Energy Opportunities For India In Latin America

UNDERSTANDING MEXICO'S ENERGY REFORMS

In recent years, Mexico, a major fossil fuel producer, has begun a reform of its legislation to allow domestic and foreign investments in the hitherto state owned crude oil and gas extraction and delivery sectors. In view of decreasing energy exports to the US, Mexico has also started seeking out other large purchasers such as India, a country interested in diversifying its sources of oil and gas. Latin America is becoming an increasingly important partner and energy supplier for India whose oil and gas needs will double in the next two decades.

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The International Energy Agency's *World Energy Outlook 2015* (online at https://webstore.iea.org) states that it would be in India's strategic interest to reduce its over dependence on West Asia for energy. Latin America with its plentiful energy resources has emerged as an alternative partner for India in its quest for energy security. It is rich with abundant resources of both hydrocarbon derivatives and renewable energy. Sources this dual nature of energy resources makes the region an attractive source of not just crude oil and natural gas but also a potential partner in India's efforts towards sustainable development. Mexico for instance has displayed keen interest in the Indian initiative focussing on harnessing solar energy, which could prove useful for countries in tropical and equatorial regions that have the geographic benefit of abundant and reliable sunshine throughout the year.

It is also an opportune time for India to look towards the region, as the countries of Latin America open their energy sectors to the world for investments. As opportunities arise, traditional obstacles such as distance and consequently higher transportation costs are being countered with the advent of advanced technologies in shipping and storage. In addition, Latin American trade patterns have been transitioning through a paradigm shift. The traditional consumer of the region's energy resources was the United States of America (US). However, with the ingress of Canada in the energy supplier market, the share of Latin American trade with the US has decreased, making the region look for new trading partners in energy. The region has no dearth of steady energy suppliers—Brazil, Mexico and Venezuela are home to abundant oil reserves. Venezuela has the largest crude oil reserves in the world, estimated at 298 billion barrels, larger than the Saudi Arabian reserves of 266 billion barrels. The Orinoco Belt too is rich in hydrocarbon based energy resources. Besides conventional crude oil resources, Argentina has shale reserves that are estimated at 58 billion barrels. Bolivia is a major producer of natural gas and the newly discovered oil reserves in Guyana and Suriname may be credited to the same region, although both countries are at times alternately classified as Caribbean.

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As the Latin American region opens up to India and other countries of the world, it is essential to understand the market and its policies. Mexico is the first country to introduce a series of reforms in various sectors including energy. It is therefore important to understand the reforms for optimal recognition and utilisation of the opportunities provided. Mexico for long has enjoyed a position among the top crude oil producing countries of the world. While the reserves are still estimated to be abundant, the output of crude oil has dwindled due to the usage of the same sites over a protracted period of time and the use of outdated technology. Although Mexico has the tenth largest crude deposits in the world, over the past few years it has realised that this gift has not been taken advantage of in an optimal way. Despite the deposits, due to lack of adequate refineries Mexico still imports about fifty per cent of its total natural gas requirement. (Embassy of India, Mexico, online at http://www.indembassy.org)

Traditionally Mexico has been an energy supplier to the US. However, as the latter becomes more energy independent, Mexican exports have shrunk and so has its revenue. Looking to expand its export base, Mexico is turning towards countries like India and Japan. (David Garcia and Isabel Martinez, "Mexico's Pemex Mulls Crude Imports: More Exports to India, Japan", *Reuters*, online at http://www.reuters.com) At the same time, India has been trying to diversify its energy suppliers. Mexico provides India with a welcome break from the Middle East that has been the main oil exporter. Mexico has catalysed the process by implementing reforms in the energy sector, which has been opened to private players from the national and international arenas. India, with its expertise in refining crude and need to find newer sources of energy supply, sees these reforms as a good prospect, providing an opportunity for the two sides to strengthen bilateral ties.

