Energy Fortnightly News

April 1 -15, 2024

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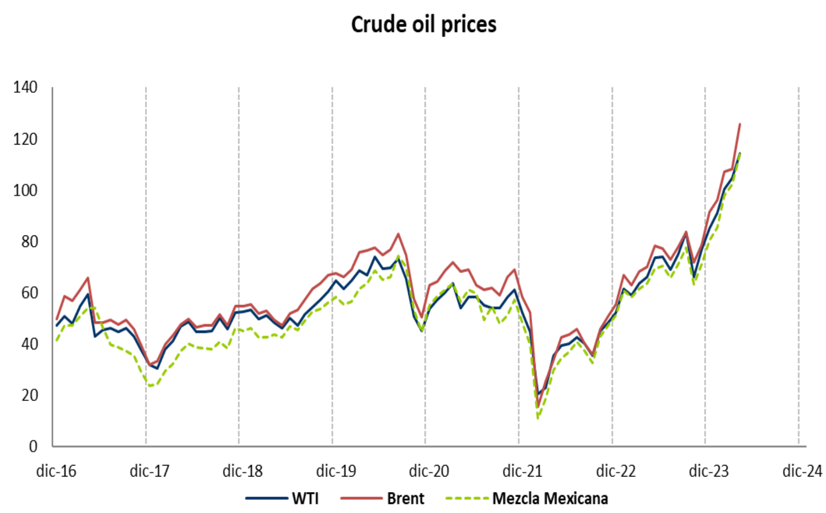
Fortnightly review

** 15/04/2024*

MME US/BD*	79.22
MME US/BD* PEF SHCP	56.30
Dif. MME AVG. 2024 vs. MME PEF SHCP	15.72
NG price HH* US/MMBTU	1.77
Mx crude production MMbd – *February*	1.59
Mx NG production MMpcd – *February*	4,047
US crude production MMbd - *January*	12.53
FX Rate*	16.68



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

Oil & Gas - Mexico

Pemex expands Ixachi field operations – *Mexico Business News*

Pemex pushes forward with its expansion plans for the Ixachi field, focusing on increasing gas reserves. Supervision operations continue, with Pemex strategizing the drilling of additional wells to bolster natural gas and condensate extraction. The field, stands as one of Pemex's priority areas in its self-sufficiency strategy and ranks among the largest onshore gas fields globally.

With over 18 wells drilled to date, production has reached 40Mb/d of condensate and over 350MMcbf/d of gas. Yet, only about 30% of Ixachi's reserves have been proven, with a mere 5% extracted. To boost proven reserves, Pemex plans to drill four strategic wells, aiming to escalate reserves from probable to proven. The success of these wells could significantly enhance hydrocarbon recovery, potentially increasing it from the current 30% to 50%.

Natural gas vital to Mexico's energy security goals, says former CRE Chairman – *NGI*

Since taking office in 2018, Mexico's President AMLO has reiterated that his government would prioritize energy security and reduce the country's dependency on foreign fuel imports, such as natural gas and gasoline. While López Obrador's government has built a $19 billion refinery in the southern state of Tabasco in hopes to reduce gasoline imports, Mexico is further from its goal of energy security than it was at the start of the current administration, according to information from the World Energy Council.

In a presentation given to commemorate the 15th anniversary of Sempra's Energía Costa Azul (ECA) LNG import terminal, Francisco Xavier Salazar Diez de Sollano, former chairman of Mexico's Comisión Reguladora de Energía (CRE), said the country must rely on natural gas in the short and medium terms to come closer to achieving its goals of energy security. ECA is slated to begin exporting liquefied natural gas in 2025. Plans are to import feed gas via pipeline from the United States.

Salazar, a founding partner at the consulting and regulatory firms Gadex, Enix and Trust Mexico, said when inspecting Mexico's "energy trilemma" – which includes energy security, energy sustainability and energy affordability – the country has fallen in its global ranking, according to WEC. Of the 127 countries that the agency evaluates within the Energy Trilemma classification, in 2022, Mexico ranked 46th, largely because of a lower grade in the energy security category.

