Marcos y Asociados

20+Year Experts

Energy Monthly News

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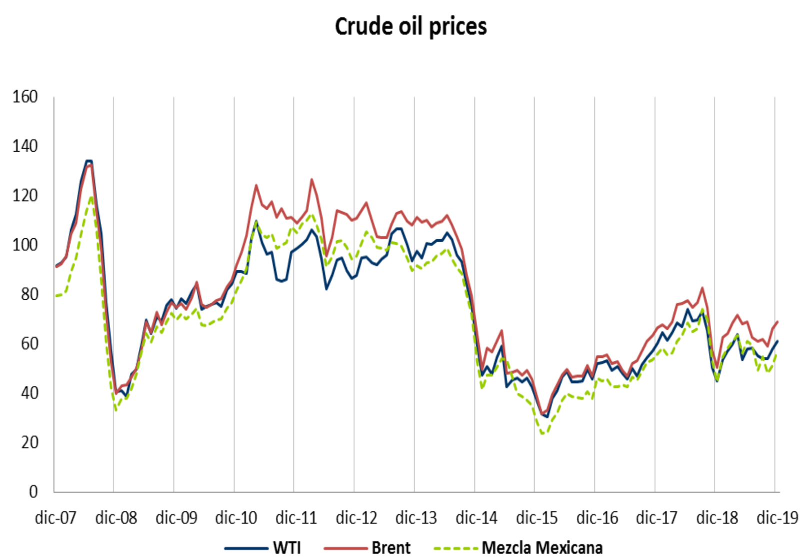
Table of Contents



Crude oil Price* US/BD	WTI 54.19 BRENT 60.69 MME 51.09
NG price* US/MMBTU	Henry Hub 1.98
Mx crude production MMbd	1,711.8 *(Dec-19)*
Mx NG production MMpcd	5,005 *(Dec.-19)*
US crude production MMbd	12.65 *(Oct-19)*
FX Rate**	18.94

** 24/01/2020 **27/01/2020*
Source: EIA. Pemex BDI, Banxico, and CNH

Oil & Gas

Grupo R's newbuild jack-up rig reaches Mexico – *Grupo R*

The Cantarell III jack-up rig was built by offshore rig builder Keppel in Singapore. Keppel completed and delivered the rig to the Mexican operator last December. As part of the deal, Grupo R also entered into a sale and leaseback arrangement for the rig with a wholly-owned subsidiary of Keppel O&M.

It was agreed that Keppel O&M would purchase the rig from Grupo R for about USD $190 million and the rig would be leased back to Grupo R on a bareboat charter at competitive dayrates over ten years. It was also agreed the rig would be deployed to work in offshore Mexico on a charter which was scheduled to start in 1Q 2020. Under the bareboat charter, Grupo R has the right to purchase the rig at pre-agreed prices during the term of the bareboat charter. After the fifth year, Keppel O&M may, at its discretion, put the rig to Grupo R at a pre-agreed price.

The Cantarell III, a FELS B Class jack-up rig, is able to operate in water depths of 400 feet, drilling depth of 30,000 feet, and accommodate 150 personal. The platform would start operating on March 15.

CNH approves Repsol to drill two deep-sea exploration wells – *CNH*

CNH authorizes Repsol Exploración México to drill two deep-sea exploration wells: Polok-1EXP and Chinwol-1EXP, corresponding to the CNH contract -R02-L04-AP-CS-G10/2018.

- The Polok-1EXP well, has 583 meters depth, will have a total program of 44 days: 38 days for drilling (from March 15 to April 23), and 6 days for abandonment (from April 24-29 this year). The drilling of the well will require an investment of USD $48.8 million.

- The Chinwol-1EXP well, has 462 meter depth, will have a total program of 69 days: 14 days for Phase 1 drilling (from March 1 to 13), 49 days for Phase 2 drilling (from May 3 to June 20), and with 6 days for abandonment (from June 21 to 26) with an investment of USD $49 million. For both wells, the drilling vessel will be the Maersk Valiant. The operator will implement the Batch Setting technique between the Polok-1EXP and Chinwol-1EXP wells, due to the short distance of 17.8 km between both locations.

Mexico's Pemex issues $5 bln in bonds to refinance debt – *Reuters*

Pemex issued USD $5.0 billion in bonds with 11-year and 40-year maturities to refinance existing debt. Pemex said part of the funds from the bond issue will be used to repurchase dollar-denominated debt maturing in 2020, and the remainder will be used for refinancing purposes. It is the first time that Pemex, which has financial debt of around USD $99 billion, has issued a 40-year bond. The 11-year bond has a coupon of 5.95%, and the 40-year bond a coupon of 6.95%.

AMLO inherited Pemex with $105.8 billion in financial debt when he took office in December 2018. His government has eased Pemex's huge debt burden, providing $9.5 billion in support via capital injections, tax breaks and debt refinancing, transferring some of the company's risk to the federal government.

