

THE NEW NATURAL GAS AGE IN MEXICO

DESPITE PUBLIC STATEMENTS FROM THE US ABOUT BECOMING MORE PROTECTIONIST, PARTICULARLY WITH RESPECT TO ITS NEIGHBOURS TO THE SOUTH, MEXICO IS ON THE CUSP OF BECOMING ONE OF THE UNITED STATES' LARGEST NATURAL GAS EXPORT MARKETS. BY **DINO BARAJAS** AND **STEVEN P OTILLAR**, PARTNERS, **AKIN GUMP**.

In the short span of a couple of years, Mexico has transformed itself into one of Latin America's most liberal and open environments for foreign investors in the energy sector. After more than 75 years of a government monopoly over the hydrocarbon market, in 2013 Mexico underwent a constitutional sea change and dramatically opened up the energy sector to private investment throughout the hydrocarbon value chain.

In the years following the constitutional reform, Mexico has held wholesale power auctions, established several new regulatory agencies, stripped Petroleros Mexicanos (Pemex) of most of its midstream assets and monopoly powers, and implemented several bidding rounds for oil and gas blocks. This transformation has provided Mexico with a unique opportunity to leverage private investment to rebuild and develop energy infrastructure, and allow it to redirect its own public investment dollars into higher-end, and perhaps more profitable, endeavours.

Success in Mexico depends greatly on understanding the larger spectrum of project development in emerging markets. A successful project development process encompasses corporate governance nuances, energy, environmental and real estate regulations and subtle, unspoken business morays.

Since the investment gold rush following implementation of the North American Free Trade Agreement (NAFTA), the last 30 years is littered with cautionary tales of large multinationals storming eagerly into the Mexican business environment and spending millions of dollars, euros and yen, only to realise that their business strategy was flawed since the beginning because of early missteps.

New market entrants will do well to either staff up with in-house development teams who have a successful track record of actual project development (as opposed to market "development/marketing efforts") and engage seasoned legal and financial advisers to assist in structuring efficient investment tax strategies, which bolster internal rates of return (IRR) and, as applicable, properly document joint development or joint venture arrangements that actually withstand the possibility (perhaps likelihood) of a dispute with a local partner or participant.

Natural gas

The looming energy crisis associated with Pemex's negative reserve replacement was the

driving force uniting multiple political parties to push through the 2013 constitutional reforms. Declining domestic production, coupled with increased demand due to the shift from fuel oil and diesel to natural gas-fired power plants, has led Mexico to substantially increase imports.

According to the EIA, natural gas exports from the US into Mexico have increased more than 200% from 2010, to now exceed 3.4Bcf/day. From an upstream perspective, the oil and gas bidding rounds have focused on crude oil production, with unconventional gas-oriented blocks being delayed due to the market. Thus, there are abundant opportunities for investment in the natural gas sector in Mexico.

As of 2015, Mexico had 15.3 trillion cubic feet (Tcf) of proven gas reserves, but more than 545 Tcf of technically recoverable shale gas resources. The main reason for this gap is that most natural gas production in Mexico, as much as 75% by some estimates, is tied to associated gas production from oil fields offshore in the southern part of the country. Two-thirds of Mexico's non-associated gas production is in the northern part of the country, just south of the acclaimed Eagle Ford formation that has led to much of Texas' growth in gas production over the past several years.

Many believe that the shale gas revolution that has taken place in the US could also occur in Mexico. However, what is lacking is investment in exploration and production activity. According to the Texas Railroad Commission (Texas' oil and gas regulator) by 2014, Pemex had drilled 175 shale test wells, whereas 27,000 had been drilled in Texas alone. Low gas prices and security concerns delayed Mexico's tender of oil and gas blocks in the unconventional space; however, in the recently announced Round 2.3, 10 of 14 blocks are focused entirely on wet and dry gas, with multiple blocks in the northern part of Mexico, in the Burgos basin.

This window will favour early movers who either studied the Mexican regulatory market while it was in transition or elect to joint-venture with a governmental entity, perhaps Comisión Federal de Electricidad (CFE), Mexico's national electricity utility, or Pemex, or another local market participant that is well versed in the local regulatory structure.

