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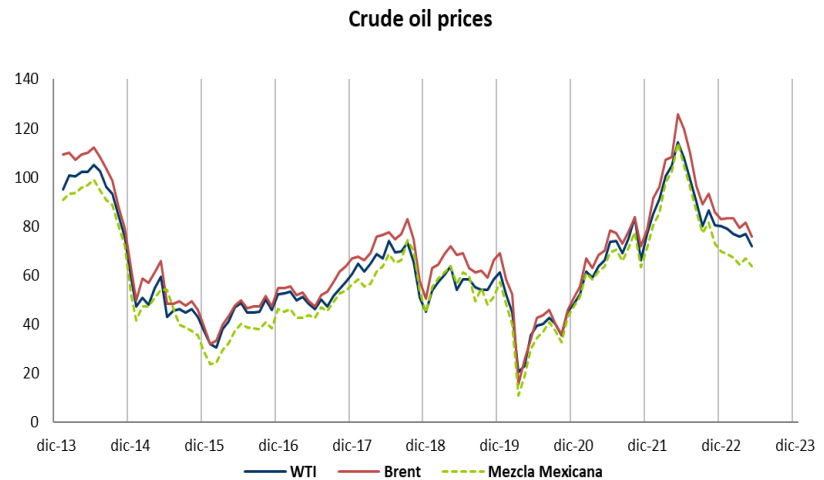
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This month in review

* 12/06/2023

MME US/BD*	66.21
MME US/BD* PEF SHCP	68.70
Dif. MME AVG. 2023 vs. MME PEF SHCP	-2.64
NG price HH* US/MMBTU	2.35
Mx crude production MMbd – April	1.66
Mx NG production MMpcd – April	4,400
US crude production MMbd - March	12.69
FX Rate*	17.31



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

Oil & Gas - Mexico

Pemex and other partners to invest USD \$9 billion in Zama field – CNH

The CNH, has authorized PEP along with the integrated consortium of Talos Energy, Harbor Energy and Wintershall Dea to proceed with the development plan, work program and associated budget for the field. Pemex, Talos Energy, Harbor Energy and Wintershall Dea have committed to invest over USD \$9 billion in the development of the Zama oil field.

Situated in the shallow waters of the Gulf of Mexico, off the coast of Tabasco, the Zama deposit spans an area of 26.7km² and holds approximately 850 million barrels of crude oil equivalent. The approved plan aims to commence the extraction and development of hydrocarbons in the field, targeting a 3P reserve estimated at 675 million barrels and 262 billion ft³ of gas. According to AMLO, production at the Zama oil field is now expected to start in 2025 and reach its peak in 2029. AMLO anticipates that daily extraction will range between 150Mb/d and 180Mb/d of light crude oil. Although the current administration will not oversee the production phase, López Obrador emphasized that significant quantities of high-quality Olmeca crude oil will be extracted starting in 2025.

Pemex and its partners have proposed drilling and completing 46 wells, carrying out 215 minor repairs, constructing three pipelines, two platforms and a separate battery, as well as abandoning eight wells.

PEP aims to retrieve 625 million barrels of oil and 2.43 billion cubic feet of gas through an investment of \$4.541 billion. The plan entails transporting the extracted hydrocarbons from the Zama A platform to the Zama B platform via a pipeline and subsequently routing the gas to the Cactus Gas Processing Center and the oil to the Dos Bocas maritime terminal.

Condensates drive Pemex's liquid hydrocarbon production recovery – *Business Mexico News*

The recent recovery in the production of liquid hydrocarbons by Pemex was driven by condensates. Their significant presence in some of the new fields is now the key to sustaining the company's efforts toward crude production recovery. Condensates are hydrocarbons that exist in a gaseous form within oil and natural gas reservoirs but condense into a very light hydrocarbon upon contact with the surface temperature. Production of this type of hydrocarbon has begun to increase with the development of the Quesqui and Ixachi onshore fields, which surprised with their high content of these liquids.

Based on the API classification, condensates are very light, with a minimum gravity of 50° although they can reach up to 120°. Mexico's lightest crude is Olmeca, with a 39° API. The share of condensates in Pemex's report on liquid hydrocarbon extraction, totaling 296.544Mb/d, reached 15.5% in April, compared to 14.8% in the same month of 2022. One year ago, it accounted for only 4.5% of total extraction and in 2018, it was just 1% of the total. Total crude oil extraction, meanwhile, totaled 1.607MMb/d in April 2023, increasing by 0.65% in one month but declining 4.6% year-on-year.