The state owned oil company Petróleos Mexicanos (Pemex) has long exercised monopoly over all hydrocarbons and their derivatives in the country. The roots of this monopoly may be traced back to the Mexican constitution as detailed below. Nonetheless, with the declining output of crude oil and dwindling revenue, Mexico felt the need to introduce advanced technologies and inject more capital into the exploration and production of its oil reserves. In 2013, the Enrique Peña Nieto regime introduced a series of energy reforms aimed at reinvigorating the energy sector. The reforms are multipronged and cover legal, financial and operational realms of upstream, midstream and downstream activities of the Mexican oil and gas sector. Such activities pertain to the exploration, production, refining and selling of crude oil and its derivatives. The reforms also alter the traditional functioning of the Mexican oil and gas industry. They aim at reducing state control of the industry and invite foreign investments and privatisation. The scale and nature of the energy reforms announced in 2013 are unprecedented taking into account the strong tradition of resource nationalisation in Mexico. Resource nationalism has been a vital part of the political and national psyche of the country until the recent constitutional amendment was apotheosised in Article 27 of the Mexican constitution. The amendment required a two-third majority in Congress in addition to a majority in state legislatures. The nationalisation of oil has deep historical significance for the Mexican people and hence the reforms are not purely economic decisions but have considerable social and political significance as well. (*Mexico Energy Revolution Series: Oil and Gas*, online at https://www.manatt.com)

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The tradition of oil nationalisation and state ownership of hydrocarbon resources may be traced to the 1917 Constitution of Mexico and Article 27 officially designates the state as the owner of all subsoil resources. President Lázaro Cárdenas nationalised the oil and gas industry in 1938 leading to the effective implementation of Article 27. However, the state could still enter into upstream partnerships, issue service contracts and even grant complete contracts to private entities, the payment of which was made either in cash or as a percentage of the total production. In 1958, an amendment to the regulatory law gave the rights of development specifically to the state through Pemex. Nevertheless, foreign companies still managed to enter by finding legal loopholes and obtained rights of exploration and production through risk contracts. Therefore two years later, the law was amended again and unambiguously prohibited all concessions and contracts and cancelled those in existence and thus the monopoly of Pemex over all hydrocarbons and its derivatives was established. (Friedrich E Schuler, *Mexico between Hitler and Roosevelt: Mexican Foreign Relations in the Age of Lázaro Cárdenas 1934–1940*, New Mexico: University of

New Mexico Press, 1999, Chapter 5) While privatisation and liberalisation were introduced by the North American Free Trade Agreement in the 1990s, the oil and gas sector remained untouched. It was only in 2008, during the Felipe Calderón regime that a smidgeon of an energy reform was introduced. Integrated service contracts were awarded through public tenders and paid for in cash by Pemex. However due to lack of constitutional change and limited legal certainty, the reforms did not attract the interest of serious investors and had limited success. (Congressional Research Service, *Mexico's Oil and Gas Sector: Background, Reform Efforts and Implications for the United States*, 2015, online at https://www.fas.org) Peña Nieto's reforms have been undertaken after the modification of Article 27 as well as Articles 25 and 28 of the constitution and thus Pemex's monopoly has been eliminated.

However, the reforms have not changed the proprietorship of the state over all hydrocarbon resources. Exploration and production remains a strategic sector directly under the state. The reforms aim to alter the 1958 legal framework and adopt a friendlier structure that encourages private sector investment. Increased interaction with both Mexican and international private actors would be through three specific contract options—profit sharing, production sharing and licenses—all awarded through public tenders. (*Mexico Energy Revolution Series: Oil and Gas, ibid*) However, the state through the Secretaría de Energía (Sener) or the Ministry of Energy retains the authority to grant adjudication to Pemex whenever the state pleases. Similarly, it also reserves the right to establish direct partnership of up to 30 per cent either via Pemex or through direct financing in case of special projects dealing with technology transfer. There is also a special clause regarding the likelihood of a trans-boundary field, where the state is required to have a minimum 20 per cent participation.

The reforms would also change the structure and functioning of Pemex, which would now enjoy complete autonomy from the government. The state would remain the sole owner of the firm but would forgo its management. The company is expected to benefit from an easier fiscal regime and receive a monetary bailout for financial restructuring as well as pension obligations. Pemex would have to introduce corporate governing structures to compete with global firms. The new law gives Pemex two years to transform itself. (*Mexico's Energy Reform and Pemex as a State Productive Enterprise*, 2015, online at http://www.pemex.com) This time the reforms with the constitutional amendment give a legal certainty that international players seek before investing. As mentioned above three types of contracts—profit sharing, production sharing and licensing—would be awarded through public tenders.

The difference between the three is based on the compensation that would be given to investors. Profit sharing contracts would compensate the bid winner with a percentage of the profit in cash, production sharing contracts would compensate in kind with oil, gas or condensates while in licensing investors would receive the property rights of hydrocarbons once they are extracted from the subsoil. Until then they would remain the property of the Mexican state.