The first movers in the offshore oil and gas market were private equity-backed entities, with an

appetite for Mexico country risk. It remains to be seen who will emerge as the first entrants into the domestic natural gas production markets. While geology does change south of the Rio Grande river, it is not significantly different from north of the border, and many smaller independent producers may find the fiscal terms attractive enough to look to expand operations to the south.

Pipelines

Opportunities in the current market are presenting themselves in numerous ways. Gas pipeline development has been particularly attractive in recent years. The Mexican government has commissioned a number of large-volume pipelines to diversify supply to high demand regional markets and to bring new supply to local markets, which had been deemed lower priorities as the federal government experienced a boom in natural gas consumption throughout the country.

Based on current projects under way, US pipeline export capacity into Mexico should exceed 7Bcf/day by 2020. The development of new government commissioned pipelines in the northern border region of the country will provide new opportunities for US natural gas exporters to move their products into the more lucrative Mexican market from saturated markets in the US Southwest.

Currently, some estimates indicate that imports to Mexico already contribute up to 30% of the price of natural gas in Texas. In addition to waiting for the Mexican government to announce new pipeline projects, more bullish US natural gas players are looking to aggressively move into local natural gas markets in Mexico along the border to gain early market share and a foothold to grow their long-term customer bases as more industrial customers look to diversify their suppliers and move away from PGPB, Pemex's natural gas supplier, particularly as Mexico forces all its governmental utilities – oil, natural gas and electricity – to redefine themselves as commercially viable and competitive entities.

Power

The electricity sector is also providing natural gas suppliers with a larger potential customer base. Over the last 30 years, Mexico's electricity sector had moved away from a coal and bunker fuel-dependent production portfolio to an efficient, cleaner-burning and cost-effective natural gas dominated generation portfolio. From 2006 to 2015, fuel oil and diesel consumption for power generation reduced from 450 trillion btu to just over 200 trillion btu. In this same timeframe, natural gas has increased from 300 trillion btu to 500 trillion btu.

This shift was largely supplied with locally produced natural gas from Pemex's oil fields following the decision by Mexico's then presiding Secretary of Energy in the early 1990s to prohibit the indiscriminate flaring of associated natural gas and to instead utilise the potential of the natural gas as a fuel source to power the country's electricity sector. The success of Mexico's power sector conversion to natural gas

was followed by great strides in renewable energy development, particularly in wind and solar.

Renewables

Recent modifications to the renewable energy regulatory regime has made large scale renewable energy production somewhat less attractive because the current regulatory structure disfavours the aggregation of economies of scale. This has resulted from the elimination of renewable energy banking and postage stamp wheeling benefits, which had been instituted to promote utility scale renewable energy project development.

As a result, industrial and commercial consumers will likely turn to large-scale natural gas power producers, including cogeneration power producers. In turn, US natural gas exporters will see a resurgence in potential customers along the US/Mexico border looking to position themselves in Mexico's newly created competitive power market.

Despite the difficulty private power purchasers may have with changes to the renewable energy regulatory regime, the Mexican power utility, the CFE, held two successful long-term auctions for power purchase agreements in the past year, awarding several private companies contracts for 5.7GW of capacity.

The prices were extremely low by international standards, with some claiming the implied rates of return for investors are well below 10%. Until prices improve, it is likely that only larger, strategic investors will be successful in future bidding rounds, unless companies are willing to develop assets relying on short-term auctions and the sale of dispatched power into the grid. That would be unlikely, however, as such arrangements would not typically be financeable.

LNG

Another potential market that US natural gas exporters are eagerly awaiting is the potential to establish liquefied natural gas (LNG) export hubs with potential for local offtake in Mexico. A diversified LNG hub would provide natural gas exporters with the best of all worlds – an attractive local market and a jump-off point for overseas sales as competitive markets provide for more lucrative short-term alternatives.

One area of concern for US exporters during the Obama administration was the Department of Energy's view of "ultimate end user" sales of US natural gas to non-free trade agreement countries.

Under the Trump administration's more liberal view of US hydrocarbon sales to the global world market, this concern will likely not be as much of a factor as the US regulatory environment is reshaped to favour a more carbon-friendly trading regime.

The breadth and depth of the changes in the Mexican energy market cannot be overstated. Even with elections looming in 2018, the opportunities that exist are extremely compelling. ■