February, 2022

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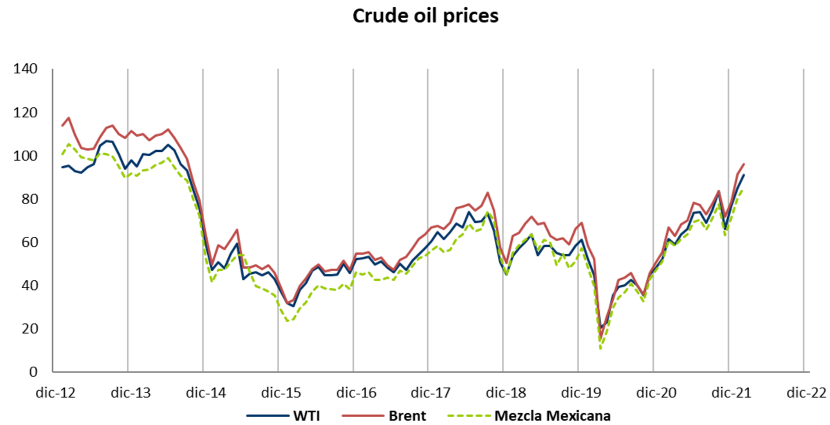
This month in review

** 25/02/2022 **28/02/2022*

Crude oil price MME US/BD	88.1
NG price HH* US/MMBTU	4.4
Mx crude production MMbd – *December*	1.65
Mx NG production MMpcd – *December*	4,697
US crude production MMbd - *December*	11.56
FX Rate*	20.42



Source: EIA. El Reforma, Pemex, Banxico, and CNH

Oil & Gas - Mexico

Shell cleared to invest USD $270 million in deepwater Mexican field – *CNH*

CNH allowed Shell E&E to amend its plans for the CS-G04 deepwater contract off the coast of Tabasco and Campeche states to account for a new well and scheduling changes. Shell would invest a minimum of USD $52.91 million at the site to spud the F well in 2022 and conduct a series of studies, and up to USD $270 million, to extend the F well deeper and spud another well, G, in 2023. The two wells are expected to incorporate some 265Mb of new oil resources.

Lukoil wraps buys 50% stake in shallow water area 4 offshore Mexico – *Oil and Gas Magazine*

Lukoil had completed the acquisition of the 50% operator interest in the Area 4 project in Mexico through the acquisition of the operator's holding company. The proposed acquisition was first announced in July 2021. The Mexican authorities approved the deal on February 3, 2022. As previously announced, the transaction value amounted to USD $435 million plus expenditures incurred since January 1, 2021, as of the transaction completion date (about USD $250 million).

The project includes two blocks, 58 square kilometers in total, which are located 42 km offshore in the Gulf of Mexico. The sea depth at the blocks is 30-45 meters. Two oil fields - Ichalkil and Pokoch - are located within the blocks. The recoverable hydrocarbon reserves of the fields amount 564 million barrels of oil equivalent, more than 80% of which is crude oil.

Production at the fields started in the fourth quarter of 2021, and the current average daily oil production exceeds 25 thousand barrels. The project is developed in three phases, with a peak daily production rate estimated to be more than 115 thousand barrels of oil equivalent. The partner in the project is PetroBal, the oil and gas subsidiary of Mexican conglomerate GrupoBAL, with the remaining 50% interest.

The project is implemented under a production sharing agreement, which was signed in 2016 for a period of 25 years with the right for an extension for up to 10 years.

Pemex to spud USD $49 million well off Tabasco state – *CNH*

CNH has cleared Pemex exploration and production arm PEP to spud the Siwak shallow-water exploratory well off the coast of Tabasco state. Pemex plans to invest USD $35.8mn to spud the well and USD $13.6mn to complete it to search for prospective resources totaling 5.6Mboe. The prospect is part of the company's 0152-M-Uchukil concession, which neighbors areas operated by Total, Eni, Lukoil, Repsol and Talos. Two other exploration wells are planned, with Niquita receiving approval earlier this month and Chamak in May last year. CNH said there was no risk of the potential discovery being shared with Lukoil's neighboring contract.

