Marcos y Asociados

20+Year Experts

Energy Monthly News

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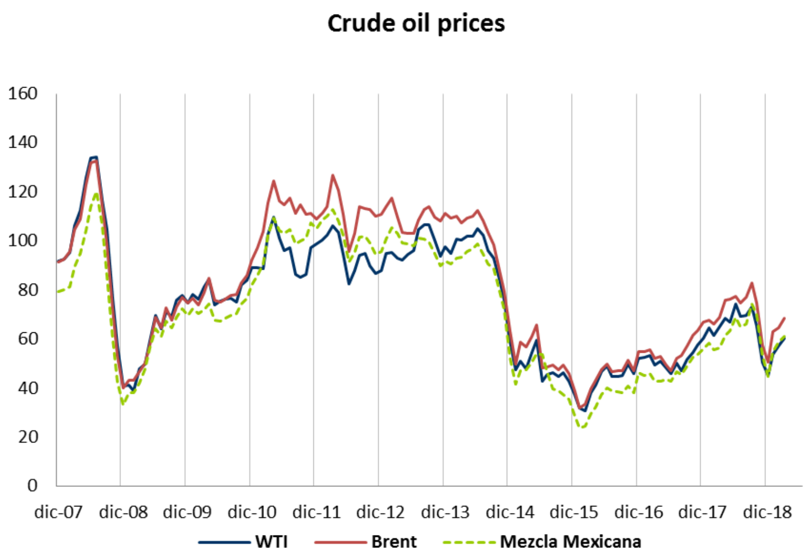


Crude oil Price* US/BD	WTI 63.81 BRENT 72.21 MME 63.59	
NG price* US/MMBTU	Henry Hub 2.75	
Mx crude production MMbd	1.699	*(Feb.-19)*
Mx NG production MMpcd	4,844	*(Feb.-19)*
US crude production MMbd	11.87	*(Jan.-18)*

FX Rate**	19.00

** 12/04/2019 **24/04/2019*
Source: EIA. Pemex BDI, Banxico, and CNH

Oil & Gas

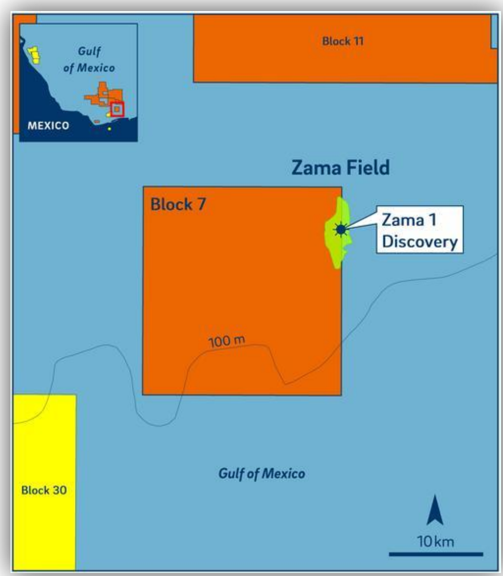
Successful Zama appraisal well and production test – *DEA Press Release*

The consortium of offshore Block 7 has successfully carried out a further appraisal well, including production testing. Hydrocarbon flow of well "Zama-2 ST1" achieved a rate of 7,900 barrels of oil equivalent per day (boe/d). DEA holds a 40% share as partner in Block 7.

"We are very pleased with the results of this well, that showed exceptional productivity," says Juan Manuel Delgado, Managing Director of Deutsche Erdoel México and country representative for DEA's businesses in Mexico. "With every well, we are growing our understanding of the reservoir. The results confirm that the recent acquisition of Sierra was the right step for DEA. We have gained access to a promising license portfolio," Delgado underlines.

Block 7 is located in the prolific Sureste Basin offshore Mexico. Zama-2 ST1 is the second of three appraisal wells drilled by the consortium, to better define the resource potential of the Zama discovery. Building upon the success of the first appraisal well (Zama-2), the goals of Zama-2 ST1 were to test the northern limits of the reservoir, acquire a whole core to collect detailed rock properties, and perform a well test in several perforated intervals. Zama-2 ST1 was drilled 180 meters updip of the Zama-2 well and approximately 2.1 kilometers north of the Zama-1 exploration well.

