Mexican Energy Reform: Prospects and Challenges

On Thursday, April 17, the Columbia Center on Global Energy Policy hosted a lecture and discussion on Mexico's energy reform featuring Center Fellow and former Pemex CEO Adrian Lajous, who provided an analysis of the ambitious opening up of the nation's energy sector to foreign investment and the end of Pemex's 75-year state oil monopoly.

Mexico's constitution was amended on December 21, 2013 in a bid to overhaul its stagnating energy sector. The amendments were aimed at creating competition in the energy sector through the introduction of private investment in both the hydrocarbon sector in the upstream, midstream and downstream as well as the generation, transmission and distribution of power.

At the same time, the amendments seek to maintain state ownership and control of subsoil resource and modernize the state of energy companies. They will reduce the direct intervention of government in these sectors and replace it with indirect intervention through regulation. Lajous anticipates there will be a limited sell off of both PEMEX and CFE assets.

WHY REFORM?

According to Lajous, several drivers culminated in Mexican President *Enrique Peña Nieto*'s push for reform. Mexico's economy has struggled since 1980, with the average rate of growth over the past 30 years has been 2.4 percent, compared to 6.4 percent in the previous 30-year period. At the same time, there has been a considerable underinvestment in public goods due to insufficient tax collection. The financial weakness of the state has hurt the energy sector by increasing the government's reliance on energy income for funds. At the same time, oil production and exports are in decline, natural gas output is stagnant and fuel imports are on the rise. In Mexico's electricity sector, uncompetitive tariffs have burdened industry.

The history of Mexico's oil industry has been dominated by the life cycle of giant and supergiant fields, all of which are either past peak production or well into their decline. Oil output has fallen by 25 percent since 2004. Lajous said that the likelihood of finding another such giant to raise production is small, and that the best case scenario right now is that output remains flat over the next four to five years, even with reform. While investment will likely come, it will take time to translate into higher production, Lajous said. This makes carrying out major reforms a difficult proposition for politicians. It would come at a high political cost but not produce benefits quickly.

Over the last few years Mexican exports to the United States have dropped due to rising U.S. production, forcing exporters such as Mexico to look to Asia for new markets. Mexico is also becoming increasingly dependent on U.S. refined product and natural gas supplies. In western Mexico, pipeline constraints have limited the availability of cheap U.S. gas, and the region has increased imports of LNG at Japan prices, roughly four times those at Henry Hub. This is significant because a large portion of Mexico's natural gas consumption is in the electricity sector – with industry, one of the Mexican economy's strengths, comprising a large share of that electricity demand.

Electricity is generated, transmitted, and distributed by a state-owned monopoly, The Comisión Federal de Electricidad (CFE), and the Mexican electricity market is subject to cross-subsidization and substantial losses to the system, especially through theft. Electricity costs in Mexico are relatively high, particularly compared to the US. The government will also need to revise its tariff design, which Lajous said could be complicated by mid-term elections.

DIFFICULT OVERHAUL

The constitutional reforms enacted in December are only the first step of the massive process needed to overhaul Mexico's energy sector and culture. Many details of the oil reforms, especially in the downstream in the midstream, have not yet been worked out, and overall the deadlines are tight, Lajous said. A secondary package has yet to be sent to Congress, and whether this can be done before the current period of the federal legislature ends in late April is uncertain.

The structure and fabric of Pemex and CFE must change – from being agencies of the government to "state productive companies" which can compete with private companies. This is a big task for monopolies unaccustomed to competition. New government entities must be created, including a National Safety and Environmental Protection Agency and the Mexican oil Stability and Development Fund, a public trust in the Central Bank. The Energy Regulatory Commission and National Hydrocarbon Commission must also be strengthened, according to Lajous.

The first step in the restructuring of Pemex will be asset allocation. This initial phase of oil and gas asset allocation has been termed "Round Zero." The process will take six months (ending in September 2014) and is not open to the public. While areas currently under production will go to Pemex, the issue of exploration areas where Pemex has invested or made discoveries will likely be more complicated and cause tension with the government. Pemex is asking for 82 percent of onshore prospective resources, 63 percent in shallow water, 29 percent in deepwater, and 15 percent in shale.

Pemex will remain the dominant player in the Mexican oil sector as the only protection of the state against full denationalization of resources. But it must become competitive if it is to maintain that position, and it will have to compete for acreage in subsequent bidding rounds, Lajous said.

Electricity sector reform will be enacted in several ways ranging from more private sector engagement in generation to a permitting regime for private power generation. CFE will operate as a state company, maintaining planning and control of the national electricity system, including transmission and distribution. Still, Lajous said that the lack of details on the overhaul of the power sector make it difficult to imagine what it will look like in five years.

Lajous argues that energy reform may not directly contribute much economic growth in the short-term, though there could be some indirect benefits, mainly by supplying fuel, gas and electricity at competitive prices. The growth of the manufacturing industry and overall productivity are the most important metrics of success in Lajous's estimation. Most of Mexico's exports are manufactured goods – with the automobile industry alone exporting nearly twice as much as the energy industry. These figures differentiate Mexico from other resource-rich developing nations that are wholly reliant on energy for economic growth.

Lajous will be producing research papers for the Center over the course of the next year focused on both upstream and downstream oil issues triggered by the energy reform program launched by the Mexican government, in the context of rapidly changing North American energy flows.