July, 2022

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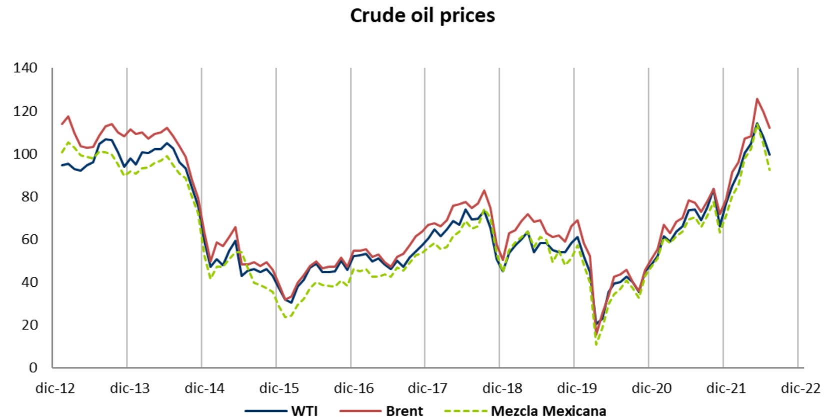
This month in review

** 25/07/2022 **26/07/2022*

Crude oil price MME US/BD	96.09
NG price HH* US/MMBTU	8.64
Mx crude production MMbd – *June*	1.64
Mx NG production MMpcd – *June*	4,784
US crude production MMbd - *April*	11.62
FX Rate*	20.46



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

Oil & Gas - Mexico

Moody's downgrades Pemex's to B1; outlook changed to stable – *Moody's*

Moody's downgraded Pemex corporate rating and the senior unsecured ratings on the company's existing notes, to B1 from Ba3.

The downgrade was prompted by the downgrade of Mexico's rating, given the critical importance of the government's financial strength and support in the assessment of Pemex's credit profile due to its high liquidity risk. The action also considered Pemex's high debt maturities in 2022-24 and Moody's expectations for continued negative free cash flow and the need for large amounts of external funding given persistent loses at the company's refining business, the necessity to maintain capex at least at current levels to sustain production and reserves stable, and high interest expenses.

The action also took into account that Pemex's access to the capital markets is currently limited given its high intrinsic credit risk. Elevated oil prices in 2022-23 will support higher cash generation at Pemex's E&P business in the period but will simultaneously increase royalties and operating costs at the refining business. Although oil and gas production growth has been below management targets, it is positive that, since 2019, Pemex has been successful in maintaining production and reserves relatively stable. However, Moody's estimates that, in 2022-24, the company will only be able to sustain production and reserves at current levels given its inability to invest larger sums of capital in E&P. Moody's assumes that the government, as promised, will continue to fund Pemex's cash needs and help the company to comply with its debt amortization obligations of $5.1 billion in 2022, $7.5 billion in 2023, and $8.9 billion in 2024, as of March 2022. Pemex has weak liquidity and is highly dependent on government support.

CNH approves exploratory wells for Wintershall – *CNH*

The drilling of five exploratory wells won approval, one operated by Wintershall Dea and four by PEP. Three of the exploratory wells will be located in Mexico's Cuencas del Sureste area on the shoreline of Veracruz and Tabasco states and offshore in the Bay of Campeche (including Wintershall's shallow-water Kan-1EXP well). The contractual area is located on 528km² off the coast of Tabasco state, and this is the operator's first exploratory well. Prospective resources are estimated at 78.5Mboe. The probability of geological success is 40%.

CNH also signed off on four exploratory wells for PEP, two in the Cuencas del Sureste area and two in the Misantla-Tampico basin along the coastline of Tamaulipas and northern Veracruz states.