In the next stage of the appraisal program, the Zama-3 appraisal well is planned to be drilled to the south of the original Zama-1 exploration well. Block 7 contains a significant part of Zama, one of the largest shallow water discoveries of the past 20 years globally. As a whole, Zama is estimated to hold 400 million to 800 million barrels of recoverable oil equivalent and expected to start production by 2022/23.



Via Sierra Oil & Gas, DEA holds a 40% share in Block 7. Operator is Talos Energy with 35% and Premier Oil holds the remaining 25%. On 20 March 2019, DEA Deutsche Erdoel AG announced the completion of the acquisition of Sierra and is currently in the phase of consolidating its two companies in Mexico, Deutsche Erdoel México and Sierra.

In Mexico, DEA currently operates the onshore Ogarrio oil field, in partnership with Pemex, and holds interests in ten exploration blocks in the Tampico Misantla and Sureste Basins, three of which as operator.

Pemex bidding of 21 oil and gas allocations – *El Financiero*

Pemex seeks to accelerate the development of recent discoveries and increase recovery in mature fields by signing "Contratos de Servicios Integrales de Exploración y Extracción" (CSIEE) - Exploration and Extraction Service Contracts with service providers.

The plan, which was presented in Ciudad del Carmen, Campeche, contemplates in a first stage the bidding of 21 gas and crude allocations. "The fields to be included include onshore mature fields, with significant residual potential in primary and secondary recovery processes, and shallow water fields with significant reserves and important investment requirements."

The first tenders correspond to four blocks: Akal, Tamaulipas Constituciones, Rodador-Cinco Presidentes, as well as Bacal-Nelash-Tiumut. The processes to award these blocks will start this month, the call for applications on November and the ruling on June 2020.

In the presentation, Pemex explained that through the CSIEE, service providers must contribute 100% of the capital investment and operating expenses. With this, the company seeks to share the risk of assignments, complement technical capabilities and reduce costs. In return, the contractors will receive remunerations through a rate in dollars per unit of hydrocarbon produced. The integral contracts will last between 15 and 20 years, period in which Pemex will maintain the ownership of the assignment and will continue as an operator.

BHP Petroleum plans more appraisal drilling off Mexico – *Oil and Gas Journal*

BHP Petroleum plans additional appraisal drilling on Trion block offshore Mexico during this year's second half, the company said in an operational update. Previously, BHP sold its US shale operations to focus on conventional oil and gas in the US Gulf of Mexico and Australia.

Oil and gas holdings also include properties in Trinidad and Tobago, Algeria, and UK. In Mexico, BHP encountered oil with the Trion-2DEL appraisal well in 2018. This was followed by a downdip sidetrack that encountered oil and water, further appraising the field and delineating the resource. An additional appraisal well 3DEL is planned yet this year to delineate resources.

MODEC secures financing to build FPSO for Eni's block offshore Mexico – *Offshore Energy*

Japan's MODEC has concluded financing for an FPSO charter project, which will be used on the Eni-operated Area 1 block offshore Mexico. Eni's development plan for the discoveries of Amoca, Miztón, and Tecoalli within the Offshore Area 1 located in the shallow waters of the Campeche Bay was approved by Mexico's National Hydrocarbon Commission at the beginning of August 2018. In October 2018, Eni awarded a Letter of Intent to MODEC for the supply, charter, and operations of an FPSO vessel for deployment in Area 1. MODEC was put in charge of engineering, procurement, construction, mobilization, installation and operation of the FPSO, including topsides processing equipment as well as hull and marine systems.

MODEC, Mitsui & Co., Ltd. and Mitsui O.S.K. Lines, Ltd. "MOL" announced that Mitsui and MOL had participated in a long-term charter business operated by MODEC for the purpose of providing an FPSO for use in the Area 1 block offshore Mexico and a loan agreement for the project was entered into on April 12, 2019. Mitsui and MOL invested in Area1 Mexico MV34, a Dutch company established by MODEC, which will engage in FPSO leasing, operations and maintenance services. MODEC and Mitsui & Co., Ltd. each have a 35% participating interest in the MV34 and Mitsui O.S.K. Lines, Ltd. has the remaining 30% interest. In December 2018, MV34 concluded the charter agreement with Eni. The charter contract initially runs for 15 years, with options for extension every year thereafter up to five additional years. The loan agreement on a project finance basis was signed by Sumitomo Mitsui Banking Corporation (lead arranger), MUFG Bank, Ltd., Mizuho Bank, Ltd., Sumitomo Mitsui Trust Bank, Limited, Société Générale, BNP Paribas, Oversea-Chinese Banking Corporation Limited, Clifford Capital Pte. Ltd. and Crédit Industriel et Commercial.