According to graphics presented by Salazar, during the López Obrador administration, Mexico's energy affordability ranking remained steady, energy sustainability slightly declined and energy security – the primary goal for the sector between 2018-2024 – plummeted. When compared to other countries of the region, Mexico's energy trilemma grade was considered to be in a worse standing than Uruguay, Chile, Argentina, Brazil, Costa Rica, Ecuador, Panama, Peru, Colombia and El Salvador.

- *Natural Gas: Energy Security Solution*

In his presentation, Salazar explained that natural gas would be imperative for Mexico to improve its global standing in the sector and provide solutions to the energy trilemma.

"Natural gas is fundamental for the reliability of the electricity sector that continues to be operated by more variable sources," Salazar explained in his comments regarding energy security. He said natural gas would be needed in Mexico to "resist and quickly recover from disruptions in the system and assure a minimal interruption in supply".

Salazar also said that, in order to assure both energy affordability and continue to reduce the country's carbon emissions, natural gas would provide Mexico with a fuel that is "abundant and highly competitive" in terms of price and is "the cleanest fossil fuel".

A consistent and growing complaint of environmental groups and credit rating agencies is that Mexico state power company CFE is burning excessive amounts of fuel oil at its power plants while national oil company Pemex is flaring too much natural gas. Pemex did, however, improve its gas capture rate to 93.2% in the fourth quarter of 2023 from 89.8% in 4Q2022, and is aiming to eliminate routine flaring by 2030.

Salazar explained that by relying more on natural gas, the national electricity system would be more efficient, produce less contaminating emissions and provide firm capacity supply, allowing for the incorporation of more renewable sources and more affordable electricity.

While Salazar largely highlighted the benefits of natural gas, he also outlined the drawbacks of the fuel, which include carbon dioxide and methane emissions. He explained that methane, after carbon dioxide, is the second-biggest contributor to global warming worldwide. While methane has a shorter half-life prior to being absorbed by the atmosphere, according to the International Energy Agency, the global energy industry represents 36.8% of methane emissions worldwide.

- *Global Energy Transition, Energy Security*

Salazar concluded his presentation by re-emphasizing the importance of natural gas in a global context and the value of the fuel for electricity generation across the world, which has been on display for European markets following the Russian invasion of the Ukraine. He said the continued diversification of LNG supply options, as well as the development of more infrastructure and export terminals, are “key elements to be able to strengthen the security of the supply of this fuel.”

He also emphasized that, to better assure and guarantee the supply and availability of natural gas, more local development of the fuel must be implemented. There also is a need for more strategic storage options, which has been a long-standing issue in the Mexican market.

“Natural gas represents a bridge energy to allow for a reliable transition to an energy matrix that is cleaner, quicker and less expensive,” Salazar said. “While new technologies such as storage and hydrogen continue to be developed, natural gas will continue to represent an alternative to reduce greenhouse gas and other contaminating emissions, as well as substitute other fossil fuels that are more harmful and allow for further penetration of clean energies.”

Pemex mulls spending over US$360 million on Tabasco offshore prospects – *Bnamericas*

Pemex could invest up to US$364 million in its AE-0150-M-Uchukil assignment off the coast of Tabasco state where seven prospects have been identified and spudded since 2020.

CNH approved the request of the company’s E&P to add a third modification to its exploration plan so two more possible prospects in the incremental scenario – Taasik and Tuul – could be considered. The company still has two prospects to spud – Xuul and Tuux – under its previously approved modification. However, only five of the first seven wells drilled turned out to be a success, while the rest were flooded by water. In the best-case scenario, Pemex could end up with nine new wells in the 851km² area where a development plan is yet to be presented before the commission.

CNH imposes fines on Chevron and Shell for failing to meet a minimum work program – *El Financiero*

Chevron Energía de México faces a penalty of US$32.1 million imposed by CNH for failing to meet a minimum work program in a deepwater contract located in the Gulf of Mexico, off the coast of Tabasco.

The contract in question, CNH-R02-L04-AP-CS-G03/2018, involves Chevron Energía de México as the operator, along with PEP and Inpex E&P México. The company fell short in meeting the obligations outlined in the contract's minimum work program, prompting the imposition of the fine. The fine is due to the fact that the oil company had agreed to execute 59,200 work units that comprise the minimum work program and its increase, but the contractor only accredited 30% of the total. Chevron said that it was unable to execute all of the committed units because it did not find an explorable prospect in the contractual area.

