North American energy integration poised for rapid transformation

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Integrated energy markets throughout North America, including Mexico, might witness a rapid transformation, mainly due to the unconventional hydrocarbon revolution taking place in the United States, according to a new paper from the Mexico Center at Rice University's Baker Institute for Public Policy.

The paper explores the economic and geopolitical implications of this revolution and the possibilities for policy coordination in the region.

"Continental Energy Integration in North America: The Emergence of Nonconventional Fuels and the Restructuring of Integrative Trends" describes how the continental integration of energy markets in North America features the U.S. as a major net importer of oil and gas and Canada as the strategic partner on both fuels. Mexico also plays a key role as a net provider of crude oil to the U.S., and the country offers a growing market for U.S. oil products and gas surpluses from Texas and the refinery cluster along the Gulf of Mexico.

The paper was authored by Isidro Morales, nonresident scholar in the Mexico Center, a senior professor and researcher at the School of Government and Public Transformation at the Monterrey Institute of Technology and Higher Education, Santa Fe campus, and editor-in-chief of the journal Latin American Policy. The paper is part of a Mexico Center research project examining the rule of law in Mexico and the challenges it poses to implementing the country's energy reform. The project's findings are compiled in a Spanish-language book and will be posted on the Baker Institute's website in English.

Mexico's recent energy reform, which openly allows private participation in the industry, has the potential to boost its oil and gas output, including nonconventional fuels. As for electricity, the three countries are interconnected and feature policy coordination in terms of standards convergence and reliability cooperation, Morales said.

"This study argues that integrated energy markets in the region might witness a rapid transformation in the foreseeable future, mainly due to the nonconventional hydrocarbon revolution taking place in the United States, which likely will result in a reduction of U.S. oil imports from its North American partners—though the pace of that decline is not

clear—and the region's emergence as a global gas exporter in the span of a few years," Morales wrote.

Though North American countries have traditionally been major world hydrocarbon producers and consumers, their positioning in world markets has changed rapidly in the last 10 to 15 years, Morales said. The region is emerging as a major reservoir and producer of nonconventional fossil fuels—oil sands, oil and shale or tight gas. While overall proven oil reserves of the region amounted to 100 billion barrels in 1998, that figure more than doubled to 232.5 billion barrels in 2014, accounting for 14 percent of world reserves. This rapid increase was due mainly to the incorporation of Canadian oil sands in Alberta and along the Western Canada Sedimentary Basin at the end of the 1990s and, more recently, tight oil resources from the U.S.

"The pace of this major transformation will depend on the way the hydrocarbons industry in the three countries reacts and adapts to a midterm scenario of weak international prices," Morales wrote. "Market, technological and geological fundamentals will continue to drive the profile of North America's cross-border markets, and growing opportunities for policy coordination may emerge, similar to what already happens in electricity interconnections. Such policy cooperation could occur in the areas of infrastructure and security coordination, efficiency standards and climate-change mitigation."

More information: "Continental Energy Integration in North America: The Emergence of Nonconventional Fuels and the Restructuring of Integrative Trends": www.bakerinstitute.org/researc … ation-north-america/

Provided by Rice University