Construction of the FPSO is planned to be completed in 2021, and the FPSO will be deployed for the development of the Area 1 block at water depths of about 32 meters. The FPSO will be capable of processing 90,000 barrels of crude oil per day, 75 million cubic feet of gas per day, 120,000 barrels of water injection per day and have a storage capacity of 900,000 barrels of crude oil. Area 1 block is owned by a consortium of two companies including Eni Mexico as operator and Qatar Petroleum, which farmed into the block last December. The agreement is subject to the authorization by the Mexican authorities and Eni will continue to be the operator.

Oil explorers push ahead in Mexico – *Bloomberg*

International oil companies including Malaysia's Petronas, U.S. independent Murphy Oil Corp. and Spain's Repsol SA are pushing ahead with plans to develop Mexico's deep-water fields, as they face criticism from the government that they aren't moving fast enough.

"We're not out there just sitting on acreage and waiting," said Adam Seitchik, general manager of exploration and new ventures at Murphy Oil, speaking on the sidelines of an event in Ciudad del Carmen, Campeche, on Thursday. "I am hoping if we're very active, they will open up the bid rounds for us."

Murphy, which won a block in Mexico's 2016 deep-water oil auction, announced that it had found hydrocarbons at its Cholula-1 well earlier this month and is assessing the discovery, which it operates in a consortium with Petroliam Nasional Berhad, Sierra Oil & Gas de RL and Ophir Energy Plc. The company expects to continue drilling in mid-2020, said Seitchik. When asked about the time line for first oil, Seitchik said: “eight to 10 years would be extremely long for us.”

International oil companies piled into Mexico’s vast oil terrain over the past several years following 2014 energy reforms that opened the sector to private investment for the first time in almost eight decades. The new government of Andres Manuel Lopez Obrador has lambasted the reforms, calling on companies that won blocks in the bid rounds to invest and produce oil quicker. His government has suspended new oil auctions until companies show results, he has said.

The political shift has put pressure on companies that are already operating in Mexico’s shallow and deep-waters, and has increased demand for ‘farm-ins,’ or buying stakes in oil assets from private companies in Mexico.

“We are not only looking at the low-hanging fruit,” said Puteri Nurlina, exploration chief for Petronas Mexico, which operates in Mexico under the name PC Carigali, speaking at a panel during the same event. The Malaysian state-owned firm has stakes in 10 shallow and deep-water blocks in Mexico, where it is the operator for half of them. In February, Mexico’s National Hydrocarbons Commission approved its purchase of a 30 percent stake in China National Offshore Oil Corporation’s block in the oil-rich deep-water Perdido Fold Belt for an undisclosed amount.

Repsol, which has six offshore blocks in Mexico, is also seeking to drill two new wells next year, said Sergio Limardo, Repsol’s country manager in Mexico. “There’s an abundance of data in Mexico that existed by the time we all came, so that has allowed us to evaluate the blocks a little faster and move faster.”

ECA LNG receives US non-FTA approval for infrastructure project in Mexico – *Sempra Press Release*

Sempra Energy announced that its subsidiary Energía Costa Azul LNG received two authorizations from the U.S. Department of Energy “DOE” to export U.S. produced natural gas to Mexico and to re-export LNG to countries that do not have a free-trade agreement “non-FTA” with the US, from its Phase 1 and Phase 2 liquefaction-export facilities in development in Baja California, Mexico.

ECA LNG Phase 1 development opportunity is a single train LNG facility to be located adjacent to the existing LNG receipt terminal. It is expected to utilize current LNG storage tanks, marine berth and associated facilities. Phase 2 of the project will include the addition of two trains and one LNG storage tank. The DOE authorizations allow the export of 636 bcf a year of US sourced LNG from these infrastructure projects. Phase 2 of the project will require additional DOE approval in order to export its full expected capacity.

