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U.S. shale oil production 'has redrawn the map of world oil'

(Financial Times; London; April 22) - The relative calm in global oil markets in the face of turmoil in the Middle East owes much to events 7,000 miles away in the shale fields of North Dakota and west Texas, where drillers have left markets awash with American oil. "Shale has redrawn the map of world oil in a way most people don't seem to understand," said Daniel Yergin, vice chair of S&P Global and a Pulitzer Prize-winning energy historian. "It has changed not only the supply-demand balance but it has changed the geopolitical balance and the psychological balance."

The numbers are stark. Two decades ago, the U.S. produced about 7 million barrels a day of petroleum and consumed 21 million barrels. Gulf countries like Saudi Arabia and Kuwait were among the most important foreign suppliers. Now the U.S. produces almost 20 million barrels per day of crude and petroleum products, roughly on par with consumption. Imports from the Persian Gulf have plummeted, and the U.S. became a net oil exporter for the first time in 2019. The prolific Permian Basin shale of Texas and New Mexico alone pumps more oil than Kuwait, Iraq or the United Arab Emirates.

The strategic advantages are profound, even for a White House eager to transition to clean energy. The shale surge has blunted the impact of supply cuts made by OPEC the past two years and allowed the U.S. to impose sanctions on suppliers such as Russia and Venezuela, while tightening restrictions on Iran — without fear of spiking oil prices. "It is a huge turnaround from where we were at in the 1970s," said Harold Hamm, chair of Continental Resources, a shale pioneer. "If you didn't have the shale revolution you would have \$150 oil. You would be in a very volatile situation. It would be horrendous."

IMF expects OPEC+ will start gradually increasing output in July

(Bloomberg; April 23) - The International Monetary Fund expects OPEC and its partners to start increasing oil production gradually from July, a transition that's set to catapult Saudi Arabia back into the ranks of the world's fastest-growing economies next year. "We are assuming the full reversal of cuts is happening at the beginning of 2025," Amine Mati, the lender's mission chief to the kingdom, said in an interview in Washington, where the IMF and the World Bank are holding their spring meetings.

The view explains why the IMF is turning more upbeat on Saudi Arabia, whose economy contracted last year as it led OPEC+ alongside Russia in production cuts that squeezed supplies and pushed up oil prices. In 2022, record crude output propelled

Saudi Arabia to the fastest expansion in the Group of 20 nations. Under the latest outlook this week, the IMF improved next year's growth estimate for the world's biggest crude exporter from 5.5% to 6% — second only to India among major economies in an upswing that would be among the kingdom's fastest spurts over the past decade.

The fund projects Saudi oil production will reach 10 million barrels per day in early 2025, from what's now a near three-year low of 9 million. Saudi Arabia says its production capacity is around 12 million barrels per day, and it's rarely pumped as low as today's levels in the past decade. Meanwhile, Saudi Arabia is spending hundreds of billions of dollars to diversify an economy that still relies on oil and its close derivatives — petrochemicals and plastics — for more than 90% of its exports.

High costs may pose a problem for Texas oil export terminal

(Reuters; April 22) - As U.S. shale oil boomed last decade, an oil pipeline company pitched an ambitious multibillion-dollar export port off the Texas coast to ship domestic crude to Europe and Asia. In April, the Enterprise Products Partners' project became the first to receive a license from the U.S. maritime regulator for a deepwater port that could load two supertankers, each of which can carry up to 2 million barrels of oil at a time.

But multi-year regulatory delays, a loss of commercial backers and slowing U.S. shale production has left the Sea Port Oil Terminal (SPOT) and its three rival projects without any secured customers, energy industry executives say. "There are a lot of gray areas right now with export projects," said Zack Van Everen, an oil analyst at energy investment banker Tudor Pickering Holt. Enterprise declined to make an executive available for an interview, but said it continues to develop the project.

Shale producers and traders are balking at the higher-than-expected loading fees for new projects, even if they are able to fully load supertankers, executives said. SPOT is the only Texas deepwater project with government approvals, but its cost has soared to about \$3 billion, sources said, from the original \$1.85 billion. Fees are reported between \$1 and \$1.20 per barrel, higher than an existing terminal in Corpus Christi, Texas. It has no long-term customer contracts, or joint-venture partners, stalling a financial green light from Enterprise, sources said. The project, if approved, is expected to start up in 2027.