Regarding the British oil company, Shell, the fine was only US$59,043, since of the 59,200 work units to which they committed in their Minimum Work Program of contract CNH-R02-L04-AP-CS-G04/2018, they managed to comply with 99.7%. According to experts, the oil sector has been affected by a lack of cash flow. Consequently, many operations in the sector have been affected or delayed.

Pemex, Mexico City investigating water contamination – *Bloomberg*

Pemex, in conjunction with the government of Mexico City, is investigating reports of contaminated water in some parts of the city. Pemex has found no evidence yet of leaks in pipes around the affected area which would cause resident's water to smell like gasoline or other chemicals.

"Since this complaint began, the city government has been looking into it, and Pemex technicians have also participated in searching for the causes," AMLO said. "They are looking at several wells, to see if there is any contamination from chemicals." The investigation began earlier this week after residents of Mexico City's Benito Juarez borough complained of water coming from their taps that smelled like gasoline.

Pemex to cancel up to 436,000 bpd of crude exports in April – *Reuters*

Pemex requested its trading unit to cancel up to 436,000 bd of crude exports as it gets ready to process domestic oil at the new Dos Bocas refinery.

Pemex and the government of President AMLO said earlier this year that the Dos Bocas refinery built in Tabasco state would start producing gasoline and diesel in the first quarter. The refinery, which has been running behind schedule and over budget, is part of Lopez Obrador's strategy to wean the country off expensive gasoline and diesel imports.

Pemex numbers showed that its crude oil production had fallen to its lowest level in 45 years, curtailing available supplies for the nation's six local refineries already operating.They either refine it or export it. There is not enough crude for both. The cancellations will reduce exports of Mexico's flagship Maya crude by 122,000 bpd, Isthmus by 247,000 bpd and Olmeca by 67,000 bpd, the document showed.

The cancellations will affect term contract customers in Europe, the United States and Asia. Mexico's energy ministry expects the Dos Bocas refinery to process an average of 178,600 bpd of crude oil this year. While the refinery is operational, it does not yet produce finished fuels. In total, the energy ministry numbers show domestic crude oil processing is expected to increase from 713,300 bpd in 2023 to an average of 1.04 million bpd this year.

Pemex among the biggest global contributors to carbon emissions – *Mexico Business News*

Pemex is among the companies that have made significant contributions to global carbon emissions since the signing of the Paris Agreement, revealed an analysis conducted by the InfluenceMap research center. InfluenceMap, a global non-profit organization focusing on climate and sustainability, quantified the historical impact of the world's largest oil, gas, coal, and cement corporations on global carbon emissions.

The study revealed that most CO2 emissions since the signing of the Paris Agreement can be attributed to a small group of major emitters who have failed to curb production. Approximately 80% of the global emissions between 2016 and 2022 originate from just 57 corporate and state entities. Of this, nation-state producers accounted for 38% of the emissions in the database, while state-owned entities contributed 37% and investor-owned companies accounted for 25%, as reported by the study.

The Top 10 polluting companies during this period are led by the Saudi Arabian oil company Saudi Aramco, responsible for 4.8% of total global emissions, followed by the Russian company Gazprom with 3.3%, the state-owned coal giant Coal India contributing 3%, the National Iranian Oil Company accounting for 2.8%, and the Russian company Rosneft with 2.1%. The remaining five companies, CNPC, Abu Dhabi National Oil Co., ExxonMobil, Iraq National Oil Co., and Shell, each contribute between 1.7% and 1.2% of the total emissions.

Among the Latin American companies listed, Pemex ranks 12th with 1% of emissions, followed by Petrobras with 0.8% ranking 19th, Petroleos de Venezuela with 0.6% positioned 21st, and Ecopetrol with 0.3% standing at the 59th position. Additionally, Repsol ranks 50th with 0.2% of global emissions, PetroEcuador at 0.2%, placed 75th, YPF at the 77th position with the same percentage, and Cemex at 0.1%, ranked 105th.

Pemex says nine injured in Akal-B oil platform fire – *Oil and Gas Magazine*

Pemex said a fire at one of its Akal-B oil platforms in the Campeche Bank left nine people injured and one person dead (five of the injured were its employees while the rest were from other companies). The deceased worker was from the company COTER. Akal-B, which is part of the Cantarell production complex, produces 200,000 bpd of oil and 900,000 cubic feet of gas. The fire began where gas fuel pipes feed the platform’s turbo machinery.