Pemex with late exploration, development and extraction goals – *CNH*

Pemex Exploration and Production closed 2019 with production in 4 of the 20 priority fields. The field with the highest production was Ixachi, which closed the year with a production of 4,400 barrels per day. While Chocol, Cibix and Xikin jointly reached a production of 1,600 barrels per day.

This means that the aforementioned fields reached a production of 6.15 thousand barrels per day, although the figure represents 62.3% of the 9.87 thousand expected in 2019. In addition, of the investments budgeted for the development of the fields, it has only executed $2,864 million pesos of the $42,462 million pesos committed, the equivalent of 6.7% of the investment. In the matter of drilling wells, the state's productive company could only drill 3 of the 28 wells it undertook to drill in its development plans.

CNH approves modifications to Jaguar E&P evaluation plan – *CNH*

CNH approved to Jaguar E&P the modification of the evaluation program to CNH-R02-L03-VC-02/2017 contract. The contract area is located in Veracruz. Jaguar confirms that the Copite Norte block has no potential for hydrocarbon recovery, because the reservoir has low pressure and an uncertain structural framework. Therefore, the regulator was asked for authorization to drill a single well instead of the four that were contemplated in the original evaluation plan. With the approved modification, the investment that Jaguar E&P will make, would go from USD $22 million to USD $3.9 million.

Mexico plan to divert gas pipeline reignites concerns – *Bloomberg*

Mexico's move to divert a TC Energy Corp. gas pipeline from indigenous lands is reigniting concerns over the future of energy projects in the country. The plan to deviate the Tuxpan-Tula conduit in central Mexico, announced by AMLO, follows a restructuring of contracts last year that forced pipeline operators to cut shipping rates. The decision creates a precedent that could be replicated as local communities have opposed several pipeline projects in Mexico, stalling construction and leading to a slowdown in investment, said Nina Fahy, head of North American natural gas for consultancy Energy Aspects Ltd.

Diverting the pipeline is “really opening up a can of worms” because many other projects face similar issues, and moving them could prove costly, she said from New York. AMLO announced the plan after holding a consultation with the Otomi, Nahuatl, Totonaco and Tepehua indigenous communities in the city of Pahuatlan. He pledged to compensate TC Energy. Mexican pipeline operator Fermaca, Villa de Reyes-Aguascalientes-Guadalajara pipeline and the Guaymas-El Oro pipeline operated by Sempra Energy’s IEnova also face holdups due to social conflicts.

Talos announces completion of independent resource evaluation of Zama discovery – *Talos Press Release*

Talos announced the completion of the third-party contingent resource evaluation of the Company's globally recognized Zama discovery commissioned from Netherland, Sewell & Associates, Inc.. Talos is the operator of Zama, located offshore Mexico, and holds a 35% working interest in Block 7 in a consortium with its partners Sierra Oil & Gas, a Wintershall DEA company, and Premier Oil.

Key highlights of the Netherland Sewell contingent resource evaluation include:

- NSAI's "Best Estimate" of the 2C gross recoverable resource estimate is approximately 670 MMboe , which is near the high end of the Company's previously guided range;
- NSAI estimates 60% of the total resources of Zama are located on Block 7 in the 2C case. As previously disclosed the Zama reservoir extends into the adjacent block to the east, owned by "Pemex" and, therefore, is subject to unitization between the Consortium and Pemex.
- NSAI's "High Estimate" of the 3C gross recoverable resource estimate is approximately 1,010 MMBoe, exceeding the high end of the Company's guidance range.
- High quality oil accounts for approximately 94% of total resource estimates in both 2C and 3C cases.

NSAI used a full geological data set collected from four successful reservoir penetrations. In addition, the data set included over 1,400 feet of whole core samples, an extended flow test, 185 pressure samples, 60 physical oil samples and 28 well logs.

The Zama discovery lies beneath both the Consortium's Block 7 area and Pemex's block and is thus subject to unitization. On December 9, 2019, the Consortium presented a formal notice to Mexico's Ministry of Energy providing technical evidence of the shared Zama reservoir. This required filing marked a significant step to move the Zama project as soon as possible to FID, and, eventually, to first oil, which is expected within three years after FID. The filing of the notice will move the unitization process forward by allowing SENER to seek the technical opinion of the CNH on the data presented by the Consortium. Once the CNH confirms the shared nature of the reservoir, SENER would then instruct the Consortium and Pemex to present a Unitization Agreement, which is currently being negotiated.

The preliminary steps of Front End Engineering and Design pre-FEED have been completed, and early FEED work has begun to develop the detailed engineering plans for Zama. The development will include two fixed production facilities capable of handling a combined 150 thousand barrels of oil per day, plus associated gas. Zama is located in approximately 550 feet of water, which would make the Zama platforms, once in place, the deepest production platforms ever installed in the history of offshore Mexico.