Eni has started oil production via the Miamte FPSO at the Miztón field – O*ffshore Mexico*

The field sits in Area 1 in the Gulf of Mexico, about 10 kilometers offshore the Tabasco coast. Upon its arrival in Mexico in January 2022, Miamte FPSO has been connected to its Mooring System and went through pre-commissioning and integrated commissioning activities. Following the first hydrocarbon introduction into the FPSO and two more platforms start-up in Amoca and Tecoalli fields, production will ramp up till the full field development will be completed by 2024.

The FPSO, supplied by MODEC, has an oil treatment capacity of 90 kbopd and gas treatment capacity of 75MMscfd. Early production from Miztón field started in June 2019, after only 3.5 years from the award of the Contractual Area 1, and 7 months from the Final Investment Decision. In Mexico, Eni currently holds interests in eight exploration and production blocks (six as an Operator), all located in the Sureste Basin in the Gulf of Mexico.

CNH approved exploration plan to Jaguar – *CNH*

CNH approved an updated exploration plan presented by Jaguar E&P its TM-01 area in Veracruz state, which straddles both onshore and offshore acreage. The company expects to spud a minimum of one well and up to two additional wells under the project's incremental scenario, for a total investment of up to USD $25.5 million.

BP, Equinor pull out of Mexico deepwater block – *NGI*

CNH has given the green light for the local subsidiaries of European energy giants BP plc and Equinor to pull out of their participation in a deepwater block offshore Veracruz and Tabasco states. The Mexico branch of France's TotalEnergies SE will now assume control of the Salina basin contract. A license on the block was granted to the consortium in an upstream bidding round in 2016. Equinor had said that the block was in "a largely unexplored deepwater area." The director of Mexico energy consultancy GMEC, Gonzalo Monroy, told NGI's Mexico GPI six blocks won during bid rounds during the previous Mexico government are also being returned to the CNH. He said the moves, however, have more to do with changing global strategies and capital discipline at major energy companies than politics.

"Mexico, as a frontier undeveloped play, is not as attractive as other global opportunities. If we take into account the strict capital expenditure discipline, no one is salivating over Mexico.

CNH approves Eni México's modified 2022 Saasken work plan – *CNH*

Eni México won approval for the modification of its 2022 Saasken exploration prospect work plan in the block 10 assignment in mid- to deepwaters of Burgos basin in the Gulf of Mexico. Saasken is expected to have reserves of 200-300Mboe.

The company has added investment of USD $360,000 for a gas leak and fire detection program that began in January and is set to run until May, as well as environmental studies scheduled from February to April. The new plan contains investment of USD $4.42 million, down 61% from the original plan of USD $11.5 million. The company also plans to have its static and dynamic modeling of the play, set within an evaluation area of 8.9km², completed by October.

CNH approves Oleum transition program plan – *CNH*

Mexico's Oleum del Norte won CNH approval for a revised plan for its transition program at the La Laja field. The field is part of the CNH-R01-L03-A10/2016 contract, located onshore Veracruz state and covering 10.2km². The development currently has seven drilled wells, one of which is producing crude.

Oleum asked the regulator to approve the transition program due to faster-than-expected early production activities. The operator plans to drill and complete a well, make 27 minor repairs, carry out three production tests, and build a temporary discharge line. With these activities, Oleum expects to recover about 189,000b of oil and 125Mcf of natural gas. Investment is USD $8.17 million, of which USD $1.42 million is for operating expenses.

Total abandons deepwater oil blocks – *CNH*

TotalEnergies has abandoned a deep-water block in the Gulf of Mexico after it deemed the project to be commercially unviable. In 2016 Total Energies along with ExxonMobil won a license contract for exploration and extraction of hydrocarbons in the deep waters of the Gulf of Mexico. In October of 2017 the CNH approved the exploration plan for Total E&P which contemplated the perforation of two exploratory pits. It concerns block 2 of the fourth bidding located in the deep waters of the Gulf of Mexico in front of the shores of Tamaulipas with a 2 thousand 976 km² surface.

Exxon and Total acted as main contractors and explored their respective pits, nevertheless, due to unsatisfactory exploration results, did not consider it to be of their commercial interest and presented their resignation to the area. On February 2020, Total notified its irrevocable resignation and quit the license contract. They proceeded to abandon the exploratory pit it perforated. In March 2020 Exxon and Total paid USD $21.2 million to the Mexican Oil Fund in reparation fees for completing less than 79% of its corresponding duties. "All of this is part of the risk. It is an uncertain business, but I will like to point out the positive, which is that the pit was perforated and information was obtained. We finally have certain knowledge about the subsoil that can serve as correlation with other pits in the region," said Alma América Porres, CNH commissioner. In addition, Porres explained that an investment of approximately USD $100 million and MX$186 million was allocated to perforation studies that can be now useful for Mexican oil entities.

