

A Newsletter Highlighting KBH Center Initiatives in Mexico, Argentina, and Chile

Latin America is experiencing vigorous energy development. The region has seen a doubling in its primary energy demand in the last 40 years, and significant energy reserves have recently been discovered in Argentina, Brazil, Colombia, and Mexico. Mexico and Argentina have enacted new laws designed to attract private investment in the energy sector, expand supplies, lower prices for consumers, and protect environmental resources. Because of Texas' proximity to and the University's deep ties in Latin America, the Kay Bailey Hutchison Center for Energy, Law, and Business is well-positioned to contribute to the dialogue pertaining to the region's energy sector. We have embarked on a series of projects designed to explore the legal, business, and policy issues critical to the industry and the region and develop collaborative educational opportunities.

Mexico: An Energy Revolution

In December 2013, the Mexican government approved constitutional amendments aimed at reforming the country's energy sector. The reforms open up the oil and gas and electricity sectors, allowing private sector participation in activities previously considered the exclusive responsibility of the Mexican State. Secondary laws were passed in August 2014 that, among other things, allow PEMEX (the Mexican

state-owned oil company) to partner with international companies and private-sector entities to explore for and extract oil and gas.

The Mexican government hopes the reforms will boost investment in the country and reverse the historic decline in oil and gas production. Nevertheless, some significant challenges face the Mexican State. These include low oil and gas prices, lack of adequate financing for government agencies to implement the reforms, security issues along the U.S.-Mexico border, and the need for a level playing field for both domestic and foreign operators.

KBH Center Initiatives in Mexico

The KBH Center has organized a series of conferences, distinguished lectures, and symposia on aspects of Mexican Energy Reform that were designed to explore



Former Texas RRC Chairman Barry Smitherman talks about diversifying the energy mix in a competitive landscape in Mexico.

the key issues facing the energy sector:

- February 2015:** Symposium on the Geopolitics of Oil and Gas in the Americas. Speakers included: Sergio Alcocer (Mexican Undersecretary for North American Affairs), the Honorable Robert Jordan (former U.S. Ambassador to Saudi Arabia), Duncan Wood (Director, Wilson Center's Mexico Institute), and the Honorable Mel Martinez (former U.S. Senator).

- February 2016:** Distinguished Lectures by the Honorable Carlos González Gutiérrez (Consul General of Mexico in Austin) and Max Yzaguirre (former chair of the PUC of Texas and former president of Hunt Mexico, Inc.).



Major Mexico oil and gas fields. Source: Federal Reserve Bank of Dallas.

•**March 2016:** Symposium in Mexico on Efficient Regulation of Energy Markets. Speakers included: Ignacio Navarro Zermeño (Commissioner, Mexican Anti-trust Commission (COFECE)), César Hernández Ochoa (Undersecretary for Electricity, Mexican Ministry of Energy (SENER)), Ryan Sitton (Commissioner, Texas RRC), and Barry Smitherman (former Chairman, Texas RRC and PUC of Texas). Cosponsored by the Instituto Tecnológico Autónomo de México (ITAM), the Alianza por la Competencia, Zumma rg + c, and the Wilson Center's Mexico Institute. The symposium was held at the Energy Regulatory Commission (CRE) in Mexico City.



Map of Vaca Muerta. Source: Berkeley Energy & Resources Collaborative.

The KBH Center's faculty also delivered speeches and edited peer-reviewed articles related to the energy sector in Mexico.

•**March 2016:** Professor Owen Anderson, the Center's Distinguished Oil and Gas Scholar, gave a presentation on the past, present, and future of petroleum development in Mexico at a symposium at the University of New Mexico Law School.

•**April 2016:** Anderson served as the editor for an *Oil, Gas & Energy Law Intelligence Journal* Special Issue on the Mexican energy sector and the transition that is currently taking place.

•**May 2016:** Anderson gave keynote speeches on Mexican Energy Reform in Beijing and Shanghai.

