliers of U.S. imports in 2016.⁹

NAFTA Renegotiation

On May 18, 2017, the Trump Administration sent a 90-day notification to Congress of its intent to begin talks with Canada and Mexico to renegotiate NAFTA, as required by the 2015 Trade Promotion Authority. Negotiations began on August 16, 2017. At the conclusion of the fifth round of NAFTA renegotiations in November, U.S. Trade Representative Robert Lighthizer issued a statement expressing concern about the lack of headway and the desire to make meaningful process before the end of the year. Negotiators are holding intersessional meetings in Washington, D.C. throughout mid-December in advance of the sixth round of negotiations, which are scheduled to be held from January 23-28, 2018, in Montreal, Canada.

IV. STAFF CONTACTS

If you have any questions regarding this hearing, please contact Brandon Mooney, AT Johnston, or Mary Martin of the Committee staff at (202) 225-2927.

⁹ See CRS, North American Free Trade Agreement (August 25, 2017).