The condensates that Pemex began reporting in 2018 were found in large volumes in wet gas reservoirs. Unlike dry gas with a high methane content, which is used directly as gas for heating and is transported in pipelines in a gaseous form, wet gas has more value due to its propane, butane, pentane, as well as naphtha fractions content, which can be separated for petrochemical uses as precursors in the manufacturing of plastics and lubricants. However, Pemex does not report the specific use given to these products. Given that the company's petrochemical production is 29% lower than it was four years ago, it is considered that the condensates are either mixed in crude oil production for export or sold separately abroad.

New Pemex oil refinery to again miss production launch – *Reuters*

Pemex's new Dos Bocas Olmeca refinery is unlikely to start until late 2023 or early 2024. When it does begin transforming crude into refined products, the refinery built to process 340,000 barrels per day of oil and will be Pemex's biggest among seven domestic facilities.

Late last year, Lopez Obrador said the refinery at the Gulf Coast port of Dos Bocas in his home state of Tabasco would begin by processing half of its capacity this July, or 170,000 bpd, a year after a flashy, symbolic inauguration. The audit report, which is not public, indicates "that the July 2023 start date is not feasible" and that construction of the refinery's coking plants needed to efficiently process Pemex's heavy crude are "not yet finished." Asked to explain the delay outlined in the report, Pemex referred Reuters to the energy ministry, but the ministry did not respond to a request for comment.

The Olmeca refinery has also been plagued with cost overruns, as the price tag has roughly doubled from the \$8.9 billion initially budgeted in 2020. The May report cited refinery contracts worth the equivalent of \$16.9 billion - close to a billion dollars more than the sum approved by Pemex's board last August.

New Fortress-CFE barge expected to start LNG operations in August – *Bnamericas*

New Fortress Energy (NFE) has been granted an export permit for its offshore Altamira LNG hub. The firm has been authorized by energy ministry SENER to export up to 7.8Mt of LNG through April 2028. The gas will be sourced from the US through the Sur de Texas-Tuxpan marine pipeline in partnership with state-owned utility CFE.

The permit marks the final major regulatory step for the project, which entails construction and deployment of a 1.4Mt/y floating LNG unit for a US\$2.2bn initial investment. Two additional barges could later take capacity to 4.2Mt/y. President AMLO said that the project's full deployment would require investments of USD \$5.5bn. Construction of the first platform is currently underway in Corpus Christi, Texas, and over 90% complete, NFE said. In a separate release, CFE said the progress was 95%. Final installation at the site is expected for June-July. Testing is expected to begin at the end of July, with the first delivery taking place in August, CFE said.

According to CFE, its international trading arm CFE International will purchase US-sourced gas, which will be transported via the Brownsville pipeline and delivered to local gas trading arm CF Energía. In turn, CF Energía will transport the gas through the marine pipeline to deliver 235,000MMBTU/d to the LNG platform, located 26km off the coast of Altamira port, Tamaulipas state. CFE expects to take in revenues totaling USD \$5.7bn from the operation of the project, including a 10% share of the final LNG sale.

Iberdrola finalizes USD \$6 bn deal to sell Mexico plants – *Iberdrola Press Release*

Iberdrola has signed a binding deal for the planned USD-6-billion sale of a portfolio of combined-cycle gas plants and a wind farm in Mexico to Mexico Infrastructure Partners (MIP). The investment fund manager is acquiring operations accounting for 55% of the Spanish company's EBITDA in Mexico, including the associated contracts and more than 410 related jobs. Iberdrola, will retain 13 plants, all its activity with private customers and its 6-GW renewables portfolio in the country.

The multi-gigawatt portfolio of combined-cycle gas plants that is the subject of the transaction includes 12 assets. The wind farm being sold alongside them is the 103-MW La Venta III facility. The new deal is a continuation of the MOU signed two months ago. The seller further noted it intends to make additional wind and solar investments in Mexico in the coming years. It added that Mexico's Energy Regulatory Commission has recently authorized a generation permit for the company's 105-MW Santiago wind farm in the state of Guanajuato, an application for which was submitted to the regulator last October.

