Energy Fortnightly News

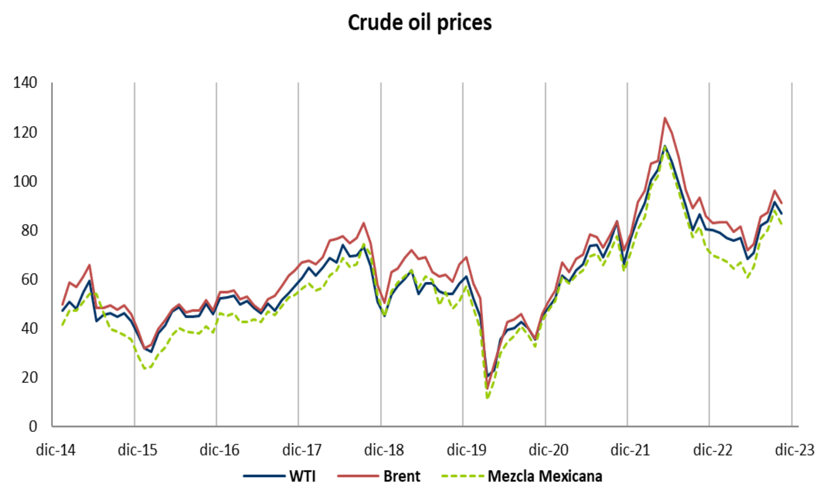
December 1-15, 2023

Table of Contents

Fortnightly review

** 11/12/2023*

MME US/BD*	66.76
MME US/BD* PEF SHCP	68.70
Dif. MME AVG. 2023 vs. MME PEF SHCP	-6.88
NG price HH* US/MMBTU	2.43
Mx crude production MMbd – *October*	1.63
Mx NG production MMpcd – *October*	4,166
US crude production MMbd - *September*	13.23
FX Rate*	17.44



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

Oil & Gas - Mexico

Pemex refinances about $8.3 billion in debt amid cash crunch – *Bloomberg*

Pemex has renewed about $8.3 billion in revolving credit lines from banks including Banco Bilbao Vizcaya Argentaria SA, JPMorgan Chase & Co., Citigroup Inc. and others at it grapples with the oil industry's largest corporate debt load.

Pemex, as the state oil firm is known, obtained a $6.5 billion tranche comprised of a three-year term loan and revolving credit facilities with the same duration in late November from banks including Bank of Nova Scotia, Sumitomo Mitsui Financial Group Inc., BBVA, Citi and JPMorgan, according to a person familiar with the transaction. A second tranche valued at $1.8 billion from HSBC Holding Plc and BNP Paribas SA, among others, involved a six-month term loan and revolver, said the person, who asked not to be identified discussing non-public information.

The renewals come as Pemex explores ways to improve its credit profile. Government help in the form of capital injections and tax breaks have done little to ease the company's long-term, financial decline. Pemex's debt reached $106 billion at the end of September, while the equivalent of as much as $9.4 billion in revolving credit was fully drawn, according to company data.

Pemex approves exploration in two key wells in Tabasco – *CNH*

CNH approved PEP drilling of the Jep-1EXP and Puk-1EXP wells, both belonging to the AE-0143-2M-COMALCALCO allocation.

The main objective of drilling the Jep-1EXP well is to discover an accumulation of heavy oil and light oil. The prospective resources that the oil company aims to access have an estimated volume of 3.1MMboe with a geological success probability of 24%. PEP considers this well in the incremental scenario of the modification to the current Exploration Plan. The Jep-1EXP well is located 34km from Cárdenas, Tabasco, and drilling and completion work are expected to take place from Jan. 2 to March 9, 2024. Meanwhile, the Puk-1EXP well is located in the Tabasco municipality of Huimanguillo and would have prospective resources of 3MMboe, with a success probability of 27%, according to PEP.

Additionally, CNH approved, Pemex's drilling of the exploratory well 101 EXP in the Salinas Basins of the Gulf of Mexico, off the coast of Tabasco. The drilling of the exploratory well in shallow waters, Toloc-101EXP, is considered in the base scenario of the modification to the Exploration Plan for the AE0161-2M-Chalabil allocation. The Toloc-101EXP prospect is located in the territorial waters of the Gulf of Mexico, within the AE-0161-2M-CHALABIL allocation, off the coast of the state of Campeche, 124km from the Dos Bocas Maritime Terminal.

The prospect aims to find accumulations of heavy and light oil. The expected hydrocarbon is heavy oil in Objective 1 and light oil in Objective 2. The prospective resources at the mean with risk are 4.55MMb in Objective 1 and 4.07MMb in Objective 2, with geological success probabilities of 35% and 37%, respectively.