PEP will drill the Xale-1EXP exploratory to look for resources in the contractual area covering 471 km² in the shallow waters off Veracruz and Tabasco states. The well has estimated resources of 10.8Mboe with a 30% chance of success. Located onshore in Tabasco state, the Xamitl-1EXP well will be sunk to seek hydrocarbons in the contractual area that covers 1018 km². Estimated resources are 25Mboe with a 23% chance of success. PEP's Chulux-1EXP well has estimated resources of 5.1Mboe with a 17% chance of success. The Yuban-1EXP exploratory well will be drilled to find hydrocarbons in a 1608 km² contractual area, also onshore in northern Veracruz state. Estimated resources at Yuban-1EXP are 3.6Mboe with an estimated 20% chance of geological success with the well.

CNH approved Pemex plans for Och, Kax fields – *CNH*

CNH approved the amendments to PEP's development plan for the A-0242-M-Campo Och assignment, involving an investment of USD $629 million. The regulator also approved PEP's investment of USD $39.1 million to modify the development plan for assignment A-0176-M-Campo Kax.

Occupying 24.5km2, the Och field is located in shallow territorial waters in the Gulf of Mexico, 108km northwest of the city of Paraíso, Tabasco. Currently, it has eight wells drilled, of which five are producers, from which volatile oil of 39º API is extracted. The modification entails plan to switch the focus of production towards natural gas, as well as increasing oil output volumes by 30%. At Och, Pemex has been given the green light to drill and plug two wells, make two major repairs and 11 minor repairs, build a pipeline and a platform to recover 31.7Mb of crude oil and 104Mf3 of gas.

PEP will also enact the newly approved amendments to its plans at the Kax field, located under a 5.63 km². area of the Gulf of Mexico off the coast of Tabasco. It has six wells drilled, of which two are producers, pumping oil of 39º API. Currently, the field has a production of 3,000b/d of crude and 4.45Mf3/day of natural gas. The modified plan tacks 15% onto earlier investments in order to increase production by more than 30%. With the changes, Pemex plans to extract an additional 810,000b of oil and 1.71Bf3 before capping three wells and abandoning activities.

Pemex-Talos dispute remains unresolved, AMLO – *Bnamericas*

The dispute between Talos Energy and Pemex over the Zama field is still not resolved, according to President AMLO, who contradicted earlier reports. "Talos is the only oil company with which we've had differences, because they have not wanted to accept that Pemex has more oil than they do in the Zama field," AMLO, said. AMLO claimed that, under the law, the party with the largest share of potential reserves will gain ownership. "And they want, being a minority, to have the operation and that cannot be done, it is illegal."

After talks between Pemex and Talos failed in March 2021, SENER took over and handed operatorship to Pemex's upstream unit PEP in July 2021. PEP received an 82.65% stake and Talos 17.35%. However, CNH must still sign off on a final agreement, approved by all stakeholders, before the development can advance. PEP signaled an advance, while its draft development program considers first production in 1H24. PEP said the agreement for CNH was being drafted together with the Talos-led consortium, also involving Premier Oil and Sierra Oil (owned by Germany's Wintershall). PEP expects the field's oil output to peak at 180,000b/d, roughly 11% of Mexico's current production and 20,000b/d more than estimated under previous plans.

NFE announces agreement with Pemex to complete Lakach offshore gas field – *NFE Press Release*

New Fortress Energy signed an agreement that involves the joint development of the Lakach deepwater natural gas field for Pemex to supply natural gas to Mexico's onshore domestic market and to produce LNG for export to global markets. Pursuant to the strategic alliance signed with Pemex, NFE will invest in the continued development of the Lakach field over a two-year period by completing seven offshore wells. In addition, NFE will deploy to the Lakach field a 1.4 MTPA FLNG unit to liquefy the majority of the produced natural gas. Remaining natural gas and associated condensate volumes would be utilized by Pemex in Mexico's onshore domestic market. NFE and Pemex believe the Lakach field will yield approximately ten years of production, with the possibility of significantly extending the reserve life if nearby fields are developed.

Pemex discovered the Lakach deepwater natural gas field in 2007 and subsequently carried out significant exploration and development activities. Lakach is one of the largest non-associated gas fields in the Gulf of Mexico with total original gas in place of 1.1 trillion cubic feet and is located approximately 70 km off the coast of Veracruz in southeastern Mexico.