Civil organizations have issued an alert about an oil leak near the Akal-B after the explosion and fire. A 152% increase in the frequency of “accidents” at Pemex over the past two years, along with a 49% reduction in the maintenance budget, reveals that administrative decisions that favor rapid fuel extraction have been prioritized over investment in security and maintenance, the organizations maintain.

They demand that the authorities provide clear details about the incident in Akal-B, its impacts and actions to prevent future incidents. They also request information on measures to address the detected oil spill and mitigate its effects on marine ecosystems, human health and the livelihoods of coastal communities.

Pemex's Tupilco Profundo to contribute 117 MM barrels to Mexico output – *Reuters*

Pemex plans to produce 116.9 million barrels of oil and 124.4 billion cubic feet of natural gas from the Tupilco Profundo field during its lifespan. Tupilco Profundo is one of the biggest finds made during the government of President AMLO as Pemex continues struggling to offset its declining production from older fields. Pemex had presented a modified development plan for the field in the southeastern state of Tabasco. Between November 2023 and October 2024, the field is forecast to produce 42.5 million boe to some 116,500 bpd.

To achieve these targets, Pemex intends to complete three existing wells, drill three new ones and install 12 pipelines. The expenditure for developing, producing and eventually decommissioning the field from 2024 to 2046 is estimated to be 24.7 billion pesos.

CFE, ENGIE sign agreement to expand Mayakan gas pipeline – *Mexico Business News*

CFE and Energía Mayakan, a subsidiary of the ENGIE group, signed an agreement for the expansion of the Mayakan gas pipeline. This initiative aims to ensure the transportation of natural gas required by the Yucatan Peninsula for energy generation. The investment for this expansion will be US$2 billion, as reported by Ana Ludlow, Vice President of Government Affairs and Sustainability, ENGIE. The expansion of the Mayakan gas pipeline will effectively double its transportation capacity, from 250 to 567MMcf/d, through the construction of over 700km of pipeline. This expansion will also facilitate interconnection with the Puerta del Sureste project, enhancing the region's access to natural gas transported from Texas, United States.

Additionally, CFE is constructing two new combined cycle power plants on the peninsula: Mérida IV and Rivera Maya, with capacities of 499MW and 1,020MW, respectively. These plants are crucial for meeting the energy demands of the region and supporting its industrial development.

CRE releases criteria for Clean Energy Certificates – *Mexico Business News*

CRE has unveiled the guidelines for assigning Clean Energy Certificates (CELs) available in the CRE account, corresponding to the obligation year 2022. CRE reported that 4.379 million CELs will be allocated corresponding to 2022, including 14,451 leftover certificates from 2021 due to non-compliance.

In a detailed breakdown, the commission revealed that in 2021, the number of CELs on the Stock Exchange totaled 4.357 million certificates. Of these, 4.342 million were delivered, leaving a subtotal of 14,422. Additionally, 29 accumulated fractions of CELs could not be delivered, resulting in a final tally of 14,451 remaining certificates.

Among the criteria outlined for CEL calculation, CRE highlighted that 60 obligated participants, with a combined consumption of 236.789 million MW, are eligible to receive certificates from CRE’s stock for 2021 "in a non-onerous manner." To qualify for CELs for 2022, entities must have registered before May 15, 2023, and submitted their annual declaration for the entire 2022 obligation year or deferred no more than 25% of their obligation for the same period. Back in March 2024, SENER revoked two agreements issued in 2019 that altered the criteria for granting CELs, reinstating the regulations established by the 2014 Energy Reform. This move restores private companies' access to these instruments, introduced by the 2014 reform.

SCJN orders CFE to pay 3,575 million pesos to the municipality of Chiapas – *Oil and Gas Magazine*

CFE will be forced to disburse 3,575 million pesos to pay a municipality in Chiapas for property taxes. In July 2010, the municipal authorities attempted to charge the CFE 2,223.9 million pesos for the fiscal years from 2006 to 2010 and it was the moment in which the productive company of the Mexican State began the lawsuit.