Portuguese oil company says offshore Africa field could be large

(Reuters; April 21) - Portuguese oil company Galp Energia said on April 20 that it had concluded the first phase of exploration in the Mopane field off the coast of Namibia and estimated it could hold at least 10 billion barrels of oil. Galp said it conducted testing operations at the Mopane-1X well in January and the Mopane-2X well in March. In both

wells, which are 5 miles apart, it said "significant light oil columns were discovered in high-quality reservoir sands."

The Mopane field is located in the Orange Basin, along the coast of the southern African country, where Shell and France's TotalEnergies have made several oil and gas discoveries. Galp said flows achieved during the tests reached the maximum allowed limit of 14,000 barrels per day, potentially positioning Mopane as an important commercial discovery. "In the Mopane complex alone, and before drilling additional exploration and appraisal wells, hydrocarbon in-place estimates are 10 billion barrels of oil equivalent, or higher," Galp said.

Galp holds an 80% stake in Petroleum Exploration License 83, which covers a large area in the Orange Basin. Namibia could become a new source of revenue for Galp, which currently has strong investments off the coast of Brazil and is also present in a natural gas project in Mozambique's Rovuma basin. Galp has previously indicated it could launch a process to attract other investors to its projects in Namibia.

JPMorgan sees global oversupply driving down LNG prices

(Reuters; April 24) - Global natural gas prices will come under pressure through the end of the decade as supply and shipping infrastructure grow rapidly, particularly in Qatar and the U.S., JPMorgan Chase said in a report. The growth in gas output and liquefied natural gas export and import facilities, which allow tankers to transport the fuel around the world, will boost efforts to switch industries from highly polluting coal to gas, which can cut greenhouse gas emissions by as much as half, the report said.

The U.S. investment bank forecasts a 2% annual growth in global gas production by 2030 from 2022 numbers, which will lead to an annual oversupply of more than 2.2 trillion cubic feet by the end of the decade. The primary sources of production growth are expected to encompass the U.S., the Middle East and to a lesser extent Russia, the report said. "We see a downward global LNG price trajectory with increased volatility driven by a structurally oversupplied market," JPMorgan Global chief global energy strategist Christyan Malek told Reuters.

The world's leading oil companies are betting on growing demand for gas and LNG as economies grow and switch from coal to gas as part of their efforts to reduce greenhouse gas emissions. The sharp growth in gas supply and the drop in prices could lead to a rapid conversion from coal to gas that could save up to around 17% of global emissions, the report said. "While the risks of oversupply in global LNG toward the end of the decade are well understood, we believe the upside potential of coal to gas switching on LNG demand has been underestimated," Malek said.

Largest U.S. gas producer extends output cuts through May

(Bloomberg; April 23) - EQT Corp., the largest U.S. gas producer, is now taking output cuts through May as prices hover near four-year lows due to weak demand. The move underscores that this year's low gas prices aren't sustainable for the industry. U.S. gas futures have touched pandemic-era lows in recent months. A mild winter curbed demand at the same time that soaring production from shale drillers flooded the market.

EQT now sees its sales volume for the year at 2.1 trillion to 2.2 trillion cubic feet equivalent, down from 2.2 trillion to 2.3 tcf, the company said in an April 23 earnings statement. That's based on production curtailments of 1 billion cubic feet per day through May, with the potential to lower output even further, depending on the market.

New report says Russia's LNG plans could stagnate under sanctions

(Reuters; April 24) - Russia's liquefied natural gas exports could stagnate in the next four years under the two less-rosy of three Economy Ministry scenarios — a sign that Western sanctions might be cramping Moscow's energy plans. Under the Russian ministry's "conservative" and "stress" scenarios, the latter not made public, LNG output would stagnate at 38.6 million tonnes a year in 2025-2027, according to a document seen by Reuters. The baseline scenario, the most optimistic, calls for a rise to 56.6 million tonnes in 2027 from 33.3 million in 2023.

Russia says it wants to secure 20% of the global LNG market by 2030-2035, compared to around 8% at present, with new plants predominantly located in the Arctic. However, myriad Western sanctions present obstacles, not least to the new Arctic LNG 2 project that has yet to export a cargo after tentatively starting production in December. It's due to become Russia's largest LNG plants, with annual output of 19.8 million tonnes of LNG and 1.6 million tons of stable gas condensate from three production units.