Mexico hedges oil output for 2020 as risks grow – *Reuters*

Mexico has completed its annual oil hedging program for 2020 at $49 a barrel, at a time when the finances of both the sovereign and state oil company Pemex are particularly vulnerable. The oil hedging program, the world's largest financial oil deal, is designed to protect Latin America's second-largest economy against oil price crashes. Mexico's creditworthiness came under increasing scrutiny in 2019 as two rating agencies flipped their sovereign outlook to negative, while another downgraded its rating, one already has Pemex bonds at "junk" status.

The annual cost of the price coverage was approximately USD $1 billion, although It was unclear how many barrels were hedged or how much was spent. The hedge price is notably lower than 2019, which was hedged at $55 per barrel, but in line with the oil price set out in the 2020 budget. Mexico typically hedges using options, which gives it the right to sell oil at a predetermined price, even if the price on the market is lower. It also reserves a portion of the budget stabilization fund to backstop its oil sales. Mexico remains the only country that has completed an oil hedging program of that scale. The economy is heavily reliant on oil sales even though their contribution to the federal budget has declined in recent years.

Pemex is heading to meet less than 60% of its drilling goal – *El Economista*

According to figures published by Pemex, crude oil production between January and November 2019 has fallen by 8.4% compared to the same period of 2018. In those 11 months, the oil company, one of the strongest bets of AMLO to relaunch the Mexican economy, obtained a daily average of 1,659 barrels; 153 thousand barrels less than in 2018, (1,812,000 barrels).

In addition Pemex reached only 58% of its well drilling goal for 2019. By November reported 206 wells drilled when in the Expenditure Budget were committed 354 wells throughout the year. In the Expenditure Budget of the Federation, Pemex committed the drilling of 62 exploratory wells and 292 development wells. By November, it has achieved only 20 exploratory wells, 32% of the goal, and 186 development wells, 64% advance.

In addition, Pemex was also delayed the presentation of development plans for three of the 20 priority fields and up to the beginning of November it had approved 17 of the 20 projects. With the seventeenth plan approved for the Suuk field in shallow waters, the state has committed a total investment of 16,087 million dollars for the activities of these areas over the next 20 years.

Power/Renewable Energy

Construction begins on Mexico's Topolobampo port – *Oil and Gas Magazine*

Construction is now underway on the Topolobampo PPP port project in Mexico's Sinaloa state after works were started on IEnova's hydrocarbons terminal and local firm ISAOSA's fertilizer terminal expansion.

The PPP involves federal funding to the tune of $3.6bn pesos (US$191mn), including $2.25bn pesos for the hydrocarbons terminal, $1.23bn pesos for the fertilizer terminal expansion and $207mn pesos to dredge the main channel for shipping.

The new hydrocarbons port, in northwestern Mexico's Sinaloa state, was awarded to IEnova, a subsidiary of Sempra Energy, in a tender concluded at the end of 2019 by the Topolobampo port administration. The storage terminal is expected to be in operation by 4Q20 and will be able to store up to 1.6Mb of regular, premium and diesel gasoline.

Topolobampo is one of IEnova's seven storage projects in the works in Mexico, which together represent an estimated investment of $24bn pesos. All seven are expected to come online between 2020 and 2021, adding 10Mb of domestic fuel storage capacity. This is equivalent to roughly 50% of the capacity that Pemex currently has. These projects include the marine hydrocarbon terminal in Veracruz, which involves an investment of USD $170 million and will have an expected capacity of 1.4Mb, contracted by Valero Energy.

Solar energy in Mexico increased 62% in 2019 – *Asociación Mexicana de Energía Solar*

Photovoltaic generation installed capacity increased 62% in 2019 compared to the previous year and according to the president of the Mexican Solar Energy Association "Asolmex", Héctor Olea, they expect the trend to continue for this year.

During 2019, an installed photovoltaic capacity of 5 thousand megawatts was recorded. "Today there are 63 solar power plants in operation in 16 states, 24 more when compared to 2018; among which is the largest power plant in America, located in Viesca, Coahuila". The investments made for the development of the projects, reached USD $8.5 billion dollars.

Regarding distributed generation, by the end of 2019 there were more than 112,660 contracts for solar roofs in Mexico, with an installed capacity of 818 megawatts, distributed in residential, commercial and industrial users. Asolmex added that there is great development potential for distributed generation considering Mexican solar radiation and roof availability.

Enel starts operations at 220 MW solar plant, Magdalena II – *Enel*

Enel, through its renewable energy subsidiary Enel Green Power México "EGPM", started operations at its new 220 MW Magdalena II solar facility, the Mexican state of Tlaxcala's first-ever renewable energy project, located in the municipalities of Tlaxco and Hueyotlipan.

The project's construction works involved an investment of around USD $165 million. Magdalena II is EGP's first project in Mexico to sell its entire energy output to private offtakers on the country's Wholesale Electricity Market. The facility is composed of approximately 550,000 bifacial modules, which are capable of generating approximately 640 GWh per year, avoiding the annual emission of about 350,000 tons of CO_2 into the atmosphere.

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