CNH approves Vista Oil & Gas to partially abandon contractual area – *CNH*

CNH authorized Vista Oil & Gas to abandon contractual areas obtained through oil rounds. The company's partial renunciation pertains to a license-type contract linked to a land area located in Macuspana, Tabasco, covering an area of 95.16 km^2.

The company renounced 50% of the contractual area, which is not included in an evaluation program or an approved development plan by CNH. "What remains is the area with greater potential, where Vista already has an extraction plan and is already investing and producing. Vista Oil & Gas has already invested US$13.44 billion of the over US$76 billion planned for the area the company is retaining. In October, it averaged a production of 762b/d and 34,000cf of natural gas.

Mexico is burning more gas: NGO – *Bnamericas*

Despite various commitments acquired by Mexico on reducing greenhouse emissions over the years, several reports and independent experts agree that the country is emitting more methane into the atmosphere due to flaring of gas. "More gas is being burned," the energy director of environmental NGO Iniciativa Climática de México (ICM), Luisa Sierra, said.

ICM has been monitoring the country's energy policies and climate change commitments for years, but in November it presented a feasible pathway for the country to achieve net zero emissions by 2060, outlining investments of US$6.17tn to be implemented between 2023 and 2060.

While there is no precise public data on the exact amount of gas that Mexico is burning due to lack of transparency, Sierra said, it is hard to believe that the government, though state-owned gas and oil company Pemex, is complying with the nationally determined contributions (NDCs) it agreed to meet last year during the COP27 conference held in Sharm El Sheikh, Egypt, in 2022.

At the time, Mexican authorities said they would increase the country's emissions reduction target from 22% to 35% by 2030, and experts are waiting to see what the administration will say. "We will be paying close attention to what Mexico presents as progress towards this commitment," Sierra said, adding that the country must update its NDCs in 2025 after last updating them in 2020, following the 2015 Paris Agreement.

In a statement, the foreign ministry said that "Mexico hopes that, as a result of this exercise (COP28), recommendations will be adopted to strengthen the development and implementation of Nationally Determined Contributions and other climate policy instruments." However, according to Pemex's last report, "carbon dioxide equivalent emissions stood at 15.2Mt, a decrease of 17.8% compared with the same quarter of 2022, mainly due to the implementation and entry into operation of infrastructure projects focused on increasing the management and use of associated gas in the exploration and production processes and the start-up and continuous operation of compressors in complex gas processors.

Woodside secures long-term LNG deal with Mexico Pacific – *Business Mexico News*

Woodside Energy has entered an agreement with Mexico Pacific, the developer of the LNG export project in Puerto Libertad, Sonora. The deal entails Woodside purchasing 1.3Mt/y of LNG for a duration of 20 years from the Saguaro Energia project in Puerto Libertad.

LNG will be procured on a free-on-board basis with pricing linked to US gas indices. This strategic move aligns with Woodside's goal of establishing global scale and flexibility in its LNG portfolio. Mexico Pacific's Saguaro Energia LNG Project is located on the Pacific coast of Mexico, providing proximity to key markets in Asia. The agreement is contingent on Mexico Pacific making a final investment decision on the proposed third train at the Saguaro Energia LNG project, expected in the first half of 2024, with commercial operations slated to commence in 2029.

"We are delighted to welcome Woodside, one of the most established global LNG market participants, as a foundation customer of Train 3, further validating the value of west coast Mexican LNG," said Sarah Bairstow, President, Mexico Pacific. The Saguaro Energia LNG facility is recognized as the most advanced LNG development project on the West Coast of North America, offering significant cost advantages and logistical benefits, including the lowest landed price of North American LNG into Asia and a shorter shipping route bypassing the Panama Canal for Asian markets. The project has garnered support from the government of the Mexican state of Sonora. Major energy players like Zhejiang Energy, Shell, ExxonMobil, and ConocoPhillips have already committed to LNG offtake agreements with Mexico Pacific.

Zuma Energía completed the acquisition of a majority stake in 216 MW – *Oil and Gas Magazine*

SPIC and parent company of Zuma Energía in Mexico, announced the majority acquisition of three solar parks in Chihuahua from InfraRed and INVEX. The remaining minority interests are owned by AINDA. The acquisition added 216 MW to its installed capacity in the country, making SPIC-Zuma Energía the second largest private company in renewable generation in Mexico. Currently, SPIC-Zuma Energía operates in Sonora, Chihuahua and Jalisco with solar parks, and in Tamaulipas and Oaxaca with wind farms. In addition, opportunities are already being sought in Puebla, Querétaro, Yucatán and Monterrey with clean energy projects and investments in new business lines such as storage, solutions for electric vehicles, solar panels, Smart Cities and Smart Energy.