•**June 2016:** Professor Melinda Taylor, the Center's Executive Director, moderated a panel on clean energy incentives and the energy transition law at Kinetic's 2nd Annual Electricity Reform in Mexico Conference, which was held in Houston.

Argentina: On the Hunt for Tight Oil and Shale Gas in Vaca Muerta

Argentina's Vaca Muerta shale formation is a vitally attractive asset for international investors. According to the U.S. Geological Service, Argentina's shale deposits are among the world's largest, on par with those of the U.S. and China. Vaca Muerta is home to most of Argentina's 27 Bbbl of unconventional oil and 23 Tcm (802 Tcf) of

unconventional natural gas.

Experts agree that Argentina has the potential to become a world-class oil and gas producer. With a new political administration encouraging an open and market-friendly environment, coupled with the 2014 hydrocarbon law that contained a series of reforms designed to attract private investment and technology, there is new momentum for development of Argentina's unconventional hydrocarbon resources. Production from Vaca Muerta is expected to double by 2018.

KBH Center Initiatives in Argentina

In 2015-16, the KBH Center and the UT Jackson School of Geosciences organized a series of seminars on energy issues for three different Argentine delegations of government officials and industry representatives. The seminars were designed to facilitate the exchange of technical, legal, and business information between experts from Texas and Argentina.

•**June 2015:** This seminar focused principally on hydraulic fracturing. It included, among others, the energy minister of Neuquén Province and the CEO of Southern Cone



One of three Argentine delegations that visited UT in 2015-2016.

General Electric. The group heard presentations from UT faculty, the Texas Railroad Commission, the Texas General Land Office, and the Texas Commission on Environmental Quality (TCEQ).

•August 2015 and May 2016: These seminars centered mainly on the shale revolution in Texas. They included, in addition to high-government officials from Neuquén Province, representatives from ExxonMobil Argentina, Schlumberger Argentina S.A., and Shell Argentina CAPSA. The groups heard presentations from UT faculty, environmental lawyers from Texas firms, and the TCEQ.

Chile: Winds of Change

Few countries have as much renewable energy potential as Chile. Chile’s Atacama Desert is considered the world’s best solar resource, and strong wind, geothermal, and hydropower resources are also abundant. As a result of this potential and because Chile has limited fossil fuel resources, Chilean policymakers have committed to supporting clean energy investment and energy efficiency. In the meantime, Chile continues to import almost all of the oil and oil products used in the country, primarily from Brazil, Argentina, Colombia, and Ecuador.

Despite the abundance of renewable sources of energy, future growth in renewables may be limited by inadequate transmission capacity, particularly in remote areas. All transmission infrastructure in the country is privately owned, and the government has found it difficult to incentivize new development.

KBH Center Initiatives in Chile

In June 2014, the KBH Center convened a two-day conference in Santiago, Chile, that focused on emerging trends in the use of international arbitration to resolve energy disputes throughout Latin



Solar Panels in Chile’s Atacama Desert. Source: OPIC.

America. It was the first conference on the topic held in Santiago. Highlights from the conference included:

- Opening remarks by the Chilean Undersecretary of Justice.
- Six panels of experts from energy companies, law firms, and universities discussed critical issues related to energy and arbitration, from investor-state disputes and the jurisdiction of arbitrators to the importance of human rights and environmental considerations.
- Approximately 150 lawyers, students, business people, and academics from Argentina, Bolivia, Chile, Peru, and the U.S. attended the conference.

Global Horizontal Irradiation (GHI)
Chile Mainlands



Chilean solar potential. Source: SolargIS.

Looking Ahead

The KBH Center is working with government agencies in Mexico, academics at several universities, and industry leaders to develop training programs for regulators and industry. In addition, the Center is partnering with academics in Mexico on research projects related to cross-boundary transmission of electricity and pipelines and water issues. We are reaching out to students in Mexico who are interested in studying at The University of Texas, either in the law school or McCombs School of Business. We are confident that all of these efforts will result in a rich exchange of ideas and deepening ties between The University of Texas and Mexico.

For more information, visit us at kbhenergycenter.utexas.edu

KBH Center for Energy, Law, and Business

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