Against that resolution, the CFE filed a revocation appeal before the Municipality of Tecpatán, Chiapas, against the collection of the Property Tax determined by the municipality. On January 26, 2011, the Municipal Treasurer of Tecpatán, Chiapas, issued the official letter TEC/TES/2011/008, through which he confirmed the collection to the CFE.

On January 31, 2022, the municipal treasurer, through the document TM/CACM/029/2022, updated the tax credit to the detriment of CFE Generación VI to an amount greater than 3 billion pesos, for which They went before a federal court to try to revoke the charge.

Oil & Gas - LATAM

Petrobras discovers oil in Potiguar Basin – *Rigzone*

Petrobras has discovered an oil accumulation in the ultra-deep waters of the Potiguar Basin on the Brazilian Equatorial Margin. The Anhangá exploratory well, 1-BRSA-1390-RNS, of the POT-M-762_R15 Concession is located near the border between the states of Ceará and Rio Grande do Norte, about 190 km from Fortaleza.

This is the second discovery in the Potiguar Basin in 2024, preceded by proof of the presence of hydrocarbons in the Pitu Oeste Well, located in the BM-POT-17 Concession, around 24 km from Anhangá. The discoveries still require further assessment. The company operates and holds a 100% stake in both concessions. The discovery of Albian-age turbidite reservoirs carrying oil is "unprecedented in the Potiguar Basin. The company will continue its exploratory activities, aiming to assess the reservoirs' quality, the oil's characteristics, and the technical-commercial viability of the accumulation.

The company plans to invest US $7.5 billion in exploration by 2028, of which US $3.1 billion will be earmarked for the Equatorial Margin, which stretches from Amapá to Rio Grande do Norte. It plans to drill 50 new exploratory wells in the period, 16 in the Equatorial Margin region.

Petrobras reduces supplier payment deadlines to 30 days – *Bnamericas*

Petrobras will reduce the payment period to 30 days for contracts to be implemented from May 1st. Since 2020, some segments of companies have started to receive payment for their contracts within 90 days. Now, the 30-day period will be resumed and standardized. The change will impact contracts that cover the operation and maintenance of industrial units (onshore and offshore) and also those that support administrative activities.

The change is aligned with Petrobras' 24-28 Strategic Plan, with strengthening the financial health of its supply chain, in addition to meeting social commitments along with the company's ESG agenda. The idea is to maintain a healthy supplier base, which will help the company achieve its planned objectives for the coming years.

The Executive Board also approved the continuation of Mais Valor. The Mais Valor Program grants Petrobras suppliers the option of receiving their invoices in advance from participating financial institutions. The operations are in the Drawn Risk modality where the buyer's credit risk is perceived. The Supplier is able to advance payment at competitive rates and there is also no IOF (Imposto sobre Operações Financeiras) charge. Obligations are paid to financial agents by Petrobras in the original amount and date. Petrobras' business opportunities mobilized around 34 thousand suppliers throughout 2023.

Ecopetrol lining up US$760 million gas investments as offshore takes focus – *Bnamericas*

Ecopetrol will invest US$760 million in upstream natural gas projects this year as it seeks to guarantee future supply of the fossil fuel, CEO Ricardo Roa said. Offshore projects will account for around US$350 million while the outlay in the onshore Piedemonte region in Colombia's Llanos basin is expected to reach US$360 million.

Capital expenditure will also be allocated to onshore projects in the Colombia Norte region and the Middle Magdalena Valley basin. Offshore projects in 2024 will focus on delimitating the Gorgón, Kronos, and Orca discoveries and drilling the Buena Suerte, Uchuva-2, and Komodo exploration wells. According to Roa, total gas resource potential from offshore discoveries in 2023 is estimated at 4-12 trillion cubic feet (Tf3), taking Colombia's overall offshore gas potential to around 75Tf3.

Onshore, the company expects to drill three development wells in Piedemonte this year (Floreña, Pauto and Recetor) while preparing exploration campaigns near the existing Cupiagua-Recetor and SDLA production fields. Meanwhile, Ecopetrol is eyeing high-impact exploration drilling in the Odisea, Farallones, Gibraltar-Sirirí and LLA-9 blocks. It has also earmarked exploration activities alongside its partners on the LLA-122 block, Roa said. In the Colombia Norte onshore region, the firm is readying exploration drilling near existing infrastructure with the aim of producing gas within two or three years.

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