Transition Industries LLC and IFC announce agreement to develop net-zero world-scale methanol project in Mexico – *IFC*

Transition Industries LLC announced at COP 28 that it has signed a Joint Project Development Agreement with the International Finance Corporation, a member of the World Bank Group, to jointly develop its Pacifico Mexinol project, a 6,145 MT per day methanol production facility near Topolobampo, Sinaloa, Mexico.

When it initiates operations, Pacifico Mexinol is expected to be the largest single ultra-low carbon chemicals facility in the world - producing approximately 300,000 MT of green methanol from captured carbon and green hydrogen, and 1.8 million MT of blue methanol annually from natural gas with carbon capture.

Under the terms of the JPDA, the IFC will share a portion of the project development costs, provide substantial expertise to ensure compliance with the IFC Performance Environmental & Social Standards, and leverage its expertise to support the project financing. In return, the IFC has the right to invest in a pro rata percentage of the project's common equity and lead the financing of at least 50% of the project's debt. Rommel Gallo, the CEO of Transition Industries, commented: "We are pleased to announce our JPDA with the IFC and proud to partner on this groundbreaking project. Together, we expect to set a new gold standard in ESG for the development of large industrial and chemicals projects that addresses climate change, sustainably manages natural resources such as water, and works in partnership with local communities to achieve shared value."

Pacifico Mexinol is expected to reach Final Investment Decision in 2024 and Commercial Operations in late 2027. The project is expected to generate on average 3,500 jobs during construction and up to 450 jobs during operations.

Siemens explores green hydrogen venture in Mexico – *Business Mexico News*

Siemens, is reportedly in the planning stages for the installation of a green hydrogen plant at Mexico's Lazaro Cardenas port in the state of Michoacan.

While Siemens emphasizes the benefits and potential of green hydrogen, there is no explicit mention of its portfolio in Mexico. This development follows President AMLO's recent announcement that Danish investment fund Copenhagen Infrastructure Partners will invest US$10 billion in a new green hydrogen plant in Oaxaca, taking charge of constructing one of the planned industrial parks along the Interoceanic Corridor.

Israel Hurtado, President of the Mexican Association of Hydrogen and Sustainable Mobility (AMH2), underscores the transformative potential of green hydrogen in enhancing manufacturing operations across various sectors in Mexico. This includes its application in automobile manufacturing, where hydrogen gas is utilized, as well as in the production of turbines and electrolyzers, opening avenues for novel industries.

Previous studies suggested that Mexico could achieve up to a 64% reduction in green hydrogen production costs compared to other countries, attributing this advantage to its strategic geographical location and renewable energy potential. Additionally, Mexico's advantageous position, with access to the Pacific and Atlantic oceans and free trade agreements with the US and Canada, could position it as a key exporter of green hydrogen to Europe and Asia. However, despite Mexico's immense potential to establish a thriving green hydrogen economy, fostering job growth, reducing emissions, and aligning with climate goals, experts warn that the country currently lacks the necessary infrastructure for large-scale green hydrogen production, especially in the realm of renewable energy.

Mexico’s top 10 energy nearshoring investments – *Bnamericas*

Mexico’s energy sector has become one of the main destinations for nearshoring investments and two investment announcements this year have even surpassed Tesla’s US$5bn investment for its planned gigafactory in Nuevo Leon state.

The top-10 projects involve foreign investments of more than US$32bn that are mainly focused on the gas and petrochemical sectors, according to nearshoring data compiled by Mexican bank Banorte.

For the first time since nearshoring, or the relocation of supply chains, became popular in the country, the energy sector emerged at the top of the foreign investment commitments highlighted by the latest edition of Santander México’s Nearshoring Data Monitor. It stated that 32% of the 120 nearshoring investment announcements totaling US$44bn this year correspond to the electric power sector.

At the top of the list is Texas-based Mexico Pacific’s US$14bn Saguaro Energía LNG project, where construction is yet to start in Sonora state’s Puerto Libertad. The project also includes the 800km Sierra Madre pipeline that will supply natural gas to the plant from Texas via Sonora and Chihuahua states.

Second is the US$10.4bn investment plan for the ultra-deepwater Trión field, in the Gulf of Mexico. The project will be carried out by the Mexican subsidiary of Australian E&P company Woodside Energy in partnership with Mexico’s Pemex, with the national oil company having a 40% stake in the venture. It involves drilling 12 producer wells, 10 water injectors and two gas injectors, with the spudding campaign set to start in 2026.