Mexican distributed generation player hits 50MW capacity – *Bnamericas*

Mexican distributed generation player Energía Real reached 50MW of installed capacity amid a boom among commercial and industrial clients. The company, controlled by investment firm Riverstone since 2021, installs and operates solar panels. It covers the investment and then charges the client for every kWh generated.

The model is becoming increasingly attractive for commercial and real estate clients, given the difficulties associated with building utility-scale renewables plants in Mexico. Distributed generation is the only segment of Mexican renewables currently seeing strong growth. According to the energy ministry, Mexico expects companies to add 20.4GW of new capacity over the next four years, of which 9.2% (or 1.8GW) is expected to comprise distributed generation assets.

Oil & Gas - LATAM

Chevron to invest USD \$500 million in Argentinian oil field – *World Oil*

Argentina and Chevron reached a deal where the oil company will invest up to USD \$500 million in the El Trapial field in the Vaca Muerta deposit, Economy Minister Sergio Massa said. Chevron will invest USD \$300 million by next week. The company could invest another USD \$200 million this year depending on the advances in the investment. Chevron Argentina holds concessions in the Neuquén basin and is looking to unlock unconventional oil and gas resources in the Vaca Muerta shale basin.

Petrobras begins FPSO production at Búzios – *Rigzone*

Petrobras has started oil production at its floating production storage and offloading unit (FPSO) at the Búzios oilfield in Brazil.

The FPSO Almirante Barroso platform can produce up to 150,000 barrels of oil and 211.89 million cubic feet of gas daily. The FPSO will contribute to the oil production of the Búzios field, which currently averages 560,000 barrels a day, or around 17 percent of national production, the company said. The Búzios oilfield is in the Santos Basin, southeast offshore of Brazil, with an average water depth of approximately 7,218 feet. It is the world's largest deep-water pre-salt producing oil field, according to the news release. It uses the traditional deepwater pre-salt development mode, which includes an FPSO and subsea facilities. FPSO Almirante Barroso is located 112 miles off the coast of Rio de Janeiro and operates its production in a water depth of 6,234 feet (1,900 meters). It is the fifth platform to start operating in the Búzios field, where the P-74, P-75, P-76, and P-77 units are already in production, the company said.

Búzios targets to have 11 platforms. Currently, six units are under construction: FPSO Almirante Tamandaré, P-78, P-79, P-80, P-82, and P-83. Petrobras operates the shared Búzios field with an 88.99%, with China's state-owned energy firms CNOOC and CNODC holding 7.34% and 3.67%, respectively.

FPSO Almirante Barroso is a unit chartered from Tokyo-based Modec, a provider of floating production solutions such as FPSOs to the offshore oil and gas industry. The FPSO is leased on a 21-year time charter contract, according to a news release from Modec. The FPSO is the 15th FPSO/FSO vessel that MODEC has delivered to the Brazilian oil and gas sector and the eighth for the pre-salt region.

Colombia's Ecopetrol refinery awarded more than \$1 billion in arbitration – *Reuters*

Refinería de Cartagena (Reficar), a refinery owned by Colombia's largest company Ecopetrol, is set to receive more than \$1 billion following an arbitration ruling in its favor against a group of contractors.

The International Chamber of Commerce ordered contractor CB&I to pay more than \$1 billion to Reficar, plus interest gains from Dec. 31, 2015. Reficar sought arbitration in March 2016 amid a dispute with consortium CB&I, made up of Contractor Chicago Bridge and Iron Company NV, CB&I (UK) and CBI Colombiana SA. The unit accused the consortium of doubling construction costs during the renovation of the refinery and failings in the engineering, procurement and construction contract. Furthermore, CB&I's claims for \$400 million were dismissed, Ecopetrol added, and the consortium was ordered to settle the EPC contract, as requested by Reficar.

The decision by the tribunal may be subject to formal corrections and clarifications. Reficar began operating at the end of 2015 following two years of delays and an investment of over \$8 billion, double the expected figure. The refinery, in northern Colombia, can process up to 200,000 bpd and is second only to the refinery in Barrancabermeja, which can process up to 250,000 bpd. Ecopetrol generates most of the country's oil production. It owns the two main refineries as well as most of the pipeline network.

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