Pemex oil exports fall despite rally – *Bloomberg*

Pemex's oil exports are falling while Mexico's reliance on foreign fuels is rising in spite of a government goal to shed its dependence on global energy markets. The company's crude oil exports hit 922,000 barrels a day in June, a 4.5% month-over-month decline, marking the fifth month so far this year that Pemex exported less than one million barrels a day. Pemex imported about 888,000 barrels of refined products in June, a record this year. Gasoline imports rose 17% over the period, and diesel increased 34%, as Pemex seeks to secure supplies amid global fuel shortages.

U.S., Canada demand trade dispute talks over Mexican energy policies – *Reuters*

The United States and Canada demanded dispute settlement talks with Mexico under a North American trade deal, charging that Mexican energy policies were discriminatory and "undermine" international firms and cross-border supplies. The request, marks the most serious trade fight between Washington and Mexico City since the U.S.-Mexico-Canada Agreement on trade took effect two years ago. If unresolved, it could ultimately lead to punitive U.S. tariffs.

The United States has challenged energy sector policies in Mexico that favor CFE and Pemex at the expense of U.S. firms in violation of the North American free trade agreement. Canada's trade ministry later told Reuters it was launching its own energy consultations with Mexico and "supporting the U.S. in their challenge. "We agree with the United States that these policies are inconsistent with Mexico's (USMCA) obligations," Ministry of International Trade Alice Hansen said.

The United States Trade Representative (USTR) said the requested consultations relate to Mexican measures that it argues disadvantage U.S. firms in favor of Mexican state-owned power utility CFE and oil producer Pemex. USTR said it was challenging amendments to Mexican legislation that prioritize distribution of CFE-generated power over cleaner sources of energy provided by private-sector suppliers, such as wind and solar - moves that it said "disincentivize" U.S. investment in clean energy. One controversial law – the Electricity Industry Law – gives power generated by the CFE priority on the national grid over that produced by private and renewable energy companies. The law was passed by Congress in March 2021 and upheld by the Supreme Court in April. At stake in the dispute are tens of billions of dollars, worth of U.S. and Canadian investments in Mexico's energy infrastructure. Ken Salazar, the U.S. ambassador to Mexico, puts the U.S. figure at $30 billion, including planned projects.

Pemex launches tender for onshore drilling equipment – *Oil and Gas Magazine*

Pemex will hold a tender to lease drilling equipment for onshore oil and gas projects in the states of Puebla, Tabasco, Oaxaca and Veracruz. The international tender announcement was published by Pemex for drilling and completion operations at exploration wells and production on land assignments.

The winning firm will lease the gear for assignments in the Coyula, Comalcalco, Cuichapa and Llave fields. Comalcalco is located on the edge of Sierra de Chiapas, within the coastal plain of the Gulf of Mexico, in Tabasco. Coyula is on the border of Veracruz and Puebla, while Cuichapa covers part of Veracruz and Tabasco. Finally, Llave is located in Veracruz and Oaxaca. Pemex will hold an information with bids submission and opening scheduled for August 8 and the winner to be announced on August 18.

Mexico Q2 drilling report shows spudding on the mend – *Bnamericas*

Oil and gas operators in Mexico reported spudding 51 wells during the second quarter, according to CNH. In its 2Q22 drilling activity report, CNH also reported estimated initial production at the newly spudded wells amounting to 155,500b/d of crude oil and 282Mf3/d (million cubic feet per day) of natural gas. The report said that there were fewer wells spudded in the second quarter compared to the first quarter, which had 56.

However, estimated initial production from Q2's new wells is roughly double that forecast for the Q1 wells, at 87,100b/d crude and 133Mf3/d gas.

Pemex, announced drilling 40 wells in Q2, followed by DS Servicios Petroleros with seven and Servicios Múltiples de Burgos (SMB) with two, while Eni and Hokchi Energy announced drilling one new well each in the quarter. Likewise, PEP claimed the lion's share of projected output at the new wells, forecasting 133,100b/d and 276Mf3/d at assigned wells.