Sener would determine the type of contract on offer for each bid on a project-by-project basis. The compensation to the state would also be determined in similar fashion and this is predicted to be the most significant cost variable for public tenders. For contracts based on licensing, a signing bonus to be paid would be determined when a bid is awarded. Flexibility in contracts has been incorporated to ensure that investments and tax regimes match the specific characteristics of each field, thus maximising state benefits. The reforms also detail three other payments applicable on all contracts. Two are an exploratory phase fee and a basic royalty payable to the Mexican Petroleum Fund for stabilisation and development. The third fee would be a contribution to a fund for hydrocarbon producing states and municipalities, a monthly flat tax for performing exploration and production activities based on a set fee per square mile. Companies in the oil and gas sector would also receive different treatment in taxation. The deductions claimed for the *Impuesto Sobre la Renta*, Mexico's traditional corporate income tax, would be subject to different rates than those applied in other sectors of the economy. An advantage to all exploration and production companies is that all royalties, fees and compensations directly derived from these contracts would be exempt from the 16 per cent value added tax. (Sener, online at http://www.energia.gob.mx) Thus, it is evident that the reforms strive hard to strike a balance between encouraging private sector investment and extracting the most amount of oil rent possible from the interested parties.

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The reforms are being introduced in stages with the first declared on 13 August 2014, whereby the Mexican government announced the areas open for exploration and production for private investors. This stage has been termed Round One and is divided into two broad categories. The first called Farm Outs contains joint venture opportunities for private investors that want to exploit the sites that have been allotted to Pemex. The other category termed New Fields and Reservoirs is for investors opting for exploiting fields and reservoirs not allotted to Pemex. The reserves that are not under Pemex have been chosen by the government based on their potential to increase oil and gas production in the short run and ultimately aimed at quickly increasing state revenue. It is expected that the latter category of reserves would see investment based more on licensing and production sharing contracts as opposed to profit sharing ones. (Sener, *National Entitlements Awarded to Pemex*, online at http://www.energia.gob.mx) Farm Outs would be distributed through public bidding supervised by the Comisión Nacional de Hidrocarburos (CNH) and lead to the development of 1.56 billion barrels of crude oil equivalent (bbcoe) of 2P (proven and possible) reserves. They also represent 2.66 bbcoe of 3P (proven, possible and probable) reserves. The Farm Outs are spread across an area of 236 square miles and expected to bring in an investment of US $32 billion within the next five to ten years. The new fields and reservoirs are a more ambitious category as compared to Farm Outs and have 169 sites that would be put up for bidding. A hundred and nine of the total are labelled as exploration projects and are spread across an area of 10,000 square miles with an estimated 14.6 bbcoe. As per assessments, these sites would require investments of up to US $19 billion over the span of the next four years. The remaining 60 sites are ready for production and are spread across an area of 1,000 square miles. They are said to have 3.8 bbcoe in 2P reserves and would require an investment of US $15.1 billion over the next four years. (Sener, *Pemex*, online at http://www.energia.gob.mx)

To ensure transparency by private companies and keep decisions based purely on economics, the bidding process would be regulated by two main bodies—Sener and CNH. Transparency in the bidding and subsequent processes is a big concern for Mexico. Ken Medlock, an energy and resource economist at Rice University, Texas, has commented that Pemex was one of the most inefficiently run bodies of the Mexican government, specifically because the federal government used the assets of the company without thinking about the management of the organisation. To increase the level of transparency, all meetings would be televised live and be accessible on the public website www.Ronda1@gov.mx. (Peter Maffitt, "Mexico's Energy Reforms Critical for Nation's Economic Growth", *Breitbart News Network*, online at http://www.breitbart.com) It has been estimated that this boost to the energy sector would soon trickle down to other sectors. It is believed that the Mexican gross domestic product (GDP) would see an additional one per cent added this year and there would be an extra two per cent surge by 2025. It has also been appraised that the reforms could prove to be the harbinger of good news for employment in Mexico. The current year is expected to bring an additional half a million job opportunities and by 2025 the number of supplementary employments should increase by two and half million. These changes would also mean cheaper gas and electricity for Mexicans. Such promises and projections have been a cause of hope for the common people as well as the government that has been battling an almost stationary rate of growth for the past thirty years. (Deloitte, *Mexican Energy Reforms: Opportunity Knocks*, online at http://www2.deloitte.com) It remains to be seen whether the new left leaning Mexican government headed by President elect Andres Manuel Lopez Obrador will pursue the same policies with regards to the oil and gas sector of the country.