Total has 8,214 employees in Mexico and approximately 200 service stations in the country. The firm still holds interests in several exploration blocks in Mexico, with operating rights. In the Salina basin Total won a share of 33.3% along with Statoil (33.4%) and BP (33.3%); in B15 it acts as operator and holds 60% of participating interest. And Blocks B32, B33 (50%) and B34 (42.5%) in shallow water. They are conducting various studies as part of a general technical cooperation.

CNOOC meets with Mexican energy minister on deepwater blocks – *Bnamericas*

Executives at the Chinese oil company met with Nahle to review CNOOC's exploration work, following the 4Q21 discovery of oil by the Ameyali-1EXP well drilled in the assignment designated AE-0094-Cinturón Subsalino-12 off the coast of Mexico's Tamaulipas state. The administration of President AMLO has been critical of private sector involvement in the upstream sector, committing major new investments to reinvigorate state-owned Pemex as the dominant player in the country. Most analysts, however, see Pemex as broadly lacking the technology, expertise or financial muscle to go into deepwater development on its own.

When CNOOC confirmed the find to hydrocarbons regulator CNH, it estimated the discovery to be 110.9Mboe with crude resources of 83.3Mb of API 38° and 164.5Bf3 of gas. CNOOC, in the meeting, reviewed its exploration plan for the A1. CPP area awarded to the Chinese firm in 2016's round 1.4 during Mexico's brief opening of the sector. CNH has also authorized CNOOC to drill the Xakpún-1EXP well, part of its evaluation plan for the A4.CPP area, also awarded in round 1.4.

Xakpún is also located off the coast of Tamaulipas, at a distance of 115km in a water depth of 1,369 vertical meters in an area of the Upper Wilcox formation, where the objective is to find 38-43° API light oil resources. The play is estimated to have a potential 993Mboe with a geological success rate of 42%.

CNH approves onshore work at Llave project to Pemex – *CNH*

Pemex's E&P unit received the green light to explore yet another block in the Llave onshore project in Cuenca de Veracruz province. CNH signed off on PEP's plan for the AE-0185-Llave 2 assignment, with the state company outlining a base scenario involving a USD $75.7 million investment plan and a separate incremental plan amounting to USD $103 million. Under the base scenario, four general studies and an environmental impact study would be carried out. The investment plan also includes processing 2D and 3D seismic data and drilling one well. The incremental plan entails nine studies, in addition to the environmental study and data processing. It also includes investments for drilling three wells.

The announcement comes on the heels of a string of approvals in and around the Llave project in January. CNH authorized three of PEP's exploration plans for its concessions Llave 1, Llave 7 and Llave 8, where it could invest up to USD $189 million. In Llave 1, Pemex would invest between USD $29.2 million and USD $68.2 million to drill up to three wells —Gafen, Nama and Tenenexpan— in order to make a discovery.

In Llave 7, it plans to invest between USD $16.2 million and USD $68.7 million in the drilling of the Fugitivo and Taha exploratory wells. In Llave 8, the state-run company indicated that it would allocate between USD $15 million and USD $51.8 million to drill a well and carry out a series of seismic studies.

BHP, Pemex meet to advance Trión – *Bnamericas*

Pemex and its partner in the deepwater Trión project, BHP Petroleum, confirmed work on the block will continue. Pemex CEO Octavio Romero met with the head of BHP Petroleum, Geraldine Slattery, to review the progress and scope of the project and agree on what comes next for Trión.

The fate of private sector involvement in Mexico's upstream sector has been murky since AMLO came to office in 2018, with new oil and gas rounds cancelled and some players abandoning blocks or allowing contracts to become void. BHP, however, is one of the few players in deepwater, where Pemex lacks the technical know-how and equipment to carry out development. Though the NOC has not given details of the talks, Pemex posted a photo of the meeting on its Twitter account.