Expected production from the new wells by private contractors amounted 16.4Mb/d and 3.3Mf3/d. Private players reached a key production milestone in May, hitting 101,000b/d of oil, according to CNH. Of the 51 wells spudded, 65% were onshore and 35% offshore, where projected production at onshore wells came to 90,000b/d and 217Mf3/d. Offshore wells are expected to reach 65,500b/d of oil and 64.6Mf3/d of gas.

Preliminary investment amounts for the wells amounted to 23.2bn pesos (USD $1.14bn), with PEP assignments amounting to 18.1bn pesos for drilling and 2.8bn pesos for well termination. CNH reported that $700 million pesos would go to drilling and 200mn to termination for PEP contracts and migrations, while private contractors expect to invest 800mn to drill and 600mn to terminate the announced wells.

Mexico has tanker traffic jam as Pemex splurges on foreign gasoline – *Bloomberg*

More than 60 ships carrying an estimated 18 million barrels of fuel are sitting off the coast of Mexico waiting for storage to open up so they can unload and paying hefty fees for every day they're forced to wait. The majority of those vessels are carrying gasoline and diesel imported by state-owned Pemex. With daily penalties of about $40,000 per ship charged for every day of waiting, fuel importers stuck in line are paying about $2.4 million a day in total, with Pemex bearing the bulk of it.

In fact, as imports grow, the ship backlog has climbed to more than three times the normal volume. The ships sitting in wait hold enough fuel to meet about 60% of the country's monthly demand. The last time the logjam was so bad was in early 2020, when the Covid-19 pandemic forced Mexico to declare force majeure on cargoes as demand for fuels plummeted, the people said.

The congestion at sea is the result of several compounding factors in addition to a lack of available storage. The Mexican government announced earlier this year fuel subsidies designed to keep a lid on inflation, which importers like Pemex's trading unit, are using to offset the cost of overseas fuel purchases. At the same time, Pemex ramped up its gasoline and diesel purchases to meet an expected rise in demand as the pandemic progresses and to stock up on supplies before the worst of hurricane season. Meanwhile, Mexico's refineries are operating at less than half of capacity amid maintenance, resulting in a need to boost imports.

Roe v. Wade in Mexican oil: why Article 27 needs reforming – *Houston Chronicle*

On June 24, the Supreme Court announced that the landmark case, Roe v. Wade (1973), had been wrongly decided 50 years before. Abortion would henceforth be regulated by the people and their legislatures in their respective states. In the revisionist spirit of Roe vs. Wade, let's revisit Mexico's political decisions about the role of the state in the oil industry. In the language of The Heritage Foundation's annual Index of Economic Freedom, the economy of the oil industry from 1884 to 1917 in Mexico was "free." From 1917-1938 it was "moderately free." Since then, with the exception of the period 2013-2018, the oil economy is "mostly unfree" or "repressed."

The turning point from "free" to "moderately free" occurred in 1916 in constitutional debates that would lead to the promulgation of a new constitution. The key provision was Article 27, which redefined the nation's relationship to private property. It introduced a home-made theory of "originalism" as applied to the property rights. All property, the text would read, originally belonged to the Nation. Private property, in turn, was created by the leave and at the convenience of the Nation.

We may imagine that the owners of oil companies in Mexico squinted at the text when it was promulgated on February 5, 1917. They may have asked, "What does this have to do with my business?" Whatever it might have meant, oil companies asked the authorities for guarantees that the new law would not be applied retroactively. The authorities, in turn, asked the property owners to exchange their rights concerning oil exploration and exploitation for concessions, which would allow them to hold mineral rights indefinitely, contingent upon continuous production. The key benefit of a concession is it provides incentives for reinvestment in technologies that could increase the oil recovered from a reservoir.

The back-and-forth between the authorities and the companies would continue for two decades until the government expropriated oil and gas holdings in 1938. It was only then that the meaning of Article 27 hit oil companies. They sought compensation for the loss of the economic value of their reserves. The authorities, in contrast, wanted to pay only for surface infrastructure, on the theory that what was in the ground belonged to the Nation.