The Kremlin-controlled energy giant Gazprom also delayed the start-up of a huge gas complex at the Baltic port of Ust-Luga since the withdrawal of Western companies after the start of Russia's conflict with Ukraine in 2022. Russia currently has two large-scale LNG plants: Novatek-led Yamal LNG, which produced around 20 million tonnes last year, and Gazprom's Sakhalin-2, with an output of more than 10 million tonnes last year.

Global energy companies may buy into LNG project in UAE

(Bloomberg; April 22) - Shell and TotalEnergies are among several global energy companies in talks to buy stakes in Abu Dhabi National Oil Co.'s next liquefied natural gas export project in the United Arab Emirates. The two oil majors, as well as Japanese trading house Mitsui, are looking for equity in the Ruwais facility, as well as contracts to

purchase LNG from it, according to people with knowledge of the matter. A final investment decision on the project could happen as soon as next month.

ADNOC, however, doesn't require investment from the energy companies to move the project forward, and may decide not to sell equity, the people said. Gas is taking an increasingly bigger role in the Middle East as countries see robust demand for the fuel that may play a bridging role in the transition to cleaner energy sources. The UAE is boosting its LNG capacity and Saudi Arabia is seeking projects overseas. Qatar, one of the world's biggest LNG suppliers, is also spending billions of dollars expanding production, and the UAE has been trying to expand its role as an LNG trader.

The Ruwais project, currently fully owned by ADNOC, will have the capacity to export 9.6 million tonnes of LNG per year, more than doubling the UAE's total output. ADNOC has signed enough preliminary and final supply agreements for the project to reach a final investment decision, according to one person familiar with the project. The UAE's other LNG export plant, at 5.8 million tonnes per year, is owned by ADNOC LNG, of which ADNOC, Mitsui, BP and TotalEnergies are shareholders.

Rising spot LNG price in Asia starts to crimp demand

(Reuters; April 24) - There are early signs that the rise in the spot price for liquefied natural gas for delivery to Asia to a three-month high is starting to crimp demand from price-sensitive buyers such as India. The spot LNG price rose to \$10.50 per million Btu in the week ended April 19, the most since Jan. 19, and up 26.5% from the low so far in 2024 of \$8.30, reached in early March.

The recent increase in the price has been driven more by supply concerns, with the ongoing conflict in the Middle East fueling worries that shipments from Qatar, the world's third-largest LNG exporter, may be disrupted. So far, these fears have yet to be realized, but there have been increased costs for LNG shipments as vessels bound for Europe avoid the Red Sea, where Yemen's Iran-aligned Houthi group has launched missile strikes against several vessels, although none of these were LNG carriers.

With the spot price once again above \$10, it has reached levels that have in the past resulted in buyers such as India, and even China, the world's top LNG importer, pulling back on purchases. That's because at these prices, LNG imports find it hard to compete with other fuels in domestic markets. China's LNG imports in the first quarter of 2024 were strong, most likely because of the lower spot prices that prevailed for much of the period, but also due to the recovery of parts of the economy, especially manufacturing.

China's claims stifle energy ambitions of Vietnam and the Philippines

(Bloomberg; April 23) - This was supposed to be the year that Vietnam reaped the benefits from one of its largest natural gas discoveries. An estimated 5.3 trillion cubic feet of the fuel, enough to power a city the size of Hanoi for decades, was discovered 50 miles from Vietnam's central coast in 2011. If all had gone to plan, the "Blue Whale" project led by ExxonMobil would have gone online late last year.

On the other side of the South China Sea, the Philippines has long eyed the energy riches off its western coast as a way to reduce its growing reliance on imported gas and oil, with successive governments drafting projects to tap into those resources and bolster the nation's energy security. None of it has happened — and an armada of Chinese fishing boats, coast guard cutters and a giant vessel dubbed the "Monster" are making sure it won't anytime soon.

Beijing's vast claims across the South China Sea — based on a vague 1947 map showing what's become known as a "ten-dash line" through the waterway — were rejected by a U.N.-backed tribunal in 2016. But President Xi Jinping dismissed the ruling, and ever-growing tensions in the disputed waters all point to an uncomfortable truth for Southeast Asian nations, as well as the U.S: In this standoff, China is winning.