Last September energy minister Rocío Nahle and Slattery met, when the latter sought to ensure the minister of BHP's long-term commitment to Mexico. And last July, the Mexican company mentioned in a call with investors that BHP told it that it had no plans to exit the agreement for the development of the Trión field, with BHP approving USD $258 million in FEED work on the block.

Power/Renewable Energy – Mexico

Mexico's CFE directly awards contracts for 6 combined cycle projects – *Bnamericas*

CFE has directly awarded contracts for work on six combined cycle plants to Siemens Energy and Mitsubishi Power. Together, the projects represent USD $3.47bn in investment, covered by a master investment trust held by subsidiary CFEnergía and income from the Fibra E investment fund. Under the contracts, capacity of nearly 4GW is due to be added. Siemens will build new generators adding 205MW in capacity at the González Ortegaplant, as well 680MW in new generators at the San Luis Río Colorado unit. It will also add 327MW in capacity at the Baja California Sur unit and 1,086MW at the Tuxpan Phase I plant.

The four projects require USD $2.26bn, according to the report. Mitsubishi will be in charge building new combined cycle plants in Mérida and Valladolid to help bring 1.52MW of capacity to the power-starved Yucatán Peninsula, with an investment of US$1.22bn. CFE expects the new plants to come online in the first quarter of 2024.

KKR vs. Mexico's López Obrador – *WSJ*

Monterra Energy owned by KKR & Co intends to sue Mexico to recover the value of its fuel-storage terminal in Tuxpan, a Gulf Coast city in Veracruz state. The facility was closed at gunpoint by the Mexican government in the wee hours of Sept. 14 and has not been allowed to operate since. According to a notification sent to Mexico's Ministry of Economy, Monterra investors seek USD $667 million in compensation, plus interest and legal costs. Yet any financial settlement that Mexico may be forced to pay is likely to be dwarfed by the damage caused to the country's reputation as a destination for capital.

Mexico seen requiring USD $6bn in clean energy investment to meet 2024 goal – *Bnamericas*

Mexico needs to invest at least USD $6bn by 2024 to meet its clean energy goals, according to CEEG, a business group formed by 57 multinational companies operating in the country. CEEG president Alberto de la Fuente outlined the goal while speaking during a climate transition panel as part of the ongoing open dialogue on proposed constitutional changes to the electric power sector.

After one month of near-daily panels, the pro-reform coalition led by Mexican President AMLO, Morena party has yet to garner the necessary support for the initiative in order to secure the two-thirds majority in the lower house that is needed to change the constitution. Those changes would see state-owned power utility CFE gain sweeping control over the electricity sector and likely lead to re-negotiations and/or cancellations of all existing private sector power generation or sales contracts. It would also create a priority dispatch order, requiring CFE generation to be purchased before private generators regardless of cost.

While most analysts believe the bill will not pass in its current form, even a watered-down proposal has many private sector firms on edge, particularly those seeking to produce their own clean energy or set up public-private partnerships to guarantee their power comes from clean sources. De la Fuente said many international companies are committed to have operations running on 100% renewable energy by 2024.

"If a company sees that in Mexico it can't meet its clean energy goals, it's simply going to leave," he said. Mexico's international commitments to the clean energy transition include a 31% reduction in greenhouse gas emissions from the power sector by 2030 and having 35% of generation coming from clean energy sources, though the AMLO administration has intimated it will include natural gas to reach the goal.

CFE lacks the infrastructure and funds to meet renewable energy demand and move towards a lower emissions future on its own, and hence the lion's share of the USD $6bn needed investment must come from private firms, according to de la Fuente. The statist ideology behind the proposed reforms and the insistence of changing the playing field in the wholesale electricity market to favor CFE are also damaging Mexico's overall investment climate.

In its most recent poll of private sector analysts, the central bank found that only 8% of those polled believe it is a good moment to invest in Mexico, with the remaining respondents divided between saying it was a bad moment (53%) and being unsure (39%). With 92% not feeling good about investment, "you really can't have a reactivation of the economy," said Mexican economist Federico Rubli Kaiser, vice-president of the economic committee at the Mexican Finance Executives Association (IMEF).