Move ahead to the constitutional amendments of 2013. Article 27 was left untouched. In 2015, with the first lease auctions to attract foreign oil companies to Mexico, the authorities insisted that the reserves belong to the Nation and that the oil company was being contracted by the Nation merely for the commercial services of exploration and exploitation.

Oil and gas production would be reported solely by the regulator as "Mexico's." Contractors were prohibited from reporting to the U.S. Securities Exchange Commission the volume of their reserves and production in Mexico. Companies went along with this legalistic charade but, as investors led by Talos Energy would later discover, at their peril. Talos in mid-2017 announced a discovery at the well Zama-1 and estimated that its reserves might be upwards of 600 million barrels.

Pemex quickly claimed a share of the reservoir, and, despite five years of negotiations, the parties have yet to agree about who owns what share or how, and by whom, is field development to occur. Zama has become a stranded asset for all stakeholders. Talos in 2021 asked for arbitration, but conventional metrics of economic value will be disallowed by Mexican negotiators, who will insist that the Nation owns the Zama reserves.

The fresh constitutional thinking needed to revise Article 27 has not yet come to Mexico. The story that the Nation originally owned the "lands and waters" supports the derivative narratives that Pemex is "the property of all Mexicans" and that oil and gas reserves are the property of the Nation. Such narratives support presidential power, but at a high cost to Houston investors, Pemex and the economy. To turn back toward a market-based oil regime, Mexico's lawmakers should expunge the first paragraph of Article 27.
By: George Baker is the publisher of Mexico Energy Intelligence

Power/Renewable Energy – Mexico

NFE announces agreement with CFE to expand supply of NG – *NFE Press Release*

New Fortress Energy entered into an agreement with CFE that involves (i) expanding and extending NFE's supply of natural gas to multiple CFE power generation facilities in Baja California Sur, (ii) selling NFE's 135 MW La Paz power plant to CFE, and (iii) creating a new LNG hub off the coast of Altamira, Tamaulipas, with CFE supplying the requisite feedgas to two NFE FLNG units using CFE's existing pipeline capacity.

- Baja California Sur

In July 2021, NFE commenced commercial operations of an LNG regasification terminal in the port of Pichilingue, La Paz, Baja California Sur. Pursuant to the agreement, CFE and NFE will extend the term of NFE's gas supply agreement to CFE's power generation facilities in the region and increase the volume of delivered natural gas under mutually agreeable terms. Additionally, NFE has agreed to sell its own 135 MW power plant in La Paz to CFE.

- Altamira

NFE and CFE plan to collaborate on the creation of a new LNG hub off the coast of Altamira, Tamaulipas. Pursuant to the agreement, NFE will deploy multiple FLNG units of 1.4 MTPA each that utilize CFE's existing firm pipeline transportation capacity to deliver feed gas volumes to NFE. As part of the agreement, CFE would share in the production and marketing of a portion of the LNG volumes from the new Altamira offshore LNG hub.

CRE denies more solar and wind permits as trade war brews – *Bnamericas*

CRE turned down 11 permit requests, including seven generation permits, from private firms, undeterred by a brewing trade fight with its top trading partners. Seven of the 11 permit denials were for private power generation projects, with companies listed as Energía el Trojano, 360 Plaza de Cibeles, FRV San Isidro, Parque Solar las Lomas de Ocampo III, Parques Eólicos de México, Recursos Solares PV de México V and Scutti Solar 3. The regulator also advanced in efforts to eliminate legacy self-supply PPAs, turning down permit modification requests from four companies, and authorizing 19 permit holders' requests to exit the scheme voluntarily.

Moody's downgrades CFE ratings to Baa2; outlook changed to stable – *Moody's*

Moody's downgraded CFE senior unsecured ratings to Baa2 from Baa1 and downgraded the baseline credit assessment (BCA) to ba3 from ba2. The outlook changed to stable from negative. The BCA reflects CFE's standalone intrinsic strength, absent any extraordinary support from Mexico's federal government. The BCA adjustment reflects the expected weaker intrinsic credit strength amid Mexico's energy policies and a high natural gas price environment.