"The tactics have worked," said Bill Hayton, author of "The South China Sea: The Struggle for Power in Asia." He explained: "China has effectively established a veto over new oil developments within the U-shaped line." The clearest evidence of that is this: both the Philippines and Vietnam imported their first shipments of liquified natural gas last year, and they are rapidly increasing those purchases.

Delays, cost overruns plague LNG-fueled Scottish ferries

(BBC News; April 19) - Delivery of a long-delayed CalMac ferry in Scotland has been put back again by two months due to issues with its dual-fuel propulsion system that will run on LNG. The Glen Sannox, being built at Ferguson shipyard in Port Glasgow, is now due to be handed over to ferries agency Caledonian Maritime by July 31. It is the first liquefied natural gas-powered ferry constructed in the U.K. New Ferguson CEO John Petticrew said its "complexity" and construction difficulties were to blame for the delay.

Petticrew pointed to a "lack of available expert knowledge and qualified resources in the U.K." around LNG systems. "The installation and commissioning of the LNG system, a first in class for U.K. shipbuilding, remains particularly challenging." The shipyard is dependent on specialist contractors for much of the work. Issues with the ship's propulsion system also have been blamed for the latest delay. Scottish Conservative Party transport spokesman Graham Simpson said the latest delay was "yet another huge blow to Scotland's betrayed island communities" which depend on the ferries.

Estimates to complete the Glen Sannox and its sister ship Glen Rosa remain at just under £300 million (US\$370 million). That does not include £83 million paid for the ships

prior to nationalization of the project or £45 million of government loans that were later written off. The contract for the two vessels was awarded to Ferguson in 2015 and both were due for delivery in 2018. The project was later nationalized but problems grew and the cost of the ships has risen to about four times the original £97 million contract.

Lower prices helping push maritime industry to use more LNG

(Reuters; April 24) - Demand for cleaner-burning liquefied natural gas to power ships will rise this year due to attractive prices, while more dual-fuel vessels join the global fleet, industry executives said. Prices of LNG delivered as marine fuel at the world's largest bunker hub Singapore are at steep discounts of nearly \$100 per metric ton compared with conventional 0.5% very-low sulfur fuel oil, industry sources said.

That is a far cry from record premiums of more than \$1,000 a ton seen in September 2023, based on data from S&P Global Platts published on industry coalition SEA-LNG's website, after Russia sparked a global gas crisis in 2022 by reducing piped supplies to Western Europe after its invasion of Ukraine. Consultancy Rystad expects discounts to persist at least through the third quarter of this year, barring major market disruption, said Junlin Yu, a senior analyst on shipping supply chains.

Global LNG bunker sales in 2024 could be 50% higher than in 2023, Rystad forecasts show. In Singapore, LNG bunker sales rose for a fourth straight month to a record in March, data from the Maritime and Port Authority showed. Global mining giant BHP, which operates five dual-fueled bulk carriers, is refueling its ships with 100% LNG in Singapore on the route between Port Hedland, Australia, and China, Rashpal Singh Bhatti, vice president of maritime and supply chain excellence at BHP, told Reuters.

TotalEnergies partners on Mideast LNG plant to deliver marine fuel

(Bloomberg; April 21) - TotalEnergies and Oman National Oil Co. will build a liquefied natural gas plant aimed at becoming the first hub serving the LNG marine fuel market in the Middle East. The Marsa LNG project, 80% owned by TotalEnergies and 20% by Oman's OQ SAOC, includes upstream gas production, a 1 million-tonne-per-year liquefaction plant to be built in the port of Sohar and a 300-megawatt solar plant to reduce the facility's emissions, the French company said in a statement April 22. TotalEnergies CEO Patrick Pouyanne announced the final investment decision.

The engineering, procurement and construction contracts for the project have been awarded to Technip Energies for the LNG plant and CB&I for the LNG tank, according to the statement. The "substantial" contract represents between €500 million (\$533 million) and €1 billion, Technip said. LNG production is expected to start by the first quarter of 2028 and is primarily intended to serve the marine fuel market in the Persian Gulf.

But using LNG as a marine fuel has been controversial. Although ships using LNG produce about 25% less carbon dioxide emissions than traditional marine fuels, older vessels often fail to burn all the methane. That means some of it leaks directly into the atmosphere where it can have a devastating climate impact.