The advantage that Mexico offers on its cheaper crude oil compensates for the distance and increased cost of shipping. The import of crude oil from Mexico has begun and the total cost is about US $7–10 less per barrel in comparison to the oil imported from the Middle East. This difference provides a definite advantage over West Asian oil.

Opportunities for India as an energy dependent country are great. Seventy eight per cent of the total energy requirement is met through the import of energy resources. (Niti Aayog, *India's Energy Security Scenarios 2047, version 2.0*, online at http://niti.gov.in) The dependence on crude oil has grown steadily over the years from 43 per cent in 1990 to 71 per cent in 2012. (US Energy Information and Administration, *India increasingly Dependent on Imported Fossil Fuels as Demand Continues to Rise*, online at https://www.eia.gov) Traditionally the Middle East was the main supplier of crude oil for India. However, New Delhi has started diversifying its import base. For instance, Nigeria has become its biggest supplier of crude oil, replacing Saudi Arabia. (Morgan Winsor, "Nigeria Replaces Saudi Arabia as Top Crude Oil Supplier to India", *International Business Times*, 25 June 2015, online at http://www.ibtimes.com) The Latin American market as a whole and Mexico in particular provide an alluring avenue for India to expand its import base. Similar sentiments were echoed by the Indian Petroleum Minister Dharmendra Pradhan, who on a two-day visit to Mexico in 2015 held bilateral talks with his counterpart the Minister of Energy Pedro Caldwell. (Press Information Bureau, Government of India, *Visit of Petroleum Minister*

Shri Dharmendra Pradhan to Mexico, online at http://pib.nic.in) As Pradhan said, "India is trying to diversify its import sources of energy and more than 20 per cent of crude oil import could be sourced from Latin America ... Mexico figures high on the priority of India to enhance bilateral energy ties". ("India Eyes a Share of the Mexican Energy Biz", *Business Standard*, online at http://www.business-standard.com)

After the reforms, Mexico has become a more lucrative business partner, as it now offers opportunities for partnerships in exploration and production. This would lead to a change in the nature of the relationship between the countries from producer and consumer to energy partners. This is a well-suited prospect for India as it emerges as a crude refining hub and participation in the exploration and production of crude oil would give it a chance to take advantage of its expertise. Indian petrochemical companies have already taken notice of the developments in the region and have been quick to act. ONGC Videsh Limited (OVL) the international wing of the state owned Oil and Natural Gas Corporation has decided to open an office in Mexico. (*ibid*) OVL recently announced that with India keen on diversifying sources of crude oil some of the demand could be met by the Latin American region and Mexico featured high on the list of possible sources of crude oil.

The geographical distance from Mexico has been traditionally deemed an obstacle to trade, as it was considered that the vast distance would translate into high costs of shipping. In recent years however, there has been a reduction in shipping and transportation costs. The advantage that Mexico offers on its cheaper crude oil compensates for the distance and increased cost of shipping. The import of crude oil from Mexico has begun and the total cost is about US $7–10 less per barrel in comparison to the oil imported from the Middle East. This difference provides a definite advantage over West Asian oil. (Jyoti Mukul, "As Domestic Challenges Grow, RIL Follows OVL to Mexico", *Business Standard*, online at http://www.business-standard.com) The Indian private sector has given an enthusiastic response to the opening up of the Mexican energy sector. At present, Essar, the Indian Oil Company and Reliance Industries buy around six million tonnes of crude oil from Mexico annually. Reliance has already signed some contracts for exploration and production in the Farm Outs category with Pemex. This tilt towards Latin America in general and Mexico in particular is echoed in India's Focus on Latin America and Caribbean Programme. Through it, New Delhi is trying to establish better trade links with the continent as the Ministry of Commerce estimates that the markets of Latin

America and the Caribbean offer great potential for trade. The trade with Mexico could grow by four per cent annually and lead to strengthening of bilateral ties. Such conditions would facilitate the growth in energy trade, thereby making Mexico a major energy trading partner. (Department of Commerce, Government of India, *Focus Latin America and the Caribbean Programme*, online at http://commerce.nic.in)

Mexico has opened up its energy sector to the international market. This is a welcome step to revitalise the development of its known and exploited resources and a chance to explore and tap many hydrocarbon reserves that have remained hidden and undeveloped. It is a way for Mexico to increase its rate of growth, give a push to its economy, enliven its markets and reinvigorate the job market. The reforms have also come at the right time for India, which has been trying to diversify its oil import portfolio as it imports 78 per cent of its total crude oil requirement. It is an interesting opportunity for India in its move towards energy security that should be taken advantage of by furthering relations with Mexico.