CFE's BCA of ba3 reflects that its stand-alone financial performance will likely remain weak in the next 18-24 months amid a high natural gas price environment and challenges related to its large capital spending program that will require debt financing. CFE's may recover costs through tariffs over time or through extraordinary government transfers, although size and timing is highly uncertain. Since the military conflict in Ukraine started in late February, gas prices have surged reflecting uncertainty around global energy security and pushed up CFE's operating costs.

Moody's baseline scenario assumes higher natural gas prices to remain well above the historical prices in 2022, improving as the supply disruptions gradually ease in 2023. The company has some flexibility to adjust rates to large industrial and commercial customers registered as qualified users, but the adjustments do not fully mitigate continued losses from cost pressures, given tariff caps and subsidies in place to captive customers. As such, the company will remain dependent on government support through direct transfers or allowances for higher tariff increases.

The event resulted in a temporary increase in generation costs that contributed to a net income loss of approximately MXN 90 bn, since CFE was not fully compensated for the cost overrun. While the company expects an extraordinary transfer of at least MXN 45 bn from the Ministry of Finance to offset the excess cost incurred in 2021 timing remains uncertain. In addition, the rating's baseline scenario considers that the MXN 582.3 bn capital investment plan for 2022-26 included in the company's Business Plan will likely create additional pressures in terms of leverage and capital investment recovery.

Vaca Muerta pipeline megaproject valve contract draws 7 bids – *Bnamericas*

Argentine state energy company Energía Argentina received seven bids for a gas pipeline valve provision contract. The valves would be used in the first phase of the Vaca Muerta pipeline megaproject, currently in the tendering phase. The bidding parties are KSB Compañía Sudamericana de Bombas, Cameron Argentina, Valvtronic, Tormene Americana, Kioshi, Valbol and Wenlen.

Energía Argentina, which is in charge of the infrastructure project, is seeking valves of 20 inches, 24 inches, 30 inches and 36 inches. First-phase work involves 680km of new pipe. Authorities have signed a contract for the provision of the pipe and a process is underway to secure a company to lay the duct. The government has said the first-phase work – deemed last year to cost around USD $1.6bn – would be publicly funded and that the goal was to bring it online in the second half of 2023.

Brazil's Petrobras: refinery utilization at 97% – *Agência Brasil*

Petrobras reported that its refinery utilization rate hit 97%. "This was due to the completion of scheduled maintenance shutdowns at the Henrique Lage Refinery in São José dos Campos, São Paulo, and the Duque de Caxias Refinery in Rio de Janeiro. This figure allowed for a higher production, with diesel and gasoline yields in the second quarter at 67%, in line with the first quarter of the year, benefiting from favorable market conditions," Petrobras said.

According to Petrobras, the volume of sales of oil products in the second quarter was up 1% quarter-on-quarter, and the fuel output was up 2.6% year-on-year. Petrobras has been running its refineries at near capacity to reduce imports of gasoline and diesel fuel that are sold at a loss due to the government's fuel-price controls. Diesel is Brazil's most-used vehicle fuel, but the S-10 diesel needed to make engines built to new emission standards function properly only accounts for about a quarter of Brazilian diesel demand. The rest of Petrobras output is S-500, fuel with 50 times more sulfur than S-10. The pre-salt fields accounted for 73% of Petrobras' output in the second quarter of 2022 at 1.94 million boed from April through June.

Argentine oil firm YPF replaces CEO – *Reuters*

YPF has announced a change in command due to alleged differences between top executives in Argentina's state-owned energy company. The company's board decided and accepted the resignation of Sergio Affronti as chief executive and appointed Pablo Iuliano, YPF non-conventional upstream vice president, to replace Affronti in the role of chief executive. The decision to replace Affronti came after internal disputes with the company's president Pablo Gonzalez. Iuliano is a chemical engineer and started his career at YPF more than two decades ago, when the company was still controlled by Spain's Repsol.

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Contact us: www.marcos.com.mx | info@marcos.com.mx | +52 55 5202 3600 | Linkedin Marcos-y-Asociados

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