Sempra, CFE Sign MOU to Advance LNG, Natural Gas pipeline projects – *NGI*

Mexican state power utility CFE and Sempra Infrastructure have signed a nonbinding memorandum of understanding (MOU) to develop two liquefied natural gas projects and complete the Guaymas-El Oro natural gas pipeline. The LNG projects comprise the Vista Pacífico liquefaction terminal envisaged for Topolobampo, Sinaloa, and a regasification project in La Paz, Baja California Sur.

Guaymas-El Oro, part of Sempra's Sonora pipeline system in northwestern Mexico, has been out of commission since 2017 amid a dispute with a local faction of the Yaqui Indigenous community. "The development of these projects would allow CFE to optimize excess natural gas and pipeline capacity from Texas to Topolobampo," Sempra management said. The projects are designed to increase CFE's "natural gas supply to its power plants in Baja California Sur, to advance President AMLOS's commitment to supply the state with low-cost electricity and lower-emission fuels, and to promote economic growth and development of the region, with a view toward strengthening CFE's position in global LNG markets."

The companies are aiming to return Guaymas-El Oro to service "through a proposed re-routing based on mutual understanding between the Yaqui community and CFE through continued respectful dialogue," Sempra management said. "Through this new route, CFE would be able to supply natural gas to industrial, commercial and residential markets in the Pacific Coast of Mexico, Baja California Sur, as well as the Vista Pacífico LNG facility. "Through these combined actions, CFE contributes to strengthening the country's energy security and reaffirms its commitment with the Mexican people, while Sempra Infrastructure agrees to continue to work to develop critical new energy infrastructure in Mexico."

CFE signed a similar agreement with TC Energy Corp. in late July. That MOU outlined a path to resolve pending arbitration proceedings over natural gas transport contracts, as well as develop an offshore natural gas pipeline from Veracruz to the Yucatán Peninsula. The Sempra MOU follows a January announcement by CFE executives of plans to launch multiple tenders for natural gas infrastructure, and to make available excess pipeline capacity on the U.S.- Mexico border.

Oil & Gas - LATAM

Vista reports 42% annual increase in total P1 reserves – *Vista O&G Press Release*

Vista Oil & Gas, reported its estimated certified proved (P1) oil and gas reserves as of December 31, 2021, which showed a 42% year-over-year increase, for a total of 181.6 MMboe. P1 reserves additions totaled 67.6 MMboe, implying a reserves replacement ratio of 477%. The proved oil and gas reserves in Vista's flagship Bajada del Palo Oeste project were estimated at 155.0 MMboe. "This constitutes an outstanding achievement by our operations team, as we continue to prove the quality of our core Vaca Muerta acreage and our ability to organically generate profitable growth", commented Miguel Galuccio, Vista's Chairman and CEO, and added: "As we continue to invest in Bajada del Palo Oeste, we expect to keep incorporating our deep inventory of new well locations into our proved reserves base".

Average daily production during Q4 2021 was 41,064 boe/d, a 34% increase year-over-year, mainly driven by growth in Bajada del Palo Oeste. Oil production was 32,436 bbl/d, an inter annual increase of 41%. Natural gas production in Q4 2021 was 1.29 MMm3/d, a 15% increase year-over-year. Total production in 2021 averaged 38,845 boe/d, a 46% increase year-over-year, of which oil production was 30,359 bbl/d and natural gas production was 1.22 MMm3/d, reflecting inter annual increases of 66% and 4%, respectively.

Proved reserves breakdown by type (MMboe)	2021	2020	▲ y/y (MMboe)	▲ y/y (%)
Proved developed reserves	**64.7**	**53.3**	**11.4**	**21%**
Oil	48.5	37.8	10.7	28%
Natural Gas	16.2	15.5	0.7	5%
Proved undeveloped reserves	**116.9**	**74.9**	**42.0**	**56%**
Oil	98.1	61.7	36.4	59%
Natural Gas	18.8	13.2	5.6	43%
Total proved reserves	**181.6**	**128.1**	**53.5**	**42%**

Petrobras divests Alagoas cluster fields – *Offshore Magazine*

Petrobras has completed the sale of its interest in seven producing concessions forming the Alagoas Cluster, onshore and offshore Alagoas State, Brazil, to Origem Energia. Origem is a Brazilian E&P and thermoelectric power generation company. The full sale price is $300 million. The Alagoas Cluster, which includes the shallow-water Paru field concession in 24 m (79 ft) water depth, delivered on average 1,620 b/d of oil, 62,000 b/d of oil and condensate, and 550,000 cu m/d of gas last year.