The existing ECA receipt terminal was the first LNG receipt terminal constructed on North America's West Coast. Located about 15 miles north of Ensenada, Baja California, it began commercial operations in 2008 and is capable of processing up to 1 Bcf of natural gas per day.

Last November, Sempra Energy announced that its subsidiaries IEnova and Sempra LNG had signed Heads of Agreements with affiliates of Total S.A., Mitsui & Co., Ltd. and Tokyo Gas Co., Ltd. for Phase 1 of the ECA LNG project, subject to reaching definitive agreements. TechnipFMC and

Kiewit were selected as the engineering, procurement, construction and commissioning (EPC) contractors for the project, subject to reaching a definitive agreement on the EPC contract.

Development of the ECA LNG liquefaction project is contingent upon obtaining binding customer commitments, completing the required commercial agreements, securing all necessary permits, including additional export authorization from the Mexican and U.S. governments, obtaining financing, incentives and other factors, and reaching a final investment decision.

Sempra Energy's mission is to be North America's premier energy infrastructure company. With 2018 revenues of more than $11.6 billion, the San Diego-based company is the utility holding company with the largest U.S. customer base.

Power/Renewable Energy

Iberdrola to invest 5 billion dollars in Mexico – *Bloomberg, Notimex*

With or without power auctions, Iberdrola will maintain its investment plans in Mexico, so during the current administration expects to allocate resources for five billion pesos for wind, photovoltaic and gas generation plants, which would increase its installed capacity to 15 thousand megawatts.

The director of the company in the country, Enrique Alba, said that they have invested approximately three thousand USD $500 million dollars from 2014 to date, but the prospect is to continue investing in national territory, given the importance of its market and it ranks among the five strategic nations globally.

According to the manager, the company has 20 plants throughout Mexico, of which five are wind farms, two are photovoltaic, as well as five cogeneration and eight combined cycles, which represents around seven thousand megawatts of installed capacity. "In the current strategic plan, which covers 2018-2022, we had the expectation of investing approximately USD $2,800 or $3 billion dollars. If we talk about it in the presidential term of President López Obrador and we extend that date to 2024, we are talking about a figure of up to $5 billion dollars of possible investment, "he said. Alba explained that the resources that Iberdrola would allocate to Mexico will depend on the certainty that is seen with the new energy planning policy, in addition to the company being able to develop the projects and commercialize energy to industrial companies, a niche in which it has participation. He assured that the cancellation of the electric auctions has not had any direct impact, since of the three carried out they did not obtain any project, since their strategy is more focused on having the capacity to commercialize the electric power to private and not of these mechanisms to anchor projects. "We like to sell directly to the client, because having a client is an additional value, such as an auction, so our current and future growth strategy really does not have any impact," said the CEO of the company.

He detailed that the renewable energy projects that are finalizing, which will be built by 2022 and even until 2024, were not designed to be made within the framework of the tenders, so that their "strategy does not change if there are auctions or do not". Enrique Alba considered that the auctions are a decision of planning and energy policy of the government, and if the current administration considers, for some reason, that this mechanism does not make any sense at this time, it is acceptable. However, he said it is important for the government to clarify that the niche for energy supply to the industrial client will continue or there will be another, because that is where they can take part.

According to the executive, if there is an increase in economic activity in the country, customers continue to demand more electric power, in addition to achieving a 4.0% growth in the economy, as the federal government's goal indicates, for Iberdrola it makes sense to make more investments in Mexico. Alba explained that the natural conditions of the country are very good to generate renewable energy, mainly wind and photovoltaic, which have to achieve greater promotion in the following years. "The costs of average unit capex per installed watt have been reduced a lot in recent years and make them competitive to market to an industrial client; there is no need for anything special or any mechanism for Mexico to develop renewable energy".

Glencore wins $520 million deal to sell coal to Mexico – *Reuters*

State-run power utility the Federal Electricity Commission “CFE” said that global trader Glencore has won contracts worth around USD 520 million to supply 4.94 million tonnes of coal to Mexico.

The utility said in a statement that by offering the best price, Glencore won all 12 auctions held to supply a CFE plant in the southwestern state of Guerrero with the coal, for delivery between May and December of this year. A CFE spokesman said that the contracts were worth around USD 519.6 million in total.