High-sulfur crudes fetch higher prices in Asia amid tighter supplies

(Bloomberg; April 22) - Oil that is more sulfurous and dense is gaining popularity in the Asian market in a rare shift away from the usual pattern as global crude flows change and rewards from refining move in its favor. Middle Eastern varieties that have medium-density and higher sulfur such as Oman and Upper Zakum are now fetching bigger spot premiums than grades like Murban. That's unusual as the latter is a lighter oil, typically regarded as better quality since it has a rich yield of refined fuels such as diesel.

The new pattern reflects underlying changes in supply and demand that span the global crude market. OPEC+ supply cuts have crimped flows of dirtier crudes, while at the same time U.S. producers have been boosting exports of lighter varieties. Cargotracking company Vortexa estimates that daily supplies of medium- and heavy-sour crude into Asia have declined by 920,000 barrels year-on-year in the first three months.

On the demand side, margins on high-sulfur fuel oil — made more from medium-sour grades — have risen, while profits in Asia from refining diesel fell, according to data from Bloomberg. "Medium- and heavy-sour crude supplies have been on a decline, and this has pushed up prices of these crudes," said Serena Huang, lead Asia analyst at Vortexa. And while demand for diesel has been showing signs of weakness globally, fuel oil — made from the heavier barrels — has seen a boost driven by seasonal demand, with the Mideast consuming more for power generation in the summer months.

EU will look at how to constrain shadow fleet hauling Russian oil

(Politico; April 22) - The European Commission will look into ways to deal with Russia's shadow oil tanker fleet as part of the next package of sanctions, Sweden's Foreign Minister Tobias Billström said in an interview April 22. The shadow fleet, which consists of an estimated 1,400 ships with opaque ownership, is "not only aiding Russia with circumventing the sanctions, but it's also a clear environmental threat," Billström told reporters on the sidelines of the EU's Foreign Affairs Council meeting in Luxembourg.

The fleet, he stressed, "is such a large problem ... when it comes to the money that it fuels the war chest of Russia." However, analysts warn that drastic actions such as blocking ships from European Union waters could be construed by Moscow as an escalation. According to Billström, the European Commission and the EU's diplomatic

arm will now "sit down and make a thorough run-through of all the elements of the shadow fleet and what can be done," followed by a report to the European Council.

Flag and harbor states would be approached, said the Swedish minister, and there could be "actions against owners, operators, insurance companies in (any) third-country that Russia today uses to make the shadow fleet possible." It would be the first time the EU has looked into this sanctions loophole since Russia's invasion of Ukraine. Billström said "the time has now come to end that," adding, "the shadow fleet has been has been so useful by Russia because it has flown — or rather floated — below the radar."

Korea Gas in dispute with shipbuilder over faulty LNG storage tanks

(Korea Times; April 23) - Samsung Heavy Industries filed a lawsuit against Korea Gas to avoid taking responsibility for defective cargo holds installed in two liquefied natural gas carriers sold to SK Shipping in 2018, the shipbuilder said April 22. The filing comes after Samsung paid \$290 million to SK Shipping in compliance with an arbitration decision last December. Shipbuilder Samsung claims that KOGAS should reimburse the \$290 million as the state-owned gas company led the development of the problematic cargo holds, the exterior walls of which developed frost when sailing through cold regions.

Samsung paid to compensate SK for costs to repair the ships and to compensate for the ships' suspended operations. Samsung said it had sought a joint acquisition of the LNG carriers with KOGAS, instead of engaging in a legal battle with the gas firm over who is to blame. A KOGAS subsidiary had designed the cargo hold and reported that a ship classification society concluded that the carriers could sail if the sea temperature is at least 42 degrees Fahrenheit, a Samsung Heavy official said. The official said the shipbuilder had hoped to work out a deal with KOGAS to operate the ships domestically.

KOGAS has appealed a Korean court ruling that said it is responsible for the defects. It said the defects may have resulted from a mistake on Samsung's part in building the ships. "This case was sent to an appellate court after we lodged an appeal last November," a KOGAS official said. "We are doing our best to overturn the lower court's ruling." The LNG containment system was designed by a joint venture between KOGAS and Korea's three largest builders — to reduce dependence on foreign technologies.