Also included in the transaction is the Natural Gas Processing Unit (UPGN) of Alagoas, which handles all the cluster's gas, processing up to 2 MMcm/d. In addition, it includes seven onshore and shallow water production concessions operated by Petrobras since the 1970s. Also included in the deal are two treatment stations and a network of 230km of pipelines with direct access to the TAMAC oil export terminal, located in the Alagoas state capital.

The assets' sale to Origem Energia, one of the first companies to sign gas distribution contracts under the country's new gas market rules, signals the end of Petrobras' monopoly in the natural gas production area of Alagoas. The sale was first announced by the state-owned company last July and is in line with Petrobras' disinvestment plans to focus on deep and ultradeep water assets.

Ecopetrol, ExxonMobil advance Colombia fracking plans – *Bnamericas*

Ecopetrol and ExxonMobil have submitted an environmental impact assessment (EIA) for their Platero fracking pilot in northern Colombia as they step up unconventional drilling plans. Investments in the joint venture are expected to reach 176bn pesos (USD $44 million), according to documents filed with national licensing authority ANLA.

The EIA is considered a key step in the companies' plans to secure an environmental permit for the project, located in the Puerto Wilches area of Santander department. The study included the input of 150 people over nine months, according to Ecopetrol. Ecopetrol and ExxonMobil are also seeking an environmental license for the nearby Kalé fracking pilot, for which investments of US$84mn are forecast. The companies are allowed to drill a maximum of two horizontal wells each in Platero and Kalé. Ecopetrol said it expects permits for both projects to be approved this year, paving the way for the start of drilling activity.

Their commercial development, however, hinges on a decision by Colombia's highest administrative tribunal. The council of state, as the tribunal is known, ordered a moratorium on unconventional drilling in 2018, citing socio-environmental concerns of local communities and lobbyists. While the pilots were exempt from the ruling, the court has yet to decide whether to allow the practice on a commercial scale. It outlines proposed actions to mitigate risks to communities, ecosystems, biodiversity and water supply, among other considerations.

Petrotal reports 68% increase in Peru field proved oil reserves – *Dow Jones*

Petrotal Corp. reported a 68% increase in year-end proved oil reserves for its Bretana field in Peru, to 37 million barrels. The Peru-focused energy company also said proved-plus-probable reserves rose 53% to 78 million barrels. "Based on the increased recovery factors and additional booked drilling locations, we have significantly extended the running room and future development potential of our asset. This should allow Bretana to generate free cash flow for a much longer period of time," Chief Executive Manuel Pablo Zuniga-Pflucker.

Petrobras signs contract to offload Potiguar fields – *Nasdaq*

Petrobras PBR has signed a deal to sell 100% of its interest in 22 concessions of onshore and offshore production fields, along with its infrastructure situated in the Potiguar basin (together called the Potiguar Cluster) in the Rio Grande do Norte, north of Brazil, to 3R Potiguar, which is a wholly owned subsidiary of 3R Petroleum Óleo e Gás. The transaction also includes the Potiguar Clara Camarao refinery with a processing capacity of 39,600 barrels per day.

This deal is in accordance with Petrobras' portfolio management strategy and an improvement in its capital allocation while maximizing value. The company is looking to produce superior quality oil with reduced emissions by increasing the concentration of its resources on assets in deep and ultradeep waters.

The agreement, which will require regulatory approval from Brazil's National Agency of Petroleum, Natural Gas and Biofuels, is worth $1.38 billion ($110 million paid, $1.04 billion to be paid at closure and four annual installments of $ 58.75 million each by March 2024). The Potiguar Basin consists of three subclusters (Canto do Amaro, Alto do Rodrigues and Ubarana), having an aggregate of 22 fields across 19 onshore and three offshore concessions, and incorporates access to the infrastructure necessary for processing, refining, logistics, storage, transportation and export of oil and natural gas. Ubarana subcluster concessions are located in shallow waters around 10 km and 22 km off the coast of the municipality of Guamaré-RN, while subclusters Canto do Amaro and Alto do Rodrigues are onshore. The average output from three of these subclusters last year was 20,600 barrels of oil per day and 58,100 m³ of natural gas per day.