Third is the US$4.5bn Southeast Gateway offshore pipeline in the Gulf of Mexico, which Canadian midstream firm TC Energy is building to supply natural gas to the Tuxpan and Coatzacoalcos ports in Veracruz state and Dos Bocas port in Tabasco state. The 715km pipeline is expected to transport 1.3Bf3/d (billion cubic feet per day) from 2025 and the goal is to have three onshore connections to deliver natural gas to the Yucatán Peninsula.

Next on the list is the partnership between France's Engie and Mexican federal power company CFE, which are building a US$1.5bn capacity expansion for the Mayakan natural gas pipeline, which is now slated for operations in 2026. It is a key element in the plans to increase natural gas supply to the Yucatán peninsula.

The list also includes renewable solar projects such as the one Iberdrola said in September that it would build in Nuevo León state for US$1bn. Another solar project in the same state and with the same investment amount was announced by Chinese firm Trina Solar a month later.

Earlier this year, Germany's Alengo and Mexican firm Spontem announced the US$158 million construction of Latin America's first waste processing plant (Pellets CDR) for exporting mass to Europe where it will be transformed into fuel.

In the eighth and ninth place are refiner Valero's plan to build a new terminal at Altamira port, and Shell's exploration and production activities off the coast of Tamaulipas, where it has requested approval for speeding up the deepwater drilling campaign.

Last is Japanese firm Mitsui's US$100 million investment in Zacatecas state, where it inaugurated the 80MW Mitre Calera solar park in a 240ha area to supply the national network of CFE.

Oil & Gas - LATAM

Venezuela prods BP, Chevron to revive gas project near Trinidad, Guyana – *Reuters*

Venezuela has begun contacting energy firms involved in a long-idled offshore gas project to push them to begin new exploration and operations near its maritime border with Guyana.

The request to act on blocks that have not been touched in more than a decade comes amid an escalating territorial dispute with Guyana that has rattled the country and led to an emergency meeting of the United Nations Security Council. Venezuelan President Nicolas Maduro wants state oil company PDVSA, and oil majors' BP, Chevron and Shell to revive an offshore project with some 8 trillion cubic feet of gas reserves.

Called Plataforma Deltana, the discoveries were never developed amid insufficient capital, an unfinished sharing effort with Trinidad and Tobago into whose waters the field extends, and a lack of clear rules for investment.

Chevron was the only company that completed exploration in Plataforma Deltana, certifying 7.3 trillion cubic feet of recoverable gas and declaring two of Venezuela's five blocks commercial in 2010. It never took steps to begin production. Russia's Rosneft in recent years explored another block but did not complete work in the area, while TotalEnergies and Equinor returned one block to Venezuela after a non-commercial discovery. One of the five blocks was never awarded.

"They are talking about working at blocks 2 and 4, which are the most advanced ones". On Trinidad's side, those two blocks extend to Shell's Manatee project and to BP's Manakin shallow water block, both of which are moving to development and production design.

BP and Trinidad's government expect to begin negotiations with Venezuela to jointly produce gas at Manakin upon completion of discussions for Manatee, which have already started, according to another person familiar with the matter.

Chevron has been in talks with Venezuela about its license. Venezuela also made initial contact with Australia's Melbana Energy, which operates in Cuba. The discussions could lead to a seismic contract for the less explored blocks, one of the people said. Venezuela's oil ministry, Trinidad's energy ministry, PDVSA and Melbana did not reply to requests for comment. BP told Reuters it views the Manakin field as an important part of its future area development plan, even though it had been unable to progress work there.

Plataforma Deltana is the closest energy project that Venezuela has to waters in dispute with Guyana. Both nations have drawn maritime border lines that cross offshore oil and gas areas in the other's claimed territory. The north portion of the Stabroek block, a massive area in development by Exxon Mobil, CNOOC and Hess under license from Guyana, extends into Venezuelan waters, according to Maduro's government. One of Plataforma Deltana's blocks extends into Guyana's claimed waters.

Venezuela's oil ministry and PDVSA have worked since 2016 to outsource 2D seismic data collection and map areas including the Esequibo and the Isla de Aves territory in the Caribbean, which are in dispute with Guyana and Dominica. The territorial dispute with Guyana is being discussed at the International Court of Justice, which this month ordered Venezuela to refrain from taking any action that would alter the situation with its neighbor. Maduro this week said he would authorize oil and mining exploration in the disputed areas with Guyana, but did not elaborate on locations or projects. PDVSA and state industrial conglomerate CVG were asked to create specific